

# TelevisIn & TelevisOut

Data acquisition and alarm signalling modules.

| Dati » Tabella in tempo reale |                   |                      |                |                    |           |     |               |
|-------------------------------|-------------------|----------------------|----------------|--------------------|-----------|-----|---------------|
| data                          | tipologia sistema | parametri monitorati | stato digitale | difficoltà lettura | compresso | gas | stato allarmi |
| 14.01.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.02.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.03.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.04.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.05.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.06.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.07.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.08.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.09.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.10.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.11.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 14.12.22                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.01.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.02.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.03.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.04.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.05.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.06.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.07.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.08.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.09.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.10.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.11.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |
| 15.12.23                      | AP1               | 1                    | 1              | 0                  | 1         | 0   |               |



MANAGEMENT AND MONITORING

**USER  
MANUAL**

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## CONSULTATION

Icons with the following meanings are provided to make the manual quick and easy to consult:



**Important!:**

Information that users must be aware of to prevent any damage to the system or hazards for people, devices, data, etc. Users **MUST** read and take note of these sections.



**Indication/highlighted text:** further information on the topic in question that users should be aware of.



**Suggestion:** a suggestion that could help users understand and make better use of the information provided.

## MAIN FEATURES

The new TelevisIn & TelevisOut devices are parametric controllers to capture system variable data in real time and signal alarm conditions when they are connected to a supervisor system (both dedicated systems like Televis or standard commercial ones, i.e. with the MODBUS protocol).

The main features of the models in both families are:

| Feature  | FAMILY  |            |
|--|---|------------|
|  | TelevisIn   | TelevisOut |
| 4-key keypad   | ✓   | ✓          |
| Lock/unlock keypad from hotkey                                   | ✓   | ✓          |
| Password-controlled access to configuration parameters           | ✓   | ✓          |
| Temperature probe display range                                  | NTC: -50.0°C ... +110°C<br>PTC: -50.0°C ... +150°C<br>PT1000: -50.0°C ... 400°C |            |
| Configurable decimal point                                       | ✓   | ✓          |
| Switch between °C, Bar or %RH display                            | ✓   | ✓          |
| LEDs present on display  |   |            |
| DI/NTC/PTC/PT1000 digital/analogue inputs                        | 3   | ×          |
| DI/NTC/0-1V/0-5V/0-10V/0...20mA/4...20mA digital/analogue inputs | 2   | ×          |
| Digital inputs   | 2   | ×          |
| Open Collector PWM low-voltage digital inputs/outputs            | ×   | 2          |
| Relay outputs (*)  | 1   | 4          |
| Relay ratings  | 2A - 250V~  | 2A - 250V~ |
| TTL for connection to Copy Card                                  | ✓   | ✓          |
| Quick DIN-rail mounting  | ✓   | ✓          |

(\*) refer to the label on the device



**IMPORTANT:** check if the specified features are available on each model.

## TECHNICAL SPECIFICATIONS (EN 60730-2-9)

|                                       |  |
|---------------------------------------|--|
| Classification:                       | electronic automatic control (not safety) device for incorporation |
| Mounting:                             | Omega DIN rail.  |
| Type of action:                       | 1.C - 1.Y  |
| Pollution class:                      | 2  |
| PTI of materials used for insulation: | PTI 250V (device made with class IIIa material)                    |
| Overvoltage category:                 | II   |
| Nominal pulse voltage:                | 2500V  |
| Temperature:                          | Use: -20 ... +55°C • Storage: -40 ... +85°C                        |
| Power supply:                         | SMPS 100-240 V~ ±10% 50/60 Hz                                      |
| Power consumption:                    | 5W max   |
| Fire resistance category:             | D  |
| Software class:                       | A  |
| RTC battery life:                     | In absence of external power, the clock battery will last 4 days.  |

## FURTHER INFORMATION

### TELEVISIN SPECIFICATIONS

|                     |   |
|---------------------|---|
| Measurement range:  | <b>NTC:</b> -50.0...+110°C; <b>PTC:</b> -50.0...+150°C; <b>PT1000:</b> -50.0...+400°C (on display with 3 digits + sign)   |
| Accuracy:           | <b>NTC, PTC:</b> ±0.5% e.o.s. + 1 digit<br><b>PT1000:</b> ±1°C (-30°C ... 30°C) e ±1% e.o.s. (-50°C ... 400°C)<br><b>0-1V:</b> ±2% e.o.s.<br><b>0-5V, 0-10V, 0...20mA, 4...20mA:</b> ±1% e.o.s. |
| Impedance           | <b>0-1V:</b> 110kΩ; <b>0-5V:</b> 110kΩ; <b>0-10V:</b> 21kΩ; <b>0...20mA:</b> 100Ω; <b>4...20mA:</b> 100Ω  |
| Resolution:         | <b>NTC, PTC, PT1000:</b> 0.1°C; <b>0-1V, 0-5V, 0-10V, 0...20mA, 4...20mA:</b> 0.1   |
| Analogue Inputs:    | <b>PB1, PB2, PB5:</b> NTC, PTC, PT1000 inputs or configurable DIs<br><b>PB3, PB4:</b> DI, NTC, 0-1V, 0-5V, 0-10V, 0...20mA or 4...20mA  |
| configurable inputs |   |
| Digital Inputs:     | <b>DI1, DI2:</b> Multifunctional digital inputs   |
| Digital Outputs:    | <b>OUT1:</b> SPST relay 2A max 250Va  |

### TELEVISOUT SPECIFICATIONS

|                            |   |
|----------------------------|---|
| Digital Outputs:           | <b>OUT1, OUT2, OUT3:</b> SPST relay 2A max 250Va<br><b>OUT4:</b> SPDT relay 2A max 250V~  |
| OC outputs/Digital Inputs: | <b>OUT5/DI1:</b> OC Analogue Output or voltage-free Digital Input<br><b>OUT6/DI2:</b> OC Analogue Output or voltage-free Digital Input  |
|                            | The two analogue outputs are low voltage (SELV) Open Collector (OC) ones: PWM with<br>- Precision: <b>2%</b> ;<br>- Nominal range: <b>0...16.9V<sub>rms</sub></b> (12V~ rectified); closure <b>12V<sub>rms</sub></b> ;<br>- Maximum current: <b>35mA</b> (min load of 340Ohm @12Vc) |
|                            | <b>N.B.:</b> outputs OUT5 and OUT6 (typically connected to the device's 12Vc auxiliary output) cannot deliver more than <b>70mA</b> in total. Any other loads connected to the same 12Vc auxiliary output must also be taken into account.  |

### MECHANICAL CHARACTERISTICS

|             |   |
|-------------|---|
| Container:  | PC+ABS resin casing, UL94 V-0   |
| Dimensions: | 4 DIN-rail  |
| Terminals:  | removable for cables with cross-section of 2.5mm <sup>2</sup>   |
| Connectors: | <b>TTL</b> for MFK / Device Manager connection (via DMI)<br><b>RS485</b> to connect to TelevisSystem/Modbus supervisor. |
| Humidity:   | Usage / Storage: 10...90% RH (non-condensing)   |

### REGULATIONS

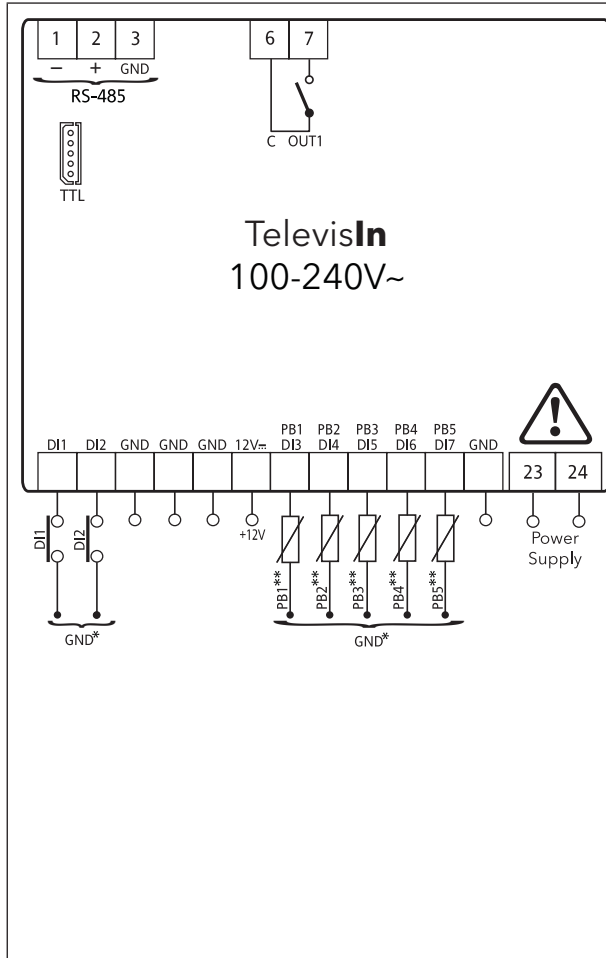
|                                |  |
|--------------------------------|--|
| Electromagnetic compatibility: | The device complies with Directive 2004/108/EC   |
| Safety:                        | The device complies with Directive 2006/95/EC  |
| Food Safety:                   | The device complies with standard EN13485 as follows:<br>- suitable for storage<br>- application: air<br>- climate range: A<br>- measurement class 1 in the range from -25°C to 15°C (*) |

(\*with Eliwell probes only)

**NOTE:** The technical specifications stated in this document regarding the measurement (range, accuracy, resolution, etc.) refer strictly to the instrument and not to any accessories provided, such as the probes. This means, for example, that the error introduced by the probe must be added to the error of the instrument.

## CONNECTIONS

### TELEVISIN CONNECTIONS



| No.   | Label        | Description  |
|-------|--------------|--|
| 1-2-3 | RS-485       | RS-485 serial (1 = "-"; 2 = "+" and 3 = "GND")               |
| 6     | C            | Common   |
| 7     | OUT1         | NO relay output OUT1 - high voltage (2A - 230V~)             |
|       | DI1          | Digital Input 1  |
|       | DI2          | Digital Input 2  |
|       | GND          | Ground   |
|       | 12V~         | Auxiliary power supply 12V~                                  |
|       | PB1/DI3      | Analogue input 1 configurable as: DI, NTC, PTC and PT1000    |
|       | PB2/DI4      | Analogue input 2 configurable as: DI, NTC, PTC and PT1000    |
|       | PB3/DI5      | Analogue input 3 configurable as: DI, NTC, Vin*** and Ain*** |
|       | PB4/DI6      | Analogue input 4 configurable as: DI, NTC, Vin*** and Ain*** |
|       | PB5/DI7      | Analogue input 5 configurable as: DI, NTC, PTC and PT1000    |
|       | GND          | Ground   |
| 23-24 | Power supply | 100-240V ~ power supply                                      |

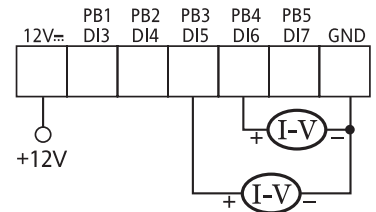
#### NOTES

\* Connect the terminal to one of the GND terminals.

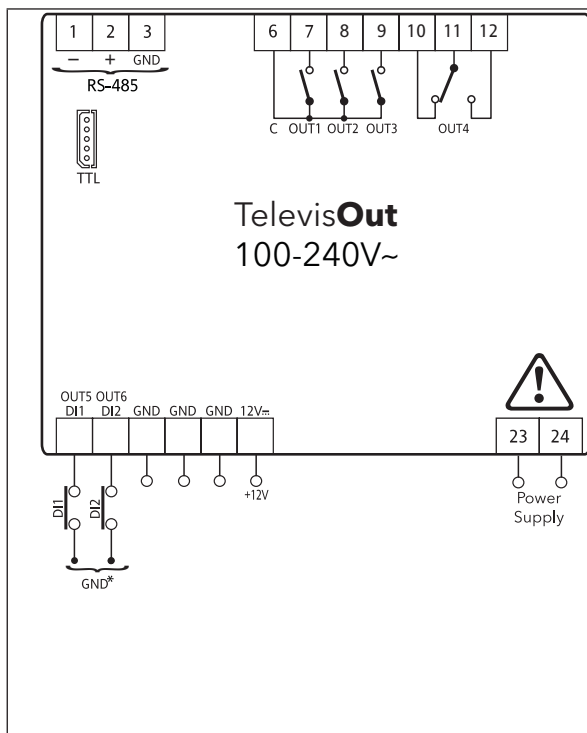
\*\* Analogue inputs PB1...PB5 can also be configured as DI (H4x="DI")

\*\*\* The **V** and **I** configurable inputs (PB3 and PB4) are:

- Vin = 0-1V; 0-5V and 0-10V
- Ain = 0...20mA and 4...20mA



### TELEVISOUT CONNECTIONS



| No.   | Label        | Description  |
|-------|--------------|--|
| 1-2-3 | RS-485       | RS-485 serial (1 = "-"; 2 = "+" and 3 = "GND")   |
| 6     | C            | Common   |
| 7     | OUT1         | NO relay output OUT1 - high voltage (2A - 230V~)   |
| 8     | OUT2         | NO relay output OUT2 - high voltage (2A - 230V~)   |
| 9     | OUT3         | NO relay output OUT3 - high voltage (2A - 230V~)   |
| 10    | OUT4         | NC relay output OUT4 - high voltage (2A - 230V~)   |
| 11    | OUT4         | Common relay output OUT4 - high voltage (2A - 230V~)   |
| 12    | OUT4         | NO relay output OUT4 - high voltage (2A - 230V~)   |
|       | OUT5/DI1     | Voltage-free digital input 1, also configurable as Analogue Output OUT5 - low voltage (SELV) OC: PWM |
|       | OUT6/DI2     | Voltage-free digital input 2, also configurable as Analogue Output OUT6 - low voltage (SELV) OC: PWM |
|       | GND          | Ground   |
|       | 12V~         | Auxiliary power supply 12V~  |
| 23-24 | Power supply | 100-240V ~ power supply  |

#### NOTES

\* Connect the terminal to one of the GND terminals.

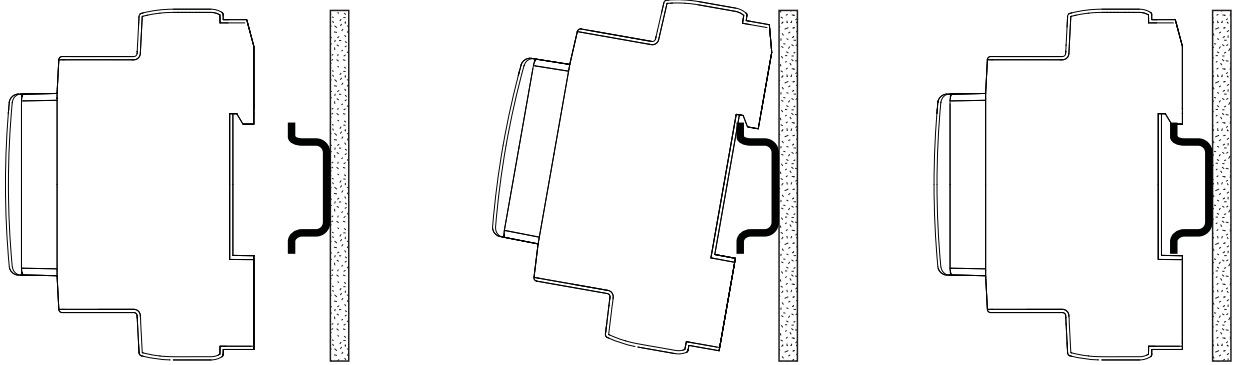
\*\* SELV: SAFETY EXTRA LOW VOLTAGE

## MECHANICAL INSTALLATION

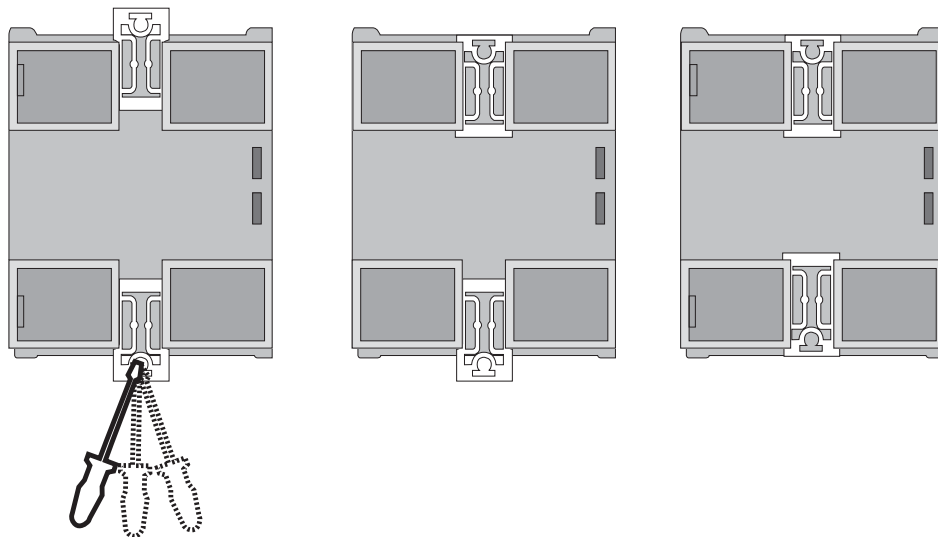
The instrument is intended for DIN rail mounting.  
For GUIDA DIN installation, follow the steps described below:

- Move the two "spring docking devices" to their standby position (use a screwdriver to press against the relative compartments).
- Install the device on the DIN RAIL, pressing on the "spring docking devices" with your fingers to put them into the locked position.

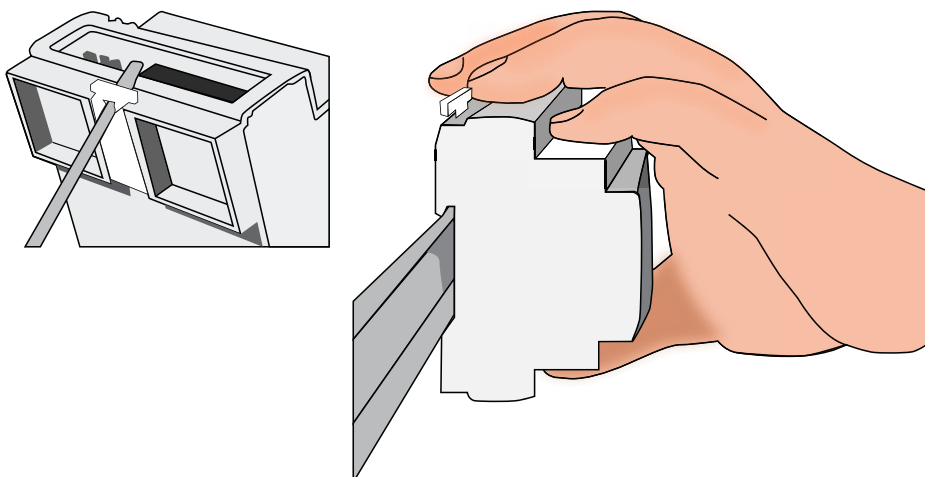
### DIN RAIL INSTALLATION - SIDE VIEW



### DIN RAIL INSTALLATION - REAR VIEW



### DIN RAIL INSTALLATION - 3/4 VIEW



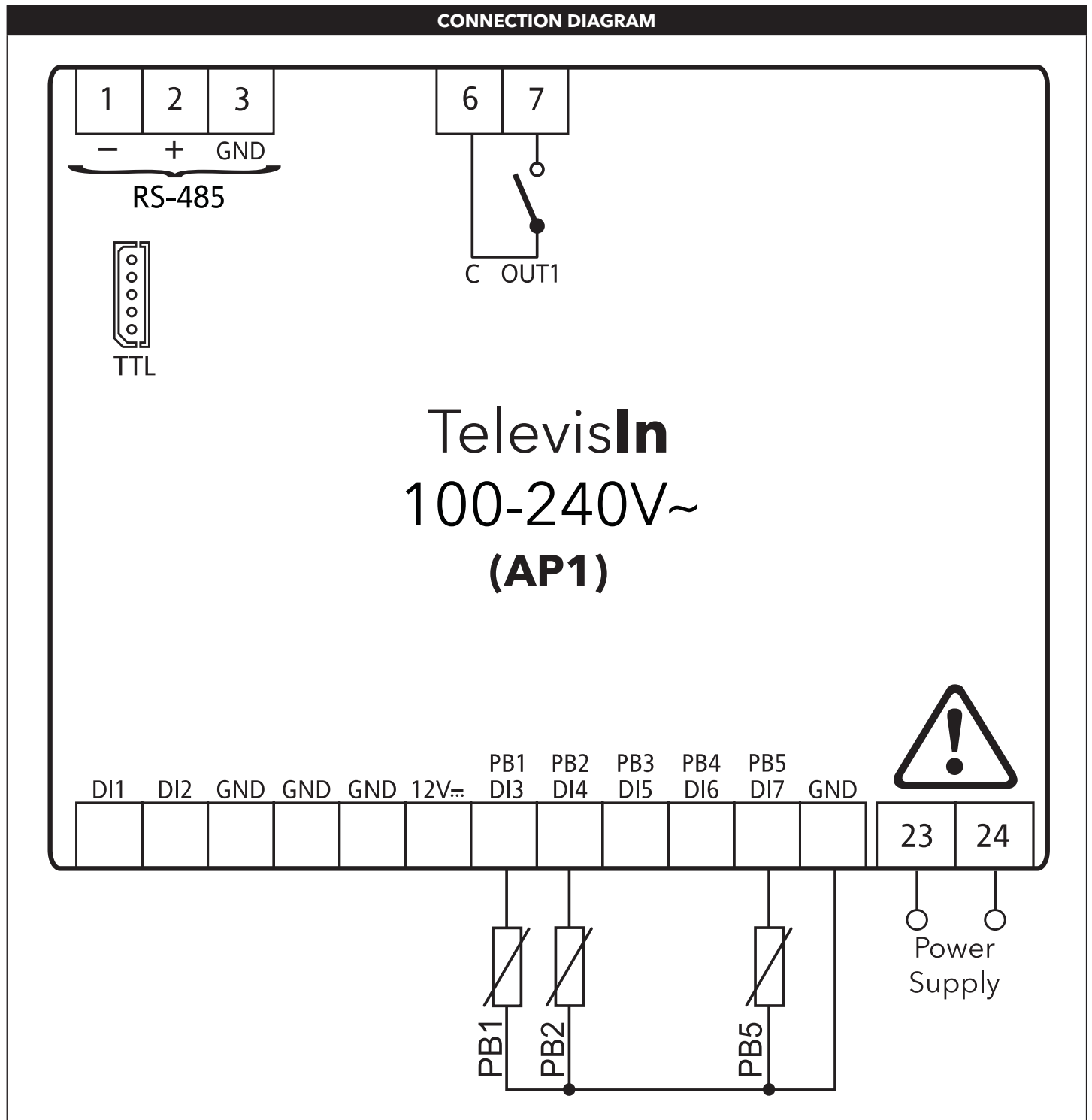
TELEVISIN MODEL

APPLICATION 1

The application is a useful alternative to **EWTV200**, with the following configuration:

- Digital Inputs: DI1: *not set*  
DI2: *not set*
- Analogue inputs: PB1: *PTC*  
PB2: *PTC*  
PB3: *not set*  
PB4: *not set*  
PB5: *PTC*
- Digital Output: OUT1: *not set (2A max 250V~)*

CONNECTION DIAGRAM



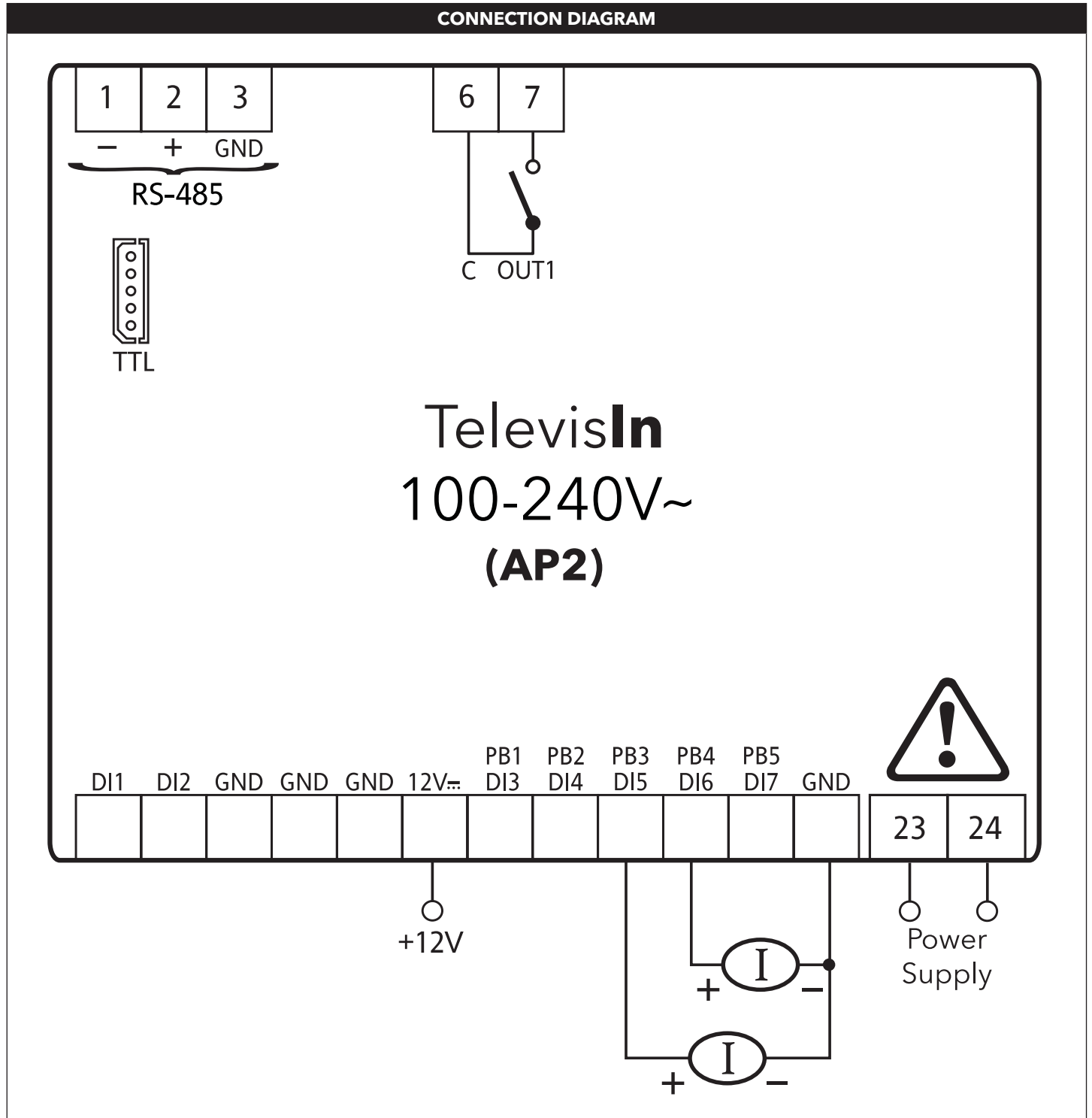


## APPLICATION 2

The application is a useful alternative to **EWTV240**, with the following configuration:

- Digital Inputs: DI1: *not set*  
DI2: *not set*
- Analogue inputs: PB1: *not set*  
PB2: *not set*  
PB3: *4 ... 20 mA*  
PB4: *4 ... 20 mA*  
PB5: *not set*
- Digital Output: OUT1: *not set (2A max 250V~)*

### CONNECTION DIAGRAM

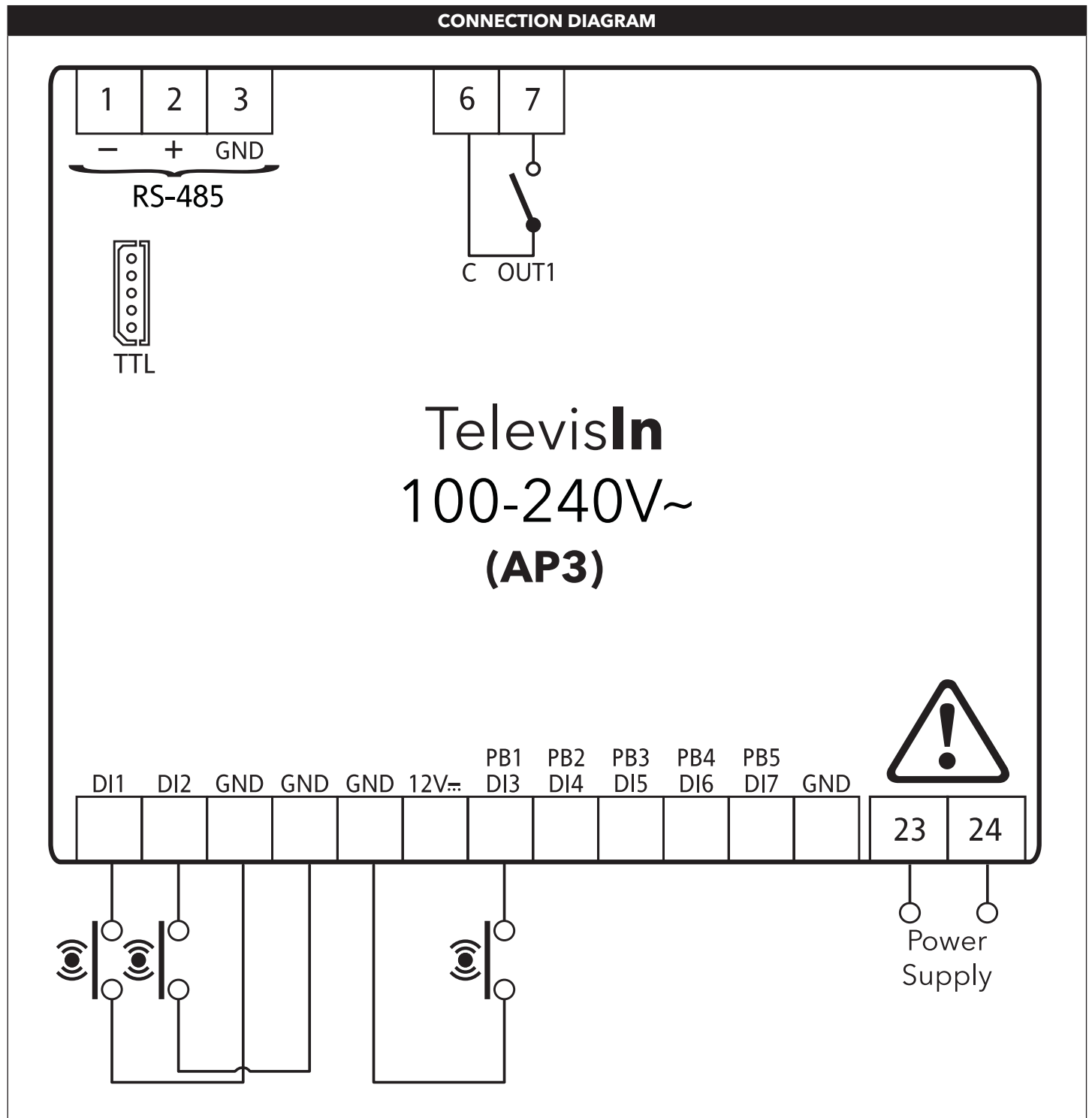


### APPLICATION 3

The application is a useful alternative to **EWTV270**, with the following configuration:

- Digital Inputs: DI1: *General alarm*  
DI2: *General alarm*
- Analogue inputs: PB1: *DI (general alarm)*  
PB2: *not set*  
PB3: *not set*  
PB4: *not set*  
PB5: *not set*
- Digital Output: OUT1: *not set (2A max 250V~)*

#### CONNECTION DIAGRAM

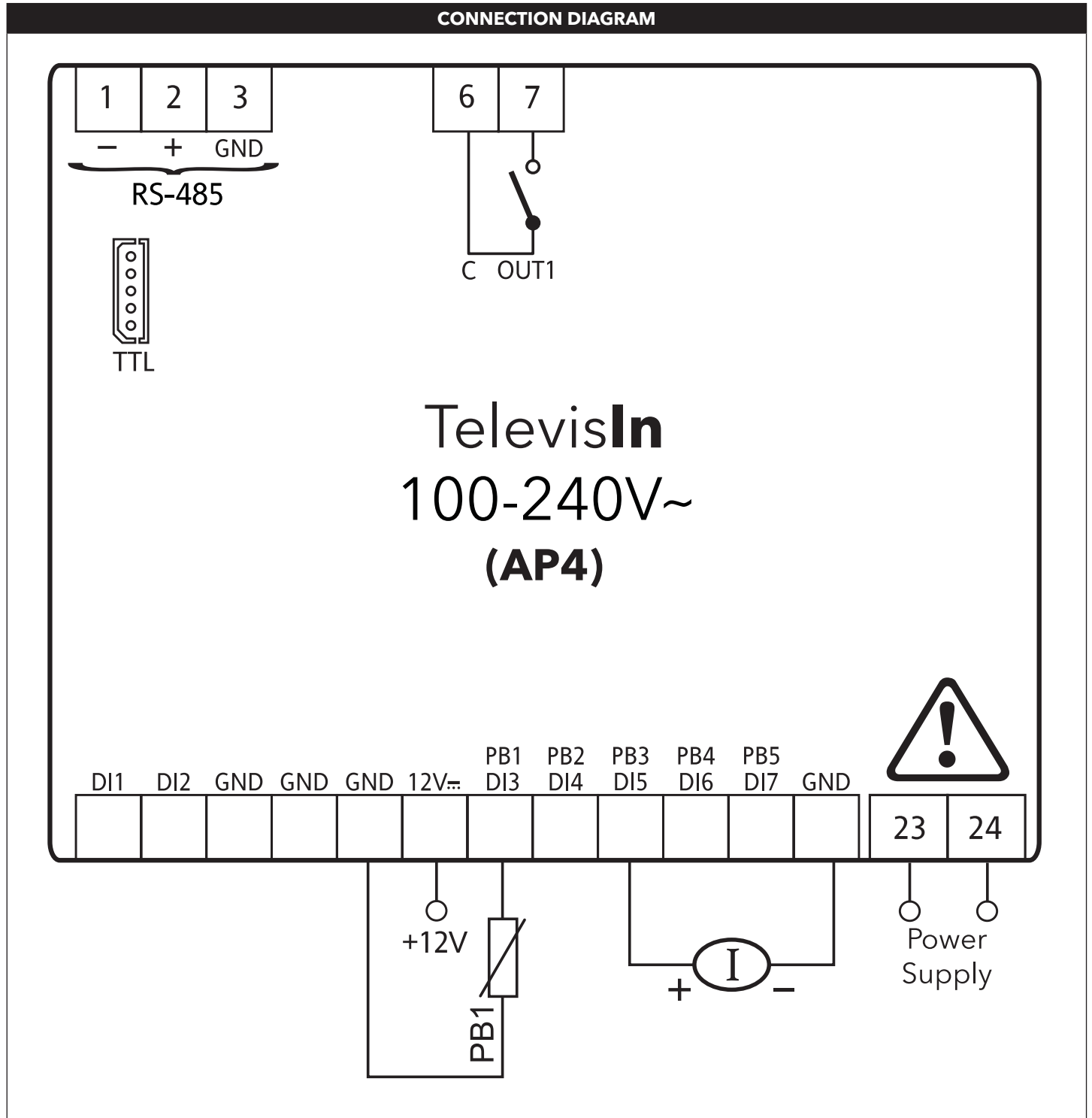


## APPLICATION 4

The application is used to manage the "dewpoint" and configure the following settings:

- Digital Inputs: DI1: *not set*  
DI2: *not set*
- Analogue inputs: PB1: *NTC*  
PB2: *not set*  
PB3: *4 ... 20 mA*  
PB4: *not set*  
PB5: *not set*
- Digital Output: OUT1: *not set (2A max 250V~)*

### CONNECTION DIAGRAM

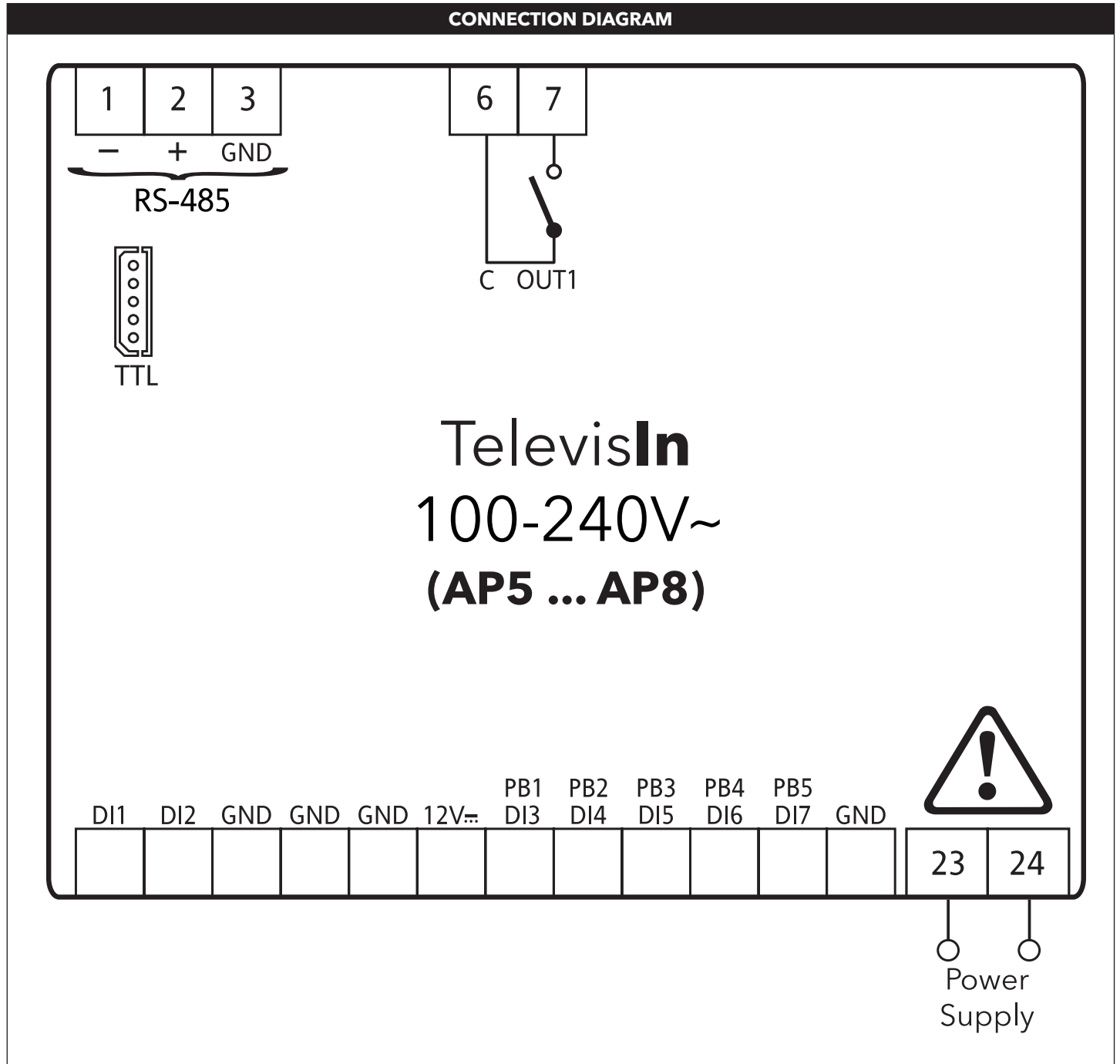


### APPLICATIONS 5/6/7/8

APP5 ...to APP8 are "FREE Televis" applications. Users are free to enter their own settings. All parameters are available.

- Digital Inputs: DI1: *not set*  
DI2: *not set*
- Analogue inputs: PB1: *not set*  
PB2: *not set*  
PB3: *not set*  
PB4: *not set*  
PB5: *not set*
- Digital Output: OUT1: *not set (2A max 250V~)*

#### CONNECTION DIAGRAM



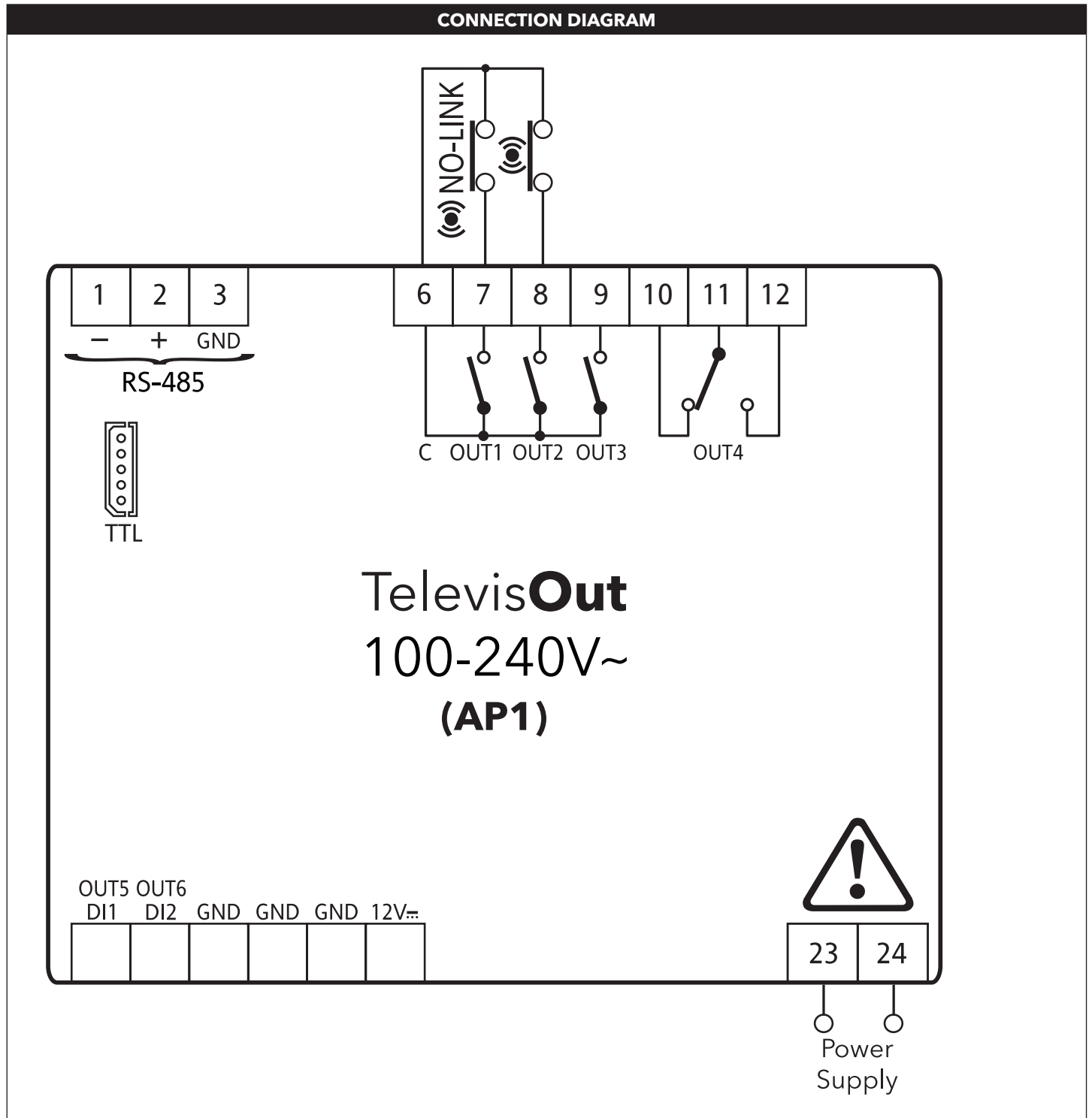
## TELEVISOUT MODEL

### APPLICATION 1

The application is a useful alternative to **EWTV280**, with the following configuration:

- Digital/OC inputs:     D11/OUT5: *not set (Digital Input/ Open Collector - PWM Output)*  
                               D12/OUT6: *not set (Digital Input/ Open Collector - PWM Output)*
- Digital Output:        OUT1:     *No-LINK alarm (2A max 250V~)*  
                               OUT2:     *General alarm (2A max 250V~)*  
                               OUT3:     *not set (2A max 250V~)*  
                               OUT4:     *not set (2A max 250V~)*

### CONNECTION DIAGRAM

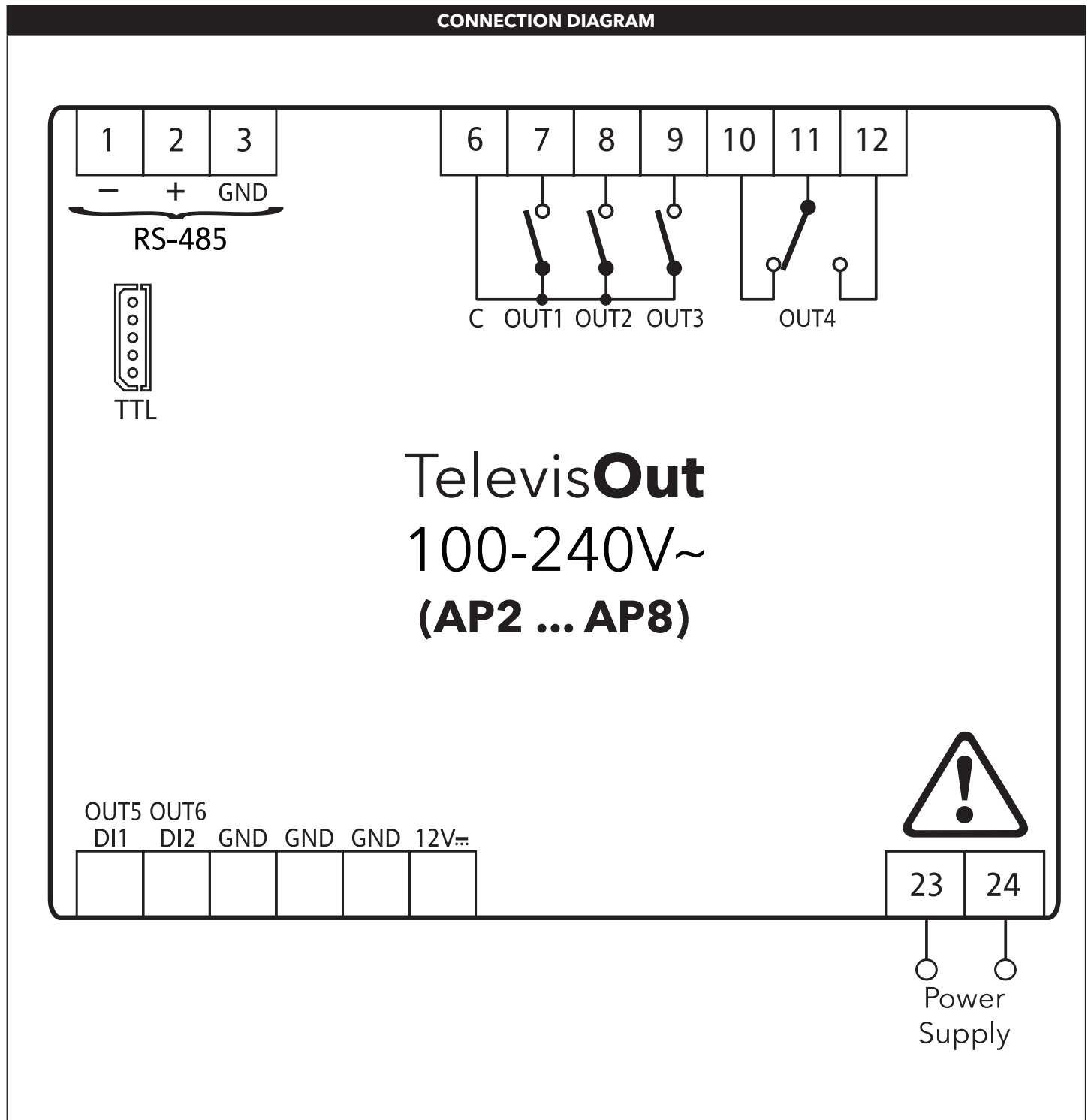


**APPLICATIONS 2/3/4/5/6/7/8**

APP2 ...to APP8 are "FREE Televis" applications. Users are free to enter their own settings. All parameters are available.

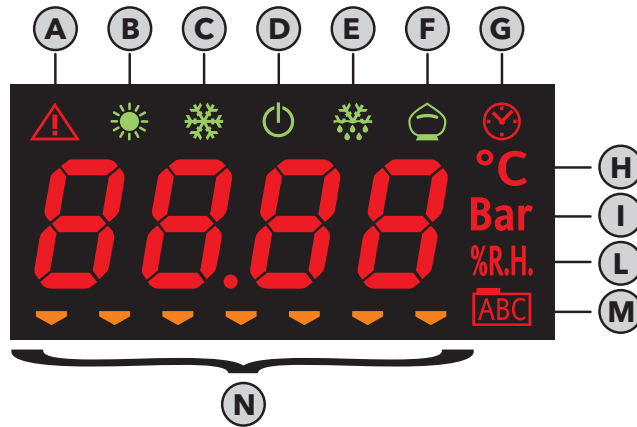
- Digital/OC inputs: DI1/OUT5: *not set (Digital Input/ Open Collector - PWM Output)*  
 DI2/OUT6: *not set (Digital Input/ Open Collector - PWM Output)*
- Digital Output: OUT1: *not set (2A max 250V~)*  
 OUT2: *not set (2A max 250V~)*  
 OUT3: *not set (2A max 250V~)*  
 OUT4: *not set (2A max 250V~)*

**CONNECTION DIAGRAM**



LED

TelevisIn & TelevisOut have this display:



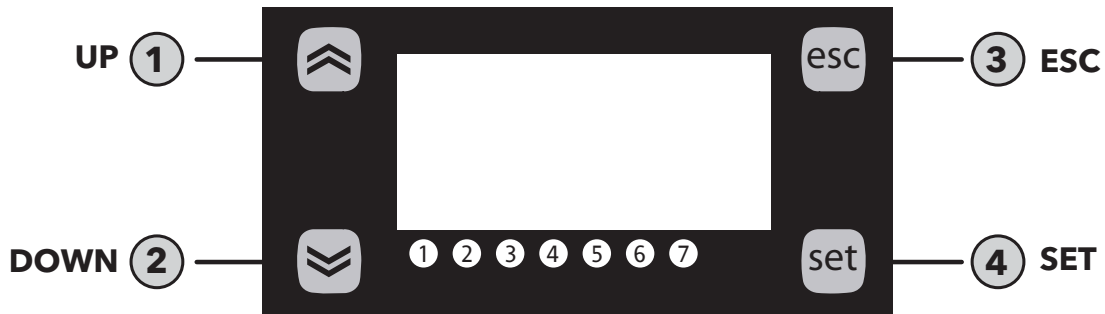
Meaning of LEDs:

| Icon                  | Description  | Colour | Note                                  |
|-----------------------|--|--------|---------------------------------------|
| <b>A</b>              | Alarm  | red    | acknowledgement from remote and/or DI |
| <b>B</b>              | Blinks when serial communication is on   | green  |                                       |
| <b>C</b>              | NOT USED   | green  |                                       |
| <b>D</b>              | ON when the device is powered on but not when it is OFF  | green  |                                       |
| <b>E</b>              | NOT USED   | green  |                                       |
| <b>F</b>              | NOT USED   | green  |                                       |
| <b>G</b>              | NOT USED   | red    |                                       |
| <b>H</b>              | Temperature unit of measure  | red    |                                       |
| <b>I</b>              | Pressure unit of measure   | red    |                                       |
| <b>L</b>              | Relative humidity unit of measure  | red    |                                       |
| <b>M</b>              | On during navigation<br>Blinks when keypad is locked   | red    |                                       |
| <b>N</b><br>(1)...(7) | Manages utilities connected to the device.<br>TelevisIn: indicates if Digital Inputs are ON<br>TelevisOut: indicates if Digital Outputs are ON | Amber  |                                       |

**NOTE:** When the controller is powered on it performs a lamp test, during which time the display and LEDs will flash for several seconds to check that they all function correctly.

## KEYS

TelevisIn & TelevisOut have 4 keys as shown; the purpose of each key is indicated below:



Each key has a different function depending on whether it is:

- pressed and released
- pressed for at least 5 seconds
- pressed and held at start-up
- pressed in combination with another key.

The following table summarises the function of each key:

| No | Key | Action   |   |   |
|----|-----|--|---|---|
|    |     | Press and release  | Press for at least 5 secs                               | Start-up  |
| 1  |     | <ul style="list-style-type: none"> <li>• Increase values</li> <li>• Go to next label</li> </ul>  | ---   | ---   |
| 2  |     | <ul style="list-style-type: none"> <li>• Decrease values</li> <li>• Go to previous label</li> </ul>  | ---   | ---   |
| 3  |     | <ul style="list-style-type: none"> <li>• Exit without saving settings</li> <li>• Go back to previous level</li> </ul>  | ---   | ---   |
| 4  |     | <ul style="list-style-type: none"> <li>• Confirm value / exit and save settings</li> <li>• Go to next level (access to folder, sub-folder, parameter, value)</li> <li>• Open State Menu</li> </ul> | Open programming menu (Parameters, User, and Installer) | When pressed during start-up, it enables the user to select the application to be loaded. |

Key combinations allowed:

| Keys | Pressed together  |
|------|---|
| +    | <p><b>Activates ON/OFF function</b></p> <p>Pressing and holding these keys at the same time for 5 seconds or a remote command activates the ON/OFF function.</p> <ul style="list-style-type: none"> <li>• In OFF mode, the screen shows the word <b>OFF</b>.</li> </ul> <p>All alarms are disabled, including active and communication ones.<br/>Probe data capture remains active.</p> |
| +    | <p><b>Activates the LOCK function (only in the "MACHINE STATE" menu).</b></p> <p>Pressing and holding both keys together for 5 seconds or a Supervisor command locks / unlocks the keypad.</p> <p>The icon  blinks when the keypad is locked; nothing will happen when a key is pressed, not even the setpoint will be displayed.</p>   |



## PRELIMINARY CONFIGURATIONS

After making the electrical connections, simply power up the device to start operation.  
At first start-up, Eliwell recommends that you:

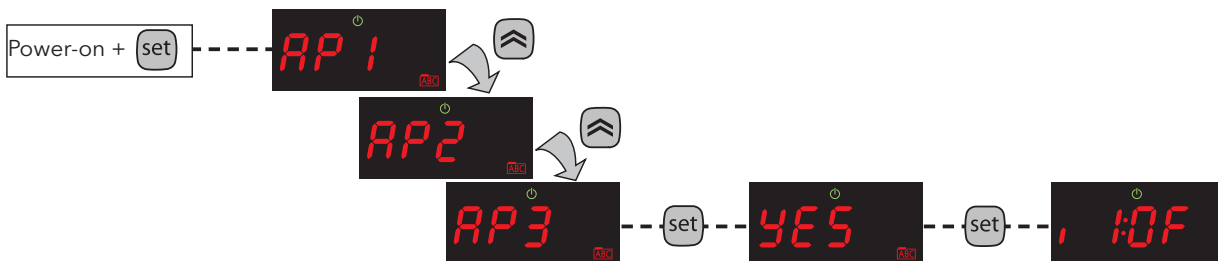
- 1) Select the preset Application that most closely matches your own.
- 2) Configure the main parameters listed in the USER menu to suit your requirements.
- 3) Make sure there are no active alarms ("⚠️" icon off and labels E1, E2 or E3 not displayed).

## SELECTING APPLICATIONS

When switched on for the first time, the display reads "AP1" and you will be asked to pick an application to load.  
Choose an application as described when you want to upload another application.

To change an uploaded application after the device has been switched on, follow these steps:

- At power-on of the device, keep the **set** key pressed: the label "AP1" will appear.
- Scroll through the various applications (**AP1 ... AP8**) using the **⏪** and **⏩** keys.
- Select the desired application using the **set** key ("AP3" in the example) or cancel the procedure by pressing the **esc** key; alternatively wait for the time-out.
- If the operation is successful, the display will show "yES", if not it will show "no".
- After a few seconds the instrument will return to the main display.



The value in parameter H60 indicates which application has been uploaded.

## RESET PROCEDURE

TelevisIn & TelevisOut can be **RESET** and the default factory settings restored in a simple, user-friendly way. This is done by simply reloading one of the basic applications (see "Selecting Applications").

You may need to **RESET** the instrument in circumstances in which normal operation of the instrument has been impeded or if you decide to restore it to the default configuration (e.g. Application "AP1" values).

**⚠️ IMPORTANT!:** This operation resets the instrument to its initial state, returning all parameters to their default values. This means that all changes made to operating parameters will be lost.


## VIEWING PROBE VALUES

To view the value read by the various probes connected to the device, press the **set** key to open the "Machine State" menu, scroll the folders listed using the **⏪** and **⏩** keys until you find the "Pb" label, then press the **set** key again.

The labels in the folder will be presented, which you can scroll through using the **⏪** and **⏩** keys until you come to the label for the relative probe "Pb1", "Pb2" ... Pb5" then press the **set** key again. The value measured by the associated probe will appear on the display.

**⚠️ IMPORTANT!:** The displayed value is read-only and cannot be modified.

This section describes the various functions of the devices.

 **IMPORTANT:** some functions may not be available in certain models.

## SETTINGS

### PROBE SETTING AND CALIBRATION


Both models (TelevisIn and TelevisOut) have 5 multifunctional analogue/digital inputs which can be configured as:

- Digital Input (H1x ≠ 0 and H41...H45 = di)
- Analogue Input (H1x ≠ 0 and H41...H45 = Pro)
- Not present (H1x ≠ 0 and H41...H45 = diS)

After installation, the values read by the probes can be corrected/calibrated using the following parameters:

- **CA1:** probe 1 offset. Positive or negative value to be added to the value read by Pb1 (Range: **-999.0 ... +999.0**)
- **CA2:** probe 2 offset. Positive or negative value to be added to the value read by Pb2 (Range: **-999.0 ... +999.0**)
- **CA3:** probe 3 offset. Positive or negative value to be added to the value read by Pb3 (Range: **-999.0 ... +999.0**)
- **CA4:** probe 4 offset. Positive or negative value to be added to the value read by Pb4 (Range: **-999.0 ... +999.0**)
- **CA5:** probe 5 offset. Positive or negative value to be added to the value read by Pb5 (Range: **-999.0 ... +999.0**)

The unit of measure shown depends on parameters **dr1 ... dr5**.

 **IMPORTANT:** CAx parameters will only be visible if the relative probe is active, and they will be present at the "Installer" level for applications AP1 ... AP3. They will be visible at both levels in other applications, AP4 ... AP8.

### DISPLAY SETTINGS

The "dis" folder contains the parameters used to set the temperature readout, decimal point usage, unit of measure and display during defrost.

- **ndt:** enables/disables decimal point display (with resolution of one-tenth of a degree; e.g.: 10.0°C)  
Display with decimal point is only possible within the range of values from -99.9°C to +99.9°C
  - ndt = y → displays read values with decimal point
  - ndt = n → displays read values without decimal point



**NOTE:** enabling/disabling the decimal point only affects the on-screen display of values. The controller will continue to perform calculations with decimal point.

- **dr1...dr5:** allows you to pick the unit of measure for parameters CA1...CA5.
  - **drx = C** → display in °C
  - **drx = F** → display in °F
  - **drx = rH** → display in %RH
  - **drx = bAr** → display in BAR
  - **drx = n** → no unit associated to display



**IMPORTANT:** switching between °C and °F DOES NOT modify the values of temperature parameters. This means that the maximum and minimum limits of parameters as absolute values are the same for both units of measure and hence the ranges are different.

- **ddd:** allows you to choose the main display. All other display and adjustment modes are the same.
  - ddd = 0 → shows the **Communication** state **SL:On** if active - **SL:OF** if not active)
  - ddd = 1 → displays the values read by **PB1**
  - ddd = 2 → displays the values read by **PB2**
  - ddd = 3 → displays the values read by **PB3**
  - ddd = 4 → displays the values read by **PB4**
  - ddd = 5 → displays the values read by **PB5**
  - ddd = 6 → displays the value of the **dewpoint**
  - ddd = 7 → shows the state of Digital Input **DI1** (**I1:On** if active - **I1:OF** if not active)
  - ddd = 8 → shows the state of Digital Input **DI2** (**I2:On** if active - **I2:OF** if not active)
  - ddd = 9 → shows the state of Digital Input **DI3** (**I3:On** if active - **I3:OF** if not active)
  - ddd = 10 → shows the state of Digital Input **DI4** (**I4:On** if active - **I4:OF** if not active)
  - ddd = 11 → shows the state of Digital Input **DI5** (**I5:On** if active - **I5:OF** if not active)
  - ddd = 12 → shows the state of Digital Input **DI6** (**I6:On** if active - **I6:OF** if not active)
  - ddd = 13 → shows the state of Digital Input **DI7** (**I7:On** if active - **I7:OF** if not active)
  - ddd = 14 → shows the state of Digital Output **OUT1** (**o1:On** if active - **o1:OF** if not active)
  - ddd = 15 → shows the state of Digital Output **OUT2** (**o2:On** if active - **o2:OF** if not active)
  - ddd = 16 → shows the state of Digital Output **OUT3** (**o3:On** if active - **o3:OF** if not active)
  - ddd = 17 → shows the state of Digital Output **OUT4** (**o4:On** if active - **o4:OF** if not active)
  - ddd = 18 → shows the state of Digital Output **OUT5** (**o5:On** if active - **o5:OF** if not active)
  - ddd = 19 → shows the state of Digital Output **OUT6** (**o6:On** if active - **o6:OF** if not active)

## FUNCTIONS

### UPLOAD, DOWNLOAD, FORMAT

#### Description

The Unicard/Copy Card must be connected to the serial port (TTL) and allows the rapid programming of instrument parameters.







 **DOWNLOAD** function mode from reset only: at power-on, if the Unicard/Copy Card is inserted in the device, the controller automatically downloads data.


After connecting the Unicard/Copy Card with the device switched off and on completion of the lamp test, one of the following labels will be displayed:

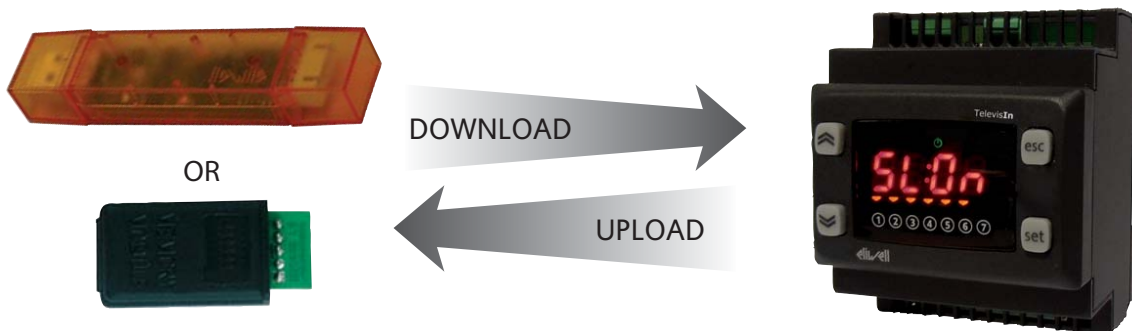
- **dLY** if the operation was successful
- **dLn** if the operation was not successful

After about 5 seconds, the display returns to the main screen, as selected in the default settings.

 **IMPORTANT:** once download has been completed successfully, the controller will start to work with the new map loaded.

Operating mode: access "Installer" parameters by entering the password "PA2" if enabled (PA2≠0), scroll through the folders using  and  until the "FPr" folder appears. Select it using , scroll through the parameters using  and  then select one of the functions by pressing .

- **UL** (Upload): This function uploads the programming parameters from the instrument to the card. If the operation is successful, the display will show "y", otherwise it will show "n".
- **Fr** (Format): This command is used to format the copy card (which is necessary when using the card for the first time). Important: the **Fr** parameter deletes all data present and this operation cannot be reversed.
- **dL** (Download): **from reset:** connect the Unicard/Copy Card with the instrument switched off. At power-on, data will automatically start downloading from the Unicard/Copy Card to the instrument. At the end of the lamp test, the display will show "dly" if the operation was successful and "dLn" if it failed.  
**from parameter:** select parameter dL and press . If the operation is successful, the display will show "y", otherwise it will show "n".



#### User parameters

The parameters that control this function are:

| Label | Description  | Model |
|-------|--|-------|
| UL    | To transfer programming parameters from instrument to Copy Card. | All   |
| dL    | To transfer programming parameters from Copy Card to instrument. | All   |
| Fr    | Format Copy Card. To erase all data on the Copy Card.            | All   |

### COPY CARD

The Copy Card lets you download/upload a parameter map from/to a controller. Regardless of whether you are down or uploading a parameter map, the controller must be connected to a power supply and switched on.



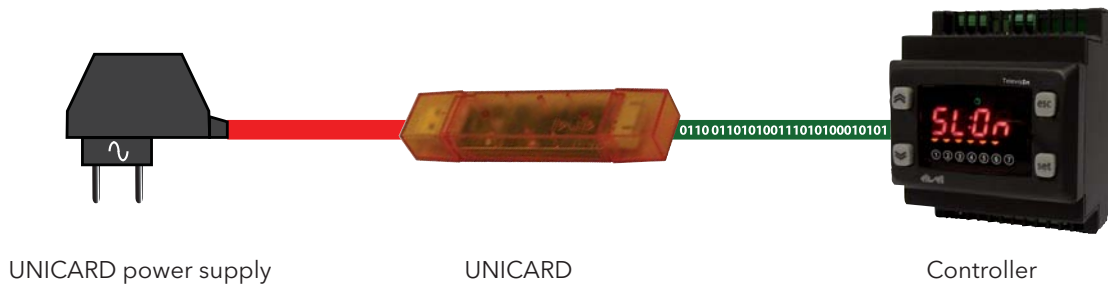
### UNICARD

The Unicard lets you download/upload a parameter map from/to a controller, in the same way as the Copy Card. It is a versatile tool that also allows you to quickly and easily customize devices. It differs from the Copy Card in the following ways:

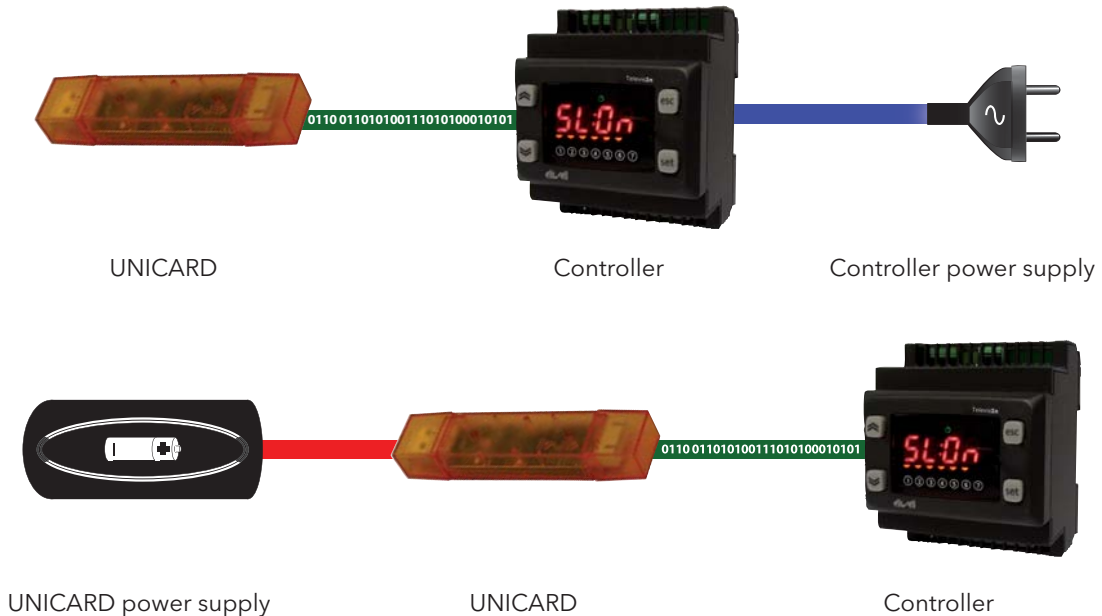
- **1)** It can be connected to a computer via USB.
- **2)** It can be plugged into a USB socket or USB battery pack, and power the device directly during upload/download.

The Unicard can be powered in the following ways:

#### A) Bench powered:



#### B) Field power:



## REGULATORS

### ANALOGUE INPUTS

#### Description

TelevisIn and TelevisOut send the values of all connected analogue inputs and the dewpoint to the supervisor.

The value of each input can be "calibrated" via the following parameters:

- **CA1**: calibration value for probe **Pb1**
- **CA2**: calibration value for probe **Pb2**
- **CA3**: calibration value for probe **Pb3**
- **CA4**: calibration value for probe **Pb4**
- **CA5**: calibration value for probe **Pb5**

In this case, the supervisor will read the value of the input + **CAx** (where **x** is the number of the analogue input).

#### Dewpoint Measurement (TelevisIn only)

Dewpoint means the temperature value (in °C) the air should be cooled to (at constant pressure) to reach 100% relative humidity, i.e. to saturate it with vapour.

The difference between the temperature value and dewpoint indicates the relative humidity level of the air.

The dewpoint is calculated using a simple psychrometric or Carrier diagram, with round-up error. The probes used are defined in parameters **rUP** (humidity probe) and **rtP** (temperature probe).



**NOTE:** If both probes are not defined, the measurement will not be enabled.

#### User parameters

The following parameters manage the Analogue Inputs:

| Label | Description   | TelevisIn | TelevisOut |
|-------|---|-----------|------------|
| CA1   | To calibrate probe <b>Pb1</b> .                           | ✓         | ✗          |
| CA2   | To calibrate probe <b>Pb2</b> .                           | ✓         | ✗          |
| CA3   | To calibrate probe <b>Pb3</b> .                           | ✓         | ✗          |
| CA4   | To calibrate probe <b>Pb4</b> .                           | ✓         | ✗          |
| CA5   | To calibrate probe <b>Pb5</b> .                           | ✓         | ✗          |
| rUP   | To select the humidity probe for dewpoint calculation.    | ✓         | ✗          |
| rtP   | To select the temperature probe for dewpoint calculation. | ✓         | ✗          |

## DIGITAL INPUTS

### Description

TelevisIn and TelevisOut send the state of all connected digital inputs to the supervisor in a single variable.

Inputs **DI1...DI7** can be configured from the following parameters:

- **H11:** for digital input 1 - DI1
- **H12:** for digital input 2 - DI2
- **H13:** for digital input 3 - DI3/Pb1
- **H14:** for digital input 4 - DI4/Pb2
- **H15:** for digital input 5 - DI5/Pb3
- **H16:** for digital input 6 - DI6/Pb4
- **H17:** for digital input 7 - DI7/Pb5

The same inputs can also be configured with the following polarity:

- **Direct:** to set positive values - (active inputs with closed contact)
- **Inverse:** to set negative values - (active inputs with open contact)

It must be possible to use the digital inputs as pulse counters (energy-gas meters, high-speed digital inputs).

The function associated with the digital input can be generated in three different ways, depending on the configuration parameters.

- Level-based
- Edge-based
- By number of events

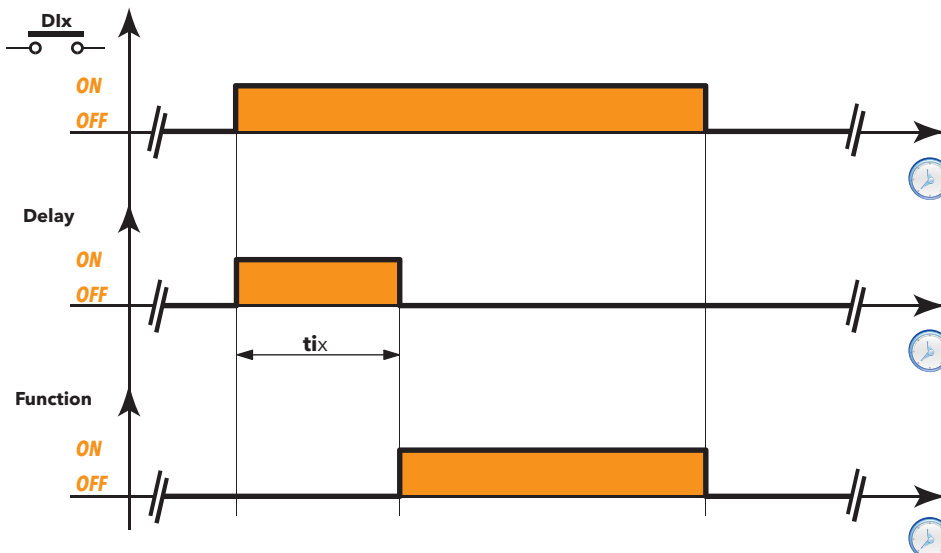
The activation of the associated function can also be delayed by a given time, that can be set in the following parameters:

- **dt1:** to set the unit of measure for parameter d11
- **d11:** to set the delay before signalling an alarm on digital input **DI1**
- **dt2:** to set the unit of measure for parameter d12
- **d12:** to set the delay before signalling an alarm on digital input **DI2**
- **dt3:** to set the unit of measure for parameter d13
- **d13:** to set the delay before signalling an alarm on digital input **DI3/Pb1**
- **dt4:** to set the unit of measure for parameter d14
- **d14:** to set the delay before signalling an alarm on digital input **DI4/Pb2**
- **dt5:** to set the unit of measure for parameter d15
- **d15:** to set the delay before signalling an alarm on digital input **DI5/Pb3**
- **dt6:** to set the unit of measure for parameter d16
- **d16:** to set the delay before signalling an alarm on digital input **DI6/Pb4**
- **dt7:** to set the unit of measure for parameter d17
- **d17:** to set the delay before signalling an alarm on digital input **DI7/Pb5**

### Level-based function generation

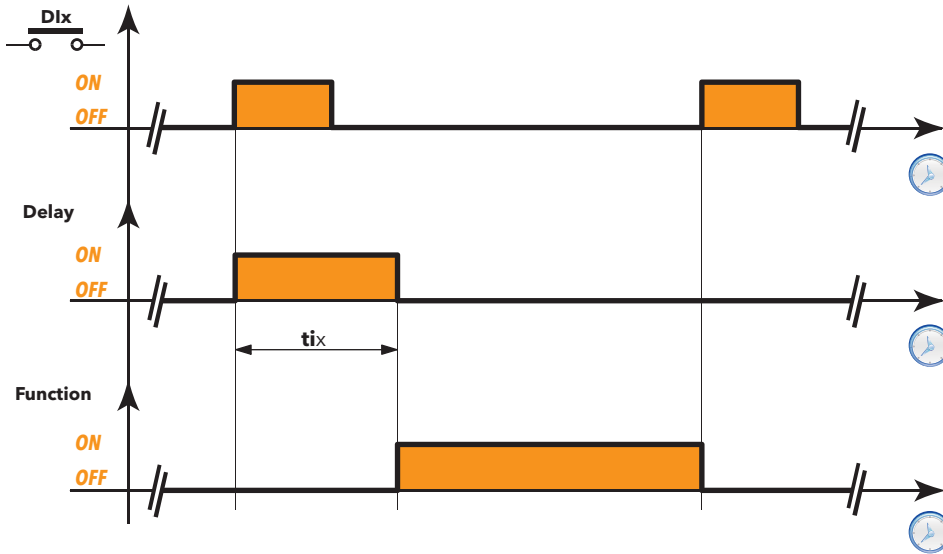
In this mode, the function remains active while the digital input is active.

The control diagram is as follows:



### Edge-based function generation

In this mode, the function is enabled and disabled at the positive edge of the impulse on the digital input. The control diagram is as follows:



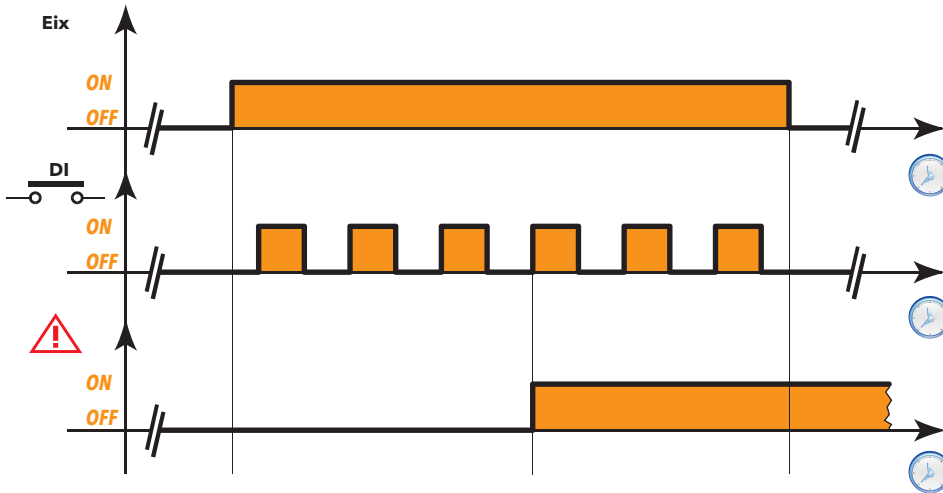
### Generation by number of events

In this mode, the function is activated after a number of pulses, that can be set in parameters **Ei1...Ei7**, are detected on the digital input for a time set in parameters **Ei1...Ei7**.

The function is disabled when the device is turned OFF from the supervisor command or menu function.

If parameters **En1...En7** and **Ei1...Ei7** are set to zero, this mode is disabled.

The following diagram provides an example with **Enx = 4** (the alarm activates on the fourth pulse):



The alarm activates when the digital input has activated **Enx** times in the interval between the current time and the value set in parameter **Eix**.

#### Examples with: $E_{ix} = 1'$ , $E_{nx} = 4$

| Pulse no. | Time     |         | Pulse no. | Time   |         | Pulse no. | Time   |         |
|-----------|----------|---------|-----------|--------|---------|-----------|--------|---------|
| 1st       | 5 secs   | → Alarm | 1st       | 5 secs | → Alarm | 1st       | 5 secs | → Alarm |
| 2nd       | 10       |         | 2nd       | 10     |         | 2nd       | 10     |         |
| 3rd       | 30       |         | 3rd       | 30     |         | 3rd       | 15     |         |
| 4th       | 31 -> 65 |         | 4th       | 70     |         | 4th       | 20     |         |
|           |          |         | 5th       | 75     |         |           |        |         |
|           |          |         | 6th       | 80     |         |           |        |         |

### Block value of analogue input displayed (TelevisIn only)

If configured accordingly via parameters **i1L ... i7L**, on activation, a digital input can block the value of the analogue input shown in the main menu. The actual value will nevertheless be sent to the supervisor and shown in the state menu.

This **block** remains active until while the input is active (level-based generation).

It is **unblocked** when the value measured drops below the value of the blocked input, or at the end of the time-out set in parameter **Ldd**. The time-out is counted from the disabling of the digital input.

### User parameters

The following parameters manage the digital inputs:

| Label | Description   | TelevisIn | TelevisOut |
|-------|---|-----------|------------|
| H11   | To configure digital input 1 (DI1).   | ✓         | ✓          |
| H12   | To configure digital input 2 (DI2).   | ✓         | ✓          |
| H13   | To configure digital input 3 (DI3/Pb1).                                     | ✓         | ✗          |
| H14   | To configure digital input 4 (DI4/Pb2).                                     | ✓         | ✗          |
| H15   | To configure digital input 5 (DI5/Pb3).                                     | ✓         | ✗          |
| H16   | To configure digital input 6 (DI6/Pb4).                                     | ✓         | ✗          |
| H17   | To configure digital input 7 (DI7/Pb5).                                     | ✓         | ✗          |
| dt1   | To set the unit of measure for parameter d11                                | ✓         | ✓          |
| d11   | To set the delay before signalling an alarm on digital input <b>DI1</b>     | ✓         | ✓          |
| dt2   | To set the unit of measure for parameter d12                                | ✓         | ✓          |
| d12   | To set the delay before signalling an alarm on digital input <b>DI2</b>     | ✓         | ✓          |
| dt3   | To set the unit of measure for parameter d13                                | ✓         | ✗          |
| d13   | To set the delay before signalling an alarm on digital input <b>DI3/Pb1</b> | ✓         | ✗          |
| dt4   | To set the unit of measure for parameter d14                                | ✓         | ✗          |
| d14   | To set the delay before signalling an alarm on digital input <b>DI4/Pb2</b> | ✓         | ✗          |
| dt5   | To set the unit of measure for parameter d15                                | ✓         | ✗          |
| d15   | To set the delay before signalling an alarm on digital input <b>DI5/Pb3</b> | ✓         | ✗          |
| dt6   | To set the unit of measurement for parameter d16                            | ✓         | ✗          |
| d16   | To set the delay before signalling an alarm on digital input <b>DI6/Pb4</b> | ✓         | ✗          |
| dt7   | To set the unit of measurement for parameter d17                            | ✓         | ✗          |
| d17   | To set the delay before signalling an alarm on digital input <b>DI7/Pb5</b> | ✓         | ✗          |
| En1   | Number of activations of digital input DI1.                                 | ✓         | ✓          |
| Ei1   | Activation count interval ( <b>En1</b> ) for digital input DI1.             | ✓         | ✓          |
| En2   | Number of activations of digital input DI2.                                 | ✓         | ✓          |
| Ei2   | Activation count interval ( <b>En2</b> ) for digital input DI2.             | ✓         | ✓          |
| En3   | Number of activations of digital input DI3/Pb1.                             | ✓         | ✗          |
| Ei3   | Activation count interval ( <b>En3</b> ) for digital input DI3/Pb1.         | ✓         | ✗          |
| En4   | Number of activations of digital input DI4/Pb2.                             | ✓         | ✗          |
| Ei4   | Activation count interval ( <b>En4</b> ) for digital input DI4/Pb2.         | ✓         | ✗          |
| En5   | Number of activations of digital input DI5/Pb3.                             | ✓         | ✗          |
| Ei5   | Activation count interval ( <b>En5</b> ) for digital input DI5/Pb3.         | ✓         | ✗          |
| En6   | Number of activations of digital input DI6/Pb4.                             | ✓         | ✗          |
| Ei6   | Activation count interval ( <b>En6</b> ) for digital input DI6/Pb4.         | ✓         | ✗          |
| En7   | Number of activations of digital input DI7/Pb5.                             | ✓         | ✗          |
| Ei7   | Activation count interval ( <b>En7</b> ) for digital input DI7/Pb5.         | ✓         | ✗          |
| i1L   | To enable DI1 to block the input shown                                      | ✓         | ✓          |
| i2L   | To enable DI2 to block the input shown                                      | ✓         | ✓          |
| i3L   | To enable DI3/Pb1 to block the input shown                                  | ✓         | ✗          |
| i4L   | To enable DI4/Pb2 to block the input shown                                  | ✓         | ✗          |
| i5L   | To enable DI5/Pb3 to block the input shown                                  | ✓         | ✗          |
| i6L   | To enable DI6/Pb4 to block the input shown                                  | ✓         | ✗          |
| i7L   | To enable DI7/Pb5 to block the input shown                                  | ✓         | ✗          |



## DIGITAL OUTPUTS

### Description

Digital outputs are configured in parameters **H21...H26**.

Using a single variable, the supervisor can vary the state of all configured digital outputs.

A time can be set in parameter **OdO** to delay the activation of outputs from start up of the device (Televis**Out** only).

When the device is OFF, outputs can be activated/disabled depending on the value set in parameter **ooF**.



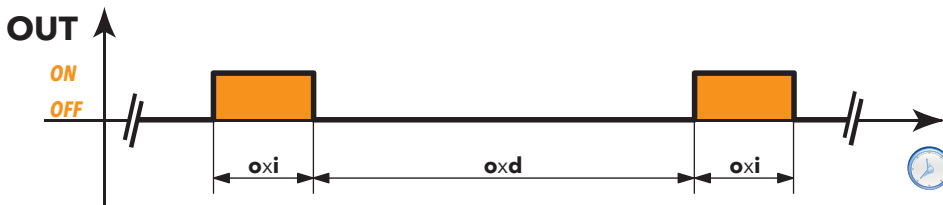
**NOTE:** Each digital output can be associated with an alarm on an analogue or digital input.

The digital output can be activated in 2 different ways, depending on the configuration parameters:

- Phone dialler
- Buzzer/light

### Phone dialler

In this mode, the output is activated by an impulse of a length set in **oxi** parameters (x indicates the number of the actual physical output), repeated at the intervals set in **oxd** parameters (x indicates the number of the physical output).



### Buzzer/light

In this mode, the output is active for the entire duration of the alarm or until it is acknowledged.










### User parameters





The following parameters manage the Analogue Inputs:






| Label | Description   | TelevisIn | TelevisOut |
|-------|---|-----------|------------|
| OdO   | Delay to activate outputs from switch on or after power failure.        | x         | ✓          |
| o1i   | Indicates how long digital output 1 ( <b>OUT1</b> ) is active for (ON). | ✓         | ✓          |
| o1d   | Indicates how long digital output 1 ( <b>OUT1</b> ) is off for (OFF).   | ✓         | ✓          |
| o2i   | Indicates how long digital output 2 ( <b>OUT2</b> ) is active for (ON). | x         | ✓          |
| o2d   | Indicates how long digital output 2 ( <b>OUT2</b> ) is off for (OFF).   | x         | ✓          |
| o3i   | Indicates how long digital output 3 ( <b>OUT3</b> ) is active for (ON). | x         | ✓          |
| o3d   | Indicates how long digital output 3 ( <b>OUT3</b> ) is off for (OFF).   | x         | ✓          |
| o4i   | Indicates how long digital output 4 ( <b>OUT4</b> ) is active for (ON). | x         | ✓          |
| o4d   | Indicates how long digital output 4 ( <b>OUT4</b> ) is off for (OFF).   | x         | ✓          |
| o5i   | Indicates how long digital output 5 ( <b>OUT5</b> ) is active for (ON). | x         | ✓          |
| o5d   | Indicates how long digital output 5 ( <b>OUT5</b> ) is off for (OFF).   | x         | ✓          |
| o6i   | Indicates how long digital output 6 ( <b>OUT6</b> ) is active for (ON). | x         | ✓          |
| o6d   | Indicates how long digital output 6 ( <b>OUT6</b> ) is off for (OFF).   | x         | ✓          |
| ooF   | To activate/disable outputs when the controller is OFF.                 | x         | ✓          |

TELEVISIN TABLES

TELEVISIN "USER" MENU PARAMETERS TABLE

| PAR.                             | DESCRIPTION   | UM         | RANGE                    | AP1 | AP2 | AP3 | AP4 | AP5...AP8  |
|----------------------------------|---|------------|--------------------------|-----|-----|-----|-----|------------|
| <b>ANALOGUE INPUT parameters</b> |   |            |                          |     |     |     |     |            |
| H41                              | To set the presence of probe <b>Pb1/DI3</b> .   | num        | diS/di/Pro               | Pro |     |     | Pro | diS        |
| H42                              | To set the presence of probe <b>Pb2/DI4</b> .   | num        | diS/di/Pro               | Pro |     |     |     | diS        |
| H43                              | To set the presence of probe <b>Pb3/DI5</b> .   | num        | diS/di/Pro               |     | Pro |     | Pro | diS        |
| H44                              | To set the presence of probe <b>Pb4/DI6</b> .   | num        | diS/di/Pro               |     | Pro |     |     | diS        |
| H45                              | To set the presence of probe <b>Pb5/DI7</b> .   | num        | diS/di/Pro               | Pro |     |     |     | diS        |
| H00                              | To select the type of probes connected to <b>Pb1, Pb2</b> and <b>Pb5</b> .  | num        | ntc/Ptc/Pt10             | Ptc |     |     | ntc | ntc        |
| H01                              | To select the type of probe connected to <b>Pb3</b> .   | num        | ntc/01/05<br>010/020/420 |     | 420 |     | 420 | ntc        |
| H02                              | To select the type of probe connected to <b>Pb4</b> .   | num        | ntc/01/05<br>010/020/420 |     | 420 |     |     | ntc        |
| H03                              | Lower display limit probe <b>Pb3</b> . (The <b>UM</b> depends on the value of parameter <b>dr3</b> ).  | <b>dr3</b> | -999.0...999.0           |     | -10 |     | 0   | 0          |
| H04                              | Upper display limit probe <b>Pb3</b> . (The <b>UM</b> depends on the value of parameter <b>dr3</b> ).  | <b>dr3</b> | -999.0...999.0           |     | 70  |     | 100 | 0          |
| H05                              | Lower display limit probe <b>Pb4</b> . (The <b>UM</b> depends on the value of parameter <b>dr4</b> ).  | <b>dr4</b> | -999.0...999.0           |     | -10 |     |     | 0          |
| H06                              | Upper display limit probe <b>Pb4</b> . (The <b>UM</b> depends on the value of parameter <b>dr4</b> ).  | <b>dr4</b> | -999.0...999.0           |     | 70  |     |     | 0          |
| rUP                              | To select which humidity probe to use for dewpoint calculation.   | num        | 0 ... 2                  |     |     |     |     | 0          |
| rtP                              | To select which temperature probe to use for dewpoint calculation.  | num        | 0 ... 5                  |     |     |     |     | 0          |
| <b>DIGITAL INPUT parameters</b>  |   |            |                          |     |     |     |     |            |
| H11                              | To configure digital input 1 ( <b>DI1</b> ). <b>0</b> = disabled                                      | num        | -8 ... 8                 |     |     | 7   |     | 0          |
| H12                              | To configure digital input 2 ( <b>DI2</b> ). <b>0</b> = disabled                                     | num        | -8 ... 8                 |     |     | 7   |     | 0          |
| H13                              | To configure digital input 2 ( <b>DI3/PB1</b> ). <b>0</b> = disabled                                 | num        | -8 ... 8                 |     |     | 7   |     | 0          |
| H14                              | To configure digital input 2 ( <b>DI4/PB2</b> ). <b>0</b> = disabled  | num        | -8 ... 8                 |     |     |     |     | 0          |
| H15                              | To configure digital input 2 ( <b>DI5/PB3</b> ). <b>0</b> = disabled  | num        | -8 ... 8                 |     |     |     |     | 0          |
| H16                              | To configure digital input 2 ( <b>DI6/PB4</b> ). <b>0</b> = disabled  | num        | -8 ... 8                 |     |     |     |     | 0          |
| H17                              | To configure digital input 2 ( <b>DI7/PB5</b> ). <b>0</b> = disabled  | num        | -8 ... 8                 |     |     |     |     | 0          |
| i1L                              | To enable digital input <b>DI1</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ).  | flag       | n/y                      |     |     |     |     | <b>n</b>   |
| i2L                              | To enable digital input <b>DI2</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ).  | flag       | n/y                      |     |     |     |     | <b>n</b>   |
| i3L                              | To enable digital input <b>DI3</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ).  | flag       | n/y                      |     |     |     |     | <b>n</b>   |
| i4L                              | To enable digital input <b>DI4</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ).  | flag       | n/y                      |     |     |     |     | <b>n</b>   |
| i5L                              | To enable digital input <b>DI5</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ).  | flag       | n/y                      |     |     |     |     | <b>n</b>   |
| i6L                              | To enable digital input <b>DI6</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ).  | flag       | n/y                      |     |     |     |     | <b>n</b>   |
| i7L                              | To enable digital input <b>DI7</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ).  | flag       | n/y                      |     |     |     |     | <b>n</b>   |
| i1d                              | To configure the acquisition mode for digital input <b>DI1</b> .  | flag       | Ed/LE                    |     |     | LE  |     | <b>Ed</b>  |
| i2d                              | To configure the acquisition mode for the activation of digital input <b>DI2</b> .  | flag       | Ed/LE                    |     |     | LE  |     | <b>Ed</b>  |
| i3d                              | To configure the acquisition mode for the activation of digital input <b>DI3</b> .  | flag       | Ed/LE                    |     |     | LE  |     | <b>Ed</b>  |
| i4d                              | To configure the acquisition mode for the activation of digital input <b>DI4</b> .  | flag       | Ed/LE                    |     |     |     |     | <b>Ed</b>  |
| i5d                              | To configure the acquisition mode for the activation of digital input <b>DI5</b> .  | flag       | Ed/LE                    |     |     |     |     | <b>Ed</b>  |
| i6d                              | To configure the acquisition mode for the activation of digital input <b>DI6</b> .  | flag       | Ed/LE                    |     |     |     |     | <b>Ed</b>  |
| i7d                              | To configure the acquisition mode for the activation of digital input <b>DI7</b> .  | flag       | Ed/LE                    |     |     |     |     | <b>Ed</b>  |
| dt1                              | To set the unit of measure for parameter <b>d11</b> . <b>SEC</b> = seconds; <b>Pri</b> = minutes.   | flag       | <b>SEC</b> /Pri          |     |     | SEC |     | <b>SEC</b> |
| d11                              | Delay signalling alarm on digital input <b>DI1</b> .   | <b>dt1</b> | 0 ... 250                |     |     | 0   |     | 0          |
| dt2                              | To set the unit of measure for parameter <b>d12</b> . <b>SEC</b> = seconds; <b>Pri</b> = minutes.   | flag       | <b>SEC</b> /Pri          |     |     | SEC |     | <b>SEC</b> |
| d12                              | Delay signalling alarm on digital input <b>DI2</b> .   | <b>dt2</b> | 0 ... 250                |     |     | 0   |     | 0          |

| PAR.                             | DESCRIPTION  | UM         | RANGE            | AP1 | AP2 | AP3 | AP4 | AP5...AP8 |
|----------------------------------|--|------------|------------------|-----|-----|-----|-----|-----------|
| <b>dt3</b>                       | To set the unit of measure for parameter <b>d13</b> . <b>SEC = seconds</b> ; <b>Pri = minutes</b> .  | flag       | SEC/Pri          |     |     | SEC |     | SEC       |
| <b>d13</b>                       | Delay signalling alarm on digital input <b>DI3</b> .   | <b>dt3</b> | 0 ... 250        |     |     | 0   |     | 0         |
| <b>dt4</b>                       | To set the unit of measure for parameter <b>d14</b> . <b>SEC = seconds</b> ; <b>Pri = minutes</b> .  | flag       | SEC/Pri          |     |     |     |     | SEC       |
| <b>d14</b>                       | Delay signalling alarm on digital input <b>DI4</b> .   | <b>dt4</b> | 0 ... 250        |     |     |     |     | 0         |
| <b>dt5</b>                       | To set the unit of measure for parameter <b>d15</b> . <b>SEC = seconds</b> ; <b>Pri = minutes</b> .  | flag       | SEC/Pri          |     |     |     |     | SEC       |
| <b>d15</b>                       | Delay signalling alarm on digital input <b>DI5</b> .   | <b>dt5</b> | 0 ... 250        |     |     |     |     | 0         |
| <b>dt6</b>                       | To set the unit of measure for parameter <b>d16</b> . <b>SEC = seconds</b> ; <b>Pri = minutes</b> .  | flag       | SEC/Pri          |     |     |     |     | SEC       |
| <b>d16</b>                       | Delay signalling alarm on digital input <b>DI6</b> .   | <b>dt6</b> | 0 ... 250        |     |     |     |     | 0         |
| <b>dt7</b>                       | To set the unit of measure for parameter <b>d17</b> . <b>SEC = seconds</b> ; <b>Pri = minutes</b> .  | flag       | SEC/Pri          |     |     |     |     | SEC       |
| <b>d17</b>                       | Delay signalling alarm on digital input <b>DI7</b> .   | <b>dt7</b> | 0 ... 250        |     |     |     |     | 0         |
| <b>En1</b>                       | Number of activations of digital input <b>DI1</b> . <b>0 = disabled</b>  | num        | 0 ... 15         |     |     | 0   |     | 0         |
| <b>Ei1</b>                       | Activation count interval ( <b>En1</b> ) for digital input <b>DI1</b> .  | min        | 0 ... 200        |     |     | 0   |     | 0         |
| <b>En2</b>                       | Number of activations of digital input <b>DI2</b> . <b>0 = disabled</b>  | num        | 0 ... 15         |     |     | 0   |     | 0         |
| <b>Ei2</b>                       | Activation count interval ( <b>En2</b> ) for digital input <b>DI2</b> .  | min        | 0 ... 200        |     |     | 0   |     | 0         |
| <b>En3</b>                       | Number of activations of digital input <b>DI3</b> . <b>0 = disabled</b>  | num        | 0 ... 15         |     |     | 0   |     | 0         |
| <b>Ei3</b>                       | Activation count interval ( <b>En</b> ) for digital input <b>DI3</b> .   | min        | 0 ... 200        |     |     | 0   |     | 0         |
| <b>En4</b>                       | Number of activations of digital input <b>DI4</b> . <b>0 = disabled</b>  | num        | 0 ... 15         |     |     |     |     | 0         |
| <b>Ei4</b>                       | Activation count interval ( <b>En4</b> ) for digital input <b>DI4</b> .  | min        | 0 ... 200        |     |     |     |     | 0         |
| <b>En5</b>                       | Number of activations of digital input <b>DI5</b> . <b>0 = disabled</b>  | num        | 0 ... 15         |     |     |     |     | 0         |
| <b>Ei5</b>                       | Activation count interval ( <b>En5</b> ) for digital input <b>DI5</b> .  | min        | 0 ... 200        |     |     |     |     | 0         |
| <b>En6</b>                       | Number of activations of digital input <b>DI6</b> . <b>0 = disabled</b>  | num        | 0 ... 15         |     |     |     |     | 0         |
| <b>Ei6</b>                       | Activation count interval ( <b>En6</b> ) for digital input <b>DI6</b> .  | min        | 0 ... 200        |     |     |     |     | 0         |
| <b>En7</b>                       | Number of activations of digital input <b>DI7</b> . <b>0 = disabled</b>  | num        | 0 ... 15         |     |     |     |     | 0         |
| <b>Ei7</b>                       | Activation count interval ( <b>En7</b> ) for digital input <b>DI7</b> .  | min        | 0 ... 200        |     |     |     |     | 0         |
| <b>DIGITAL OUTPUT parameters</b> |  |            |                  |     |     |     |     |           |
| <b>H21</b>                       | To configure digital output 1 ( <b>OUT1</b> ).   | num        | -14 ... 14       |     |     |     |     | 0         |
| <b>ALARM parameters</b>          |  |            |                  |     |     |     |     |           |
| <b>AfD</b>                       | Alarms activation differential.  | °C/°F      | 0.1 ... 15.0     | 0.1 | 0.1 |     |     | 0.1       |
| <b>At1</b>                       | Parameter <b>HA1</b> and <b>LA1</b> mode intended as the absolute temperature value or the setpoint differential. <b>AbS = absolute value</b> ; <b>reL = relative value</b> .    | flag       | AbS/rEL          | rEL |     |     |     | AbS       |
| <b>SE1</b>                       | To configure alarm setpoint for probe <b>Pb1</b> .    | <b>dr1</b> | -999.0 ... 999.0 | 0   |     |     |     | 0         |
| <b>LA1</b>                       | Probe <b>Pb1</b> probe low alarm.  | <b>dr1</b> | -999.0 ... HA1   | -50 |     |     |     | 0         |
| <b>HA1</b>                       | Probe <b>Pb1</b> probe high alarm.   | <b>dr1</b> | LA1 ... 999.0    | 50  |     |     |     | 0         |
| <b>tA1</b>                       | Delay signalling temperature alarm on probe <b>Pb1</b> .   | min        | 0 ... 250        | 0   |     |     |     | 0         |
| <b>At2</b>                       | Parameter <b>HA2</b> and <b>LA2</b> mode intended as the absolute temperature value or as the setpoint differential. <b>AbS = absolute value</b> ; <b>reL = relative value</b> . | flag       | AbS/rEL          | rEL |     |     |     | AbS       |
| <b>SE2</b>                       | To configure alarm setpoint for probe <b>Pb2</b> .    | <b>dr2</b> | -999.0 ... 999.0 | 0   |     |     |     | 0         |
| <b>LA2</b>                       | Probe <b>Pb2</b> minimum alarm.  | <b>dr2</b> | -999.0 ... HA1   | -50 |     |     |     | 0         |
| <b>HA2</b>                       | Probe <b>Pb2</b> maximum alarm.  | <b>dr2</b> | LA1 ... 999.0    | 50  |     |     |     | 0         |
| <b>tA2</b>                       | Delay signalling temperature alarm on probe <b>Pb2</b> .   | min        | 0 ... 250        | 0   |     |     |     | 0         |
| <b>At3</b>                       | Parameter <b>HA3</b> and <b>LA3</b> mode intended as the absolute temperature value or the setpoint differential. <b>AbS = absolute value</b> ; <b>reL = relative value</b> .    | flag       | AbS/rEL          |     | rEL |     |     | AbS       |
| <b>SE3</b>                       | To configure alarm setpoint for probe <b>Pb3</b> .    | <b>dr3</b> | -999.0 ... 999.0 |     | 0   |     |     | 0         |
| <b>LA3</b>                       | Probe <b>Pb3</b> minimum alarm.  | <b>dr3</b> | -999.0 ... HA1   |     | -50 |     |     | 0         |
| <b>HA3</b>                       | Probe <b>Pb3</b> maximum alarm.  | <b>dr3</b> | LA1 ... 999.0    |     | 50  |     |     | 0         |
| <b>tA3</b>                       | Delay signalling temperature alarm on probe <b>Pb3</b> .   | min        | 0 ... 250        |     | 0   |     |     | 0         |
| <b>At4</b>                       | Parameter <b>HA4</b> and <b>LA4</b> mode intended as the absolute temperature value or the setpoint differential. <b>AbS = absolute value</b> ; <b>reL = relative value</b> .    | flag       | AbS/rEL          |     | rEL |     |     | AbS       |
| <b>SE4</b>                       | To configure alarm setpoint for probe <b>Pb4</b> .    | <b>dr4</b> | -999.0 ... 999.0 |     | 0   |     |     | 0         |
| <b>LA4</b>                       | Probe <b>Pb4</b> minimum alarm.  | <b>dr4</b> | -999.0 ... HA1   |     | -50 |     |     | 0         |
| <b>HA4</b>                       | Probe <b>Pb4</b> maximum alarm.  | <b>dr4</b> | LA1 ... 999.0    |     | 50  |     |     | 0         |

| PAR.                                | DESCRIPTION   | UM         | RANGE            | AP1 | AP2 | AP3 | AP4 | AP5...AP8 |
|-------------------------------------|---|------------|------------------|-----|-----|-----|-----|-----------|
| <b>tA4</b>                          | Delay signalling temperature alarm on probe <b>Pb4</b> .  | min        | 0 ... 250        |     | 0   |     |     | 0         |
| <b>At5</b>                          | Parameter <b>HA5</b> and <b>LA5</b> mode intended as the absolute temperature value or the setpoint differential. <b>AbS</b> = absolute value; <b>reL</b> = relative value. | flag       | AbS/rEL          | rEL |     |     |     | AbS       |
| <b>SE5</b>                          | To configure alarm setpoint for probe <b>Pb5</b> .   | <b>dr5</b> | -999.0 ... 999.0 | 0   |     |     |     | 0         |
| <b>LA5</b>                          | Probe <b>Pb5</b> minimum alarm.   | <b>dr5</b> | -999.0 ... HA1   | -50 |     |     |     | 0         |
| <b>HA5</b>                          | Probe <b>Pb5</b> maximum alarm.   | <b>dr5</b> | LA1 ... 999.0    | 50  |     |     |     | 0         |
| <b>tA5</b>                          | Delay signalling temperature alarm on probe <b>Pb5</b> .  | min        | 0 ... 250        | 0   |     |     |     | 0         |
| <b>PA0</b>                          | Alarm override time after device is switched on following a power failure.                 | min        | 0 ... 999        | 120 | 120 |     |     | 0         |
| <b>COMMUNICATION parameters</b>     |   |            |                  |     |     |     |     |           |
| <b>rEL</b>                          | Firmware release. Reserved: read-only parameter   | /          | /                | /   | /   | /   | /   | /         |
| <b>tAb</b>                          | Parameters table. Reserved: read-only parameter   | /          | /                | /   | /   | /   | /   | /         |
| <b>DISPLAY parameters</b>           |   |            |                  |     |     |     |     |           |
| <b>PS1</b>                          | PAssword 1. When enabled ( <b>PS1</b> ≠ 0) this password provides access to level1 parameters ( <b>User</b> ).  | num        | 0 ... 250        | 0   | 0   | 0   | 0   | 0         |
| <b>ndt</b>                          | Display with decimal point.   | flag       | n/y              |     |     |     |     | n         |
| <b>CA1</b>                          | To calibrate probe <b>Pb1</b> . (The <b>UM</b> depends on the value of parameter <b>dr1</b> ).  | dr1        | -999.0 ... 999.0 |     |     |     | 0   | 0         |
| <b>CA2</b>                          | To calibrate probe <b>Pb2</b> . (The <b>UM</b> depends on the value of parameter <b>dr2</b> ).  | dr2        | -999.0 ... 999.0 |     |     |     |     | 0         |
| <b>CA3</b>                          | To calibrate probe <b>Pb3</b> . (The <b>UM</b> depends on the value of parameter <b>dr3</b> ).  | dr3        | -999.0 ... 999.0 |     |     |     | 0   | 0         |
| <b>CA4</b>                          | To calibrate probe <b>Pb4</b> . (The <b>UM</b> depends on the value of parameter <b>dr4</b> ).  | dr4        | -999.0 ... 999.0 |     |     |     |     | 0         |
| <b>CA5</b>                          | To calibrate probe <b>Pb5</b> . (The <b>UM</b> depends on the value of parameter <b>dr5</b> ).  | dr5        | -999.0 ... 999.0 |     |     |     |     | 0         |
| <b>Ldd</b>                          | Time-out value to unlock display.   | min        | 0 ... 250        |     |     |     |     | 0         |
| <b>dr1</b>                          | Unit of measure probe <b>Pb1</b> .    | num        | C/F/rH/bAr/n     |     |     |     | C   | C         |
| <b>dr2</b>                          | Unit of measure probe <b>Pb2</b> .  | num        | C/F/rH/bAr/n     |     |     |     |     | C         |
| <b>dr3</b>                          | Unit of measure probe <b>Pb3</b> .  | num        | C/F/rH/bAr/n     |     |     |     | rH  | C         |
| <b>dr4</b>                          | Unit of measure probe <b>Pb4</b> .  | num        | C/F/rH/bAr/n     |     |     |     |     | C         |
| <b>dr5</b>                          | Unit of measure probe <b>Pb5</b> .  | num        | C/F/rH/bAr/n     |     |     |     |     | C         |
| <b>ddd</b>                          | Selects type of value to display.    | num        | 0 ... 19         |     |     |     | 6   | 0         |
| <b>COPY CARD/UNICARD parameters</b> |   |            |                  |     |     |     |     |           |
| <b>UL</b>                           | Upload. To transfer programming parameters from instrument to CopyCard.   | /          | /                | /   | /   | /   | /   | /         |
| <b>dL</b>                           | Download. To transfer programming parameters from Copy Card to instrument.  | /          | /                | /   | /   | /   | /   | /         |
| <b>Fr</b>                           | Formatting. To erase data on Copy Card.   | /          | /                | /   | /   | /   | /   | /         |
| <b>PA2</b>                          | Folder that permits access to the "Installer" menu. If <b>PS2</b> ≠0, the password will be requested.   |            |                  |     |     |     |     |           |

**NOTES:** \* The parameters in the "USER" menu include PA2 which gives access to "Installer" menu.  
 \*\* For the full list of parameters, see the "Installer Menu Parameters Table".

## TELEVISIN "INSTALLER" MENU PARAMETERS TABLE

| PAR.   | DESCRIPTION   | UM         | RANGE                    | AP1 | AP2 | AP3 | AP4 | AP5...AP8 |
|--|---|------------|--------------------------|-----|-----|-----|-----|-----------|
| <b>ANALOGUE INPUT parameters (Ai folder)</b> |   |            |                          |     |     |     |     |           |
| <b>H41</b>                                   | To set the presence of probe <b>Pb1/DI3</b> .<br><b>diS</b> (0) = input not active<br><b>di</b> (1) = input configured as a digital input<br><b>Pro</b> (2) = input configured as a probe   | num        | diS/di/Pro               | Pro |     |     | Pro | diS       |
| <b>H42</b>                                   | To set the presence of probe <b>Pb2/DI4</b> . Same as <b>H41</b> .  | num        | diS/di/Pro               | Pro |     |     | diS | diS       |
| <b>H43</b>                                   | To set the presence of probe <b>Pb3/DI5</b> . Same as <b>H41</b> .  | num        | diS/di/Pro               |     | Pro |     | Pro | diS       |
| <b>H44</b>                                   | To set the presence of probe <b>Pb4/DI6</b> . Same as <b>H41</b> .  | num        | diS/di/Pro               |     | Pro |     | diS | diS       |
| <b>H45</b>                                   | To set the presence of probe <b>Pb5/DI7</b> . Same as <b>H41</b> .  | num        | diS/di/Pro               | Pro |     |     | diS | diS       |
| <b>H00</b>                                   | To select the type of probes connected to <b>Pb1, Pb2</b> and <b>Pb5</b> .<br><b>ntc</b> (0) = NTC<br><b>Ptc</b> (1) = PTC<br><b>Pt10</b> (2) = PT1000  | num        | ntc/Ptc/Pt10             | Ptc |     |     | ntc | ntc       |
| <b>H01</b>                                   | To select the type of probe connected to <b>Pb3</b> .<br><b>ntc</b> (0) = NTC<br><b>01</b> (1) = 0 ... 1V<br><b>05</b> (2) = 0 ... 5V<br><b>010</b> (3) = 0 ... 10V<br><b>020</b> (4) = 0 ... 20mA<br><b>420</b> (5) = 4 ... 20mA   | num        | ntc/01/05<br>010/020/420 |     | 420 |     | 420 | ntc       |
| <b>H02</b>                                   | To select the type of probe connected to <b>Pb4</b> .<br><b>ntc</b> (0) = NTC<br><b>01</b> (1) = 0 ... 1V<br><b>05</b> (2) = 0 ... 5V<br><b>010</b> (3) = 0 ... 10V<br><b>020</b> (4) = 0 ... 20mA<br><b>420</b> (5) = 4 ... 20mA   | num        | ntc/01/05<br>010/020/420 |     | 420 |     | ntc | ntc       |
| <b>H03</b>                                   | Lower display limit probe Pb3. (The <b>UM</b> depends on the value of parameter <b>dr3</b> ).   | <b>dr3</b> | -999.0...999.0           |     | -10 |     | 0   | 0         |
| <b>H04</b>                                   | Upper display limit probe Pb3. (The <b>UM</b> depends on the value of parameter <b>dr3</b> ).   | <b>dr3</b> | -999.0...999.0           |     | 70  |     | 100 | 0         |
| <b>H05</b>                                   | Lower display limit probe Pb4. (The <b>UM</b> depends on the value of parameter <b>dr4</b> ).   | <b>dr4</b> | -999.0...999.0           |     | -10 |     | 0   | 0         |
| <b>H06</b>                                   | Upper display limit probe Pb4. (The <b>UM</b> depends on the value of parameter <b>dr4</b> ).   | <b>dr4</b> | -999.0...999.0           |     | 70  |     | 100 | 0         |
| <b>rUP</b>                                   | To select which humidity probe to use for dewpoint calculation.<br><b>0</b> = disabled<br><b>1</b> = probe Pb3<br><b>2</b> = probe Pb4  | num        | 0 ... 2                  |     |     |     | 1   | 0         |
| <b>rtP</b>                                   | To select which temperature probe to use for dewpoint calculation.<br><b>0</b> = disabled<br><b>1</b> = probe Pb1<br><b>2</b> = probe Pb2<br><b>3</b> = probe Pb3<br><b>4</b> = probe Pb4<br><b>5</b> = probe Pb5   | num        | 0 ... 5                  |     |     |     | 1   | 0         |
| <b>DIGITAL INPUT parameters (di folder)</b>  |   |            |                          |     |     |     |     |           |
| <b>H11</b>                                   | To configure digital input 1 ( <b>DI1</b> ).<br><b>0</b> = disabled<br><b>1</b> = acknowledge digital output <b>OUT1</b><br><b>2</b> = not used<br><b>3</b> = not used<br><b>4</b> = not used<br><b>5</b> = not used<br><b>6</b> = not used<br><b>7</b> = external alarm<br><b>8</b> = general<br><b>NOTE:</b> - The "+" sign indicates that the input is active when the contact is closed.<br>- The "-" sign indicates that the input is active when the contact is open. | num        | -8 ... 8                 |     |     | 7   | 0   | 0         |
| <b>H12</b>                                   | To configure digital input 2 ( <b>DI2</b> ). Same as <b>H11</b> .   | num        | -8 ... 8                 |     |     | 7   | 0   | 0         |
| <b>H13</b>                                   | To configure digital input 2 ( <b>DI3/PB1</b> ). Same as <b>H11</b> .   | num        | -8 ... 8                 |     |     | 7   |     | 0         |
| <b>H14</b>                                   | To configure digital input 2 ( <b>DI4/PB2</b> ). Same as <b>H11</b> .   | num        | -8 ... 8                 |     |     |     |     | 0         |
| <b>H15</b>                                   | To configure digital input 2 ( <b>DI5/PB3</b> ). Same as <b>H11</b> .   | num        | -8 ... 8                 |     |     |     |     | 0         |

| PAR.       | DESCRIPTION  | UM         | RANGE     | AP1 | AP2 | AP3 | AP4 | AP5...AP8 |
|------------|--|------------|-----------|-----|-----|-----|-----|-----------|
| <b>H16</b> | To configure digital input 2 ( <b>DI6/PB4</b> ). Same as <b>H11</b> .  | num        | -8 ... 8  |     |     |     |     | 0         |
| <b>H17</b> | To configure digital input 2 ( <b>DI7/PB5</b> ). Same as <b>H11</b> .  | num        | -8 ... 8  |     |     |     |     | 0         |
| <b>i1L</b> | To enable digital input <b>DI1</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu. | flag       | n/y       |     |     |     |     | n         |
| <b>i2L</b> | To enable digital input <b>DI2</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu. | flag       | n/y       |     |     |     |     | n         |
| <b>i3L</b> | To enable digital input <b>DI3</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu. | flag       | n/y       |     |     |     |     | n         |
| <b>i4L</b> | To enable digital input <b>DI4</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu. | flag       | n/y       |     |     |     |     | n         |
| <b>i5L</b> | To enable digital input <b>DI5</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu. | flag       | n/y       |     |     |     |     | n         |
| <b>i6L</b> | To enable digital input <b>DI6</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu. | flag       | n/y       |     |     |     |     | n         |
| <b>i7L</b> | To enable digital input <b>DI7</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu. | flag       | n/y       |     |     |     |     | n         |
| <b>i1d</b> | To configure the acquisition mode for the activation of digital input <b>DI1</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.     | flag       | Ed/LE     |     |     | LE  | Ed  | Ed        |
| <b>i2d</b> | To configure the acquisition mode for the activation of digital input <b>DI2</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.     | flag       | Ed/LE     |     |     | LE  | Ed  | Ed        |
| <b>i3d</b> | To configure the acquisition mode for the activation of digital input <b>DI3</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.     | flag       | Ed/LE     |     |     | LE  |     | Ed        |
| <b>i4d</b> | To configure the acquisition mode for the activation of digital input <b>DI4</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.     | flag       | Ed/LE     |     |     |     |     | Ed        |
| <b>i5d</b> | To configure the acquisition mode for the activation of digital input <b>DI5</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.     | flag       | Ed/LE     |     |     |     |     | Ed        |
| <b>i6d</b> | To configure the acquisition mode for the activation of digital input <b>DI6</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.     | flag       | Ed/LE     |     |     |     |     | Ed        |
| <b>i7d</b> | To configure the acquisition mode for the activation of digital input <b>DI7</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.     | flag       | Ed/LE     |     |     |     |     | Ed        |
| <b>dt1</b> | To set the unit of measure for parameter <b>d11</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes  | flag       | SEC/Pri   |     |     | SEC | SEC | SEC       |
| <b>d11</b> | Delay signalling alarm on digital input <b>DI1</b> .   | <b>dt1</b> | 0 ... 250 |     |     | 0   | 0   | 0         |
| <b>dt2</b> | To set the unit of measure for parameter <b>d12</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes  | flag       | SEC/Pri   |     |     | SEC | SEC | SEC       |
| <b>d12</b> | Delay signalling alarm on digital input <b>DI2</b> .   | <b>dt2</b> | 0 ... 250 |     |     | 0   | 0   | 0         |
| <b>dt3</b> | To set the unit of measure for parameter <b>d13</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes  | flag       | SEC/Pri   |     |     | SEC |     | SEC       |

| PAR.  | DESCRIPTION  | UM         | RANGE        | AP1 | AP2 | AP3 | AP4 | AP5...AP8 |
|---|--|------------|--------------|-----|-----|-----|-----|-----------|
| <b>d13</b>                                    | Delay signalling alarm on digital input <b>DI3</b> .   | <b>dt3</b> | 0 ... 250    |     |     | 0   |     | 0         |
| <b>dt4</b>                                    | To set the unit of measure for parameter <b>d14</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes  | flag       | SEC/Pri      |     |     |     |     | SEC       |
| <b>d14</b>                                    | Delay signalling alarm on digital input <b>DI4</b> .   | <b>dt4</b> | 0 ... 250    |     |     |     |     | 0         |
| <b>dt5</b>                                    | To set the unit of measure for parameter <b>d15</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes  | flag       | SEC/Pri      |     |     |     |     | SEC       |
| <b>d15</b>                                    | Delay signalling alarm on digital input <b>DI5</b> .   | <b>dt5</b> | 0 ... 250    |     |     |     |     | 0         |
| <b>dt6</b>                                    | To set the unit of measure for parameter <b>d16</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes  | flag       | SEC/Pri      |     |     |     |     | SEC       |
| <b>d16</b>                                    | Delay signalling alarm on digital input <b>DI6</b> .   | <b>dt6</b> | 0 ... 250    |     |     |     |     | 0         |
| <b>dt7</b>                                    | To set the unit of measure for parameter <b>d17</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes  | flag       | SEC/Pri      |     |     |     |     | SEC       |
| <b>d17</b>                                    | Delay signalling alarm on digital input <b>DI7</b> .   | <b>dt7</b> | 0 ... 250    |     |     |     |     | 0         |
| <b>En1</b>                                    | Number of activations of digital input <b>DI1</b> . <b>0</b> = disabled  | num        | 0 ... 15     |     |     | 0   | 0   | 0         |
| <b>Ei1</b>                                    | Activation count interval ( <b>En1</b> ) for digital input <b>DI1</b> .  | min        | 0 ... 200    |     |     | 0   | 0   | 0         |
| <b>En2</b>                                    | Number of activations of digital input <b>DI2</b> . <b>0</b> = disabled  | num        | 0 ... 15     |     |     | 0   | 0   | 0         |
| <b>Ei2</b>                                    | Activation count interval ( <b>En2</b> ) for digital input <b>DI2</b> .  | min        | 0 ... 200    |     |     | 0   | 0   | 0         |
| <b>En3</b>                                    | Number of activations of digital input <b>DI3</b> . <b>0</b> = disabled  | num        | 0 ... 15     |     |     | 0   |     | 0         |
| <b>Ei3</b>                                    | Activation count interval ( <b>En3</b> ) for digital input <b>DI3</b> .  | min        | 0 ... 200    |     |     | 0   |     | 0         |
| <b>En4</b>                                    | Number of activations of digital input <b>DI4</b> . <b>0</b> = disabled  | num        | 0 ... 15     |     |     |     |     | 0         |
| <b>Ei4</b>                                    | Activation count interval ( <b>En4</b> ) for digital input <b>DI4</b> .  | min        | 0 ... 200    |     |     |     |     | 0         |
| <b>En5</b>                                    | Number of activations of digital input <b>DI5</b> . <b>0</b> = disabled  | num        | 0 ... 15     |     |     |     |     | 0         |
| <b>Ei5</b>                                    | Activation count interval ( <b>En5</b> ) for digital input <b>DI5</b> .  | min        | 0 ... 200    |     |     |     |     | 0         |
| <b>En6</b>                                    | Number of activations of digital input <b>DI6</b> . <b>0</b> = disabled  | num        | 0 ... 15     |     |     |     |     | 0         |
| <b>Ei6</b>                                    | Activation count interval ( <b>En6</b> ) for digital input <b>DI6</b> .  | min        | 0 ... 200    |     |     |     |     | 0         |
| <b>En7</b>                                    | Number of activations of digital input <b>DI7</b> . <b>0</b> = disabled  | num        | 0 ... 15     |     |     |     |     | 0         |
| <b>Ei7</b>                                    | Activation count interval ( <b>En7</b> ) for digital input <b>DI7</b> .  | min        | 0 ... 200    |     |     |     |     | 0         |
| <b>digital output parameters (Out folder)</b> |  |            |              |     |     |     |     |           |
| <b>H21</b>                                    | To configure digital input 1 ( <b>OUT1</b> ).<br><b>0</b> = disabled<br><b>1</b> = no-link<br><b>2</b> = general alarm<br><b>3</b> = temperature alarm probe <b>Pb1</b><br><b>4</b> = temperature alarm probe <b>Pb2</b><br><b>5</b> = temperature alarm probe <b>Pb3</b><br><b>6</b> = temperature alarm probe <b>Pb4</b><br><b>7</b> = temperature alarm <b>Pb5</b><br><b>8</b> = alarm digital input <b>DI1</b><br><b>9</b> = alarm digital input <b>DI2</b><br><b>10</b> = alarm digital input <b>DI3</b><br><b>11</b> = alarm digital input <b>DI4</b><br><b>12</b> = alarm digital input <b>DI5</b><br><b>13</b> = alarm digital input <b>DI6</b><br><b>14</b> = alarm digital input <b>DI7</b><br><br><b>NOTE:</b> - The "+" sign indicates that the relay will activate when there is an alarm.<br>- The "-" sign indicates that the relay will not activate when there is an alarm. | num        | -14 ... 14   |     |     |     | 0   | 0         |
| <b>Od0</b>                                    | Delay to activate outputs from switch on or after power failure.   | min        | 0 ... 250    |     |     |     | 0   |           |
| <b>ooF</b>                                    | To activate/disable outputs when the controller is OFF. <b>n</b> (0) = no; <b>y</b> (1) = yes.   | flag       | n/y          |     |     |     | 0   |           |
| <b>ALARM parameters (AL folder)</b>           |  |            |              |     |     |     |     |           |
| <b>AfD</b>                                    | Alarms activation differential.  | °C/°F      | 0.1 ... 15.0 | 0.1 | 0.1 |     | 0.1 | 0.1       |

| PAR.       | DESCRIPTION   | UM         | RANGE            | AP1 | AP2 | AP3 | AP4 | AP5...AP8 |
|------------|---|------------|------------------|-----|-----|-----|-----|-----------|
| <b>At1</b> | Parameter <b>HA1</b> and <b>LA1</b> mode intended as the absolute temperature value or the setpoint differential.<br><b>AbS</b> (0) = absolute value; <b>rEL</b> (1) = relative value.<br><b>NOTE:</b> In case of relative values (par. <b>At1=1</b> ), parameter <b>HA1</b> should be set to positive values, whilst parameter <b>LA1</b> should only have negative values.    | flag       | AbS/rEL          | rEL |     |     | rEL | AbS       |
| <b>SE1</b> | To configure alarm setpoint for probe <b>Pb1</b> .  | <b>dr1</b> | -999.0 ... 999.0 | AbS |     |     | AbS | AbS       |
| <b>LA1</b> | <b>Pb1</b> probe low alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE1</b> or absolute value in relation to <b>At1</b> ) which will generate an alarm signal when the value read drops below it.   | <b>dr1</b> | -999.0 ... HA1   | -50 |     |     | -50 | 0         |
| <b>HA1</b> | <b>Pb1</b> probe high alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE1</b> or absolute value in relation to <b>At1</b> ) which will generate an alarm signal when the value read goes above it.   | <b>dr1</b> | LA1 ... 999.0    | 50  |     |     | 50  | 0         |
| <b>tA1</b> | Delay signalling temperature alarm on probe <b>Pb1</b> .<br><b>This parameter refers to high/low temperature alarms LA1 and HA1 only.</b>   | min        | 0 ... 250        | 0   |     |     | 0   | 0         |
| <b>At2</b> | Parameter <b>HA2</b> and <b>LA2</b> mode intended as the absolute temperature value or as the setpoint differential.<br><b>AbS</b> (0) = absolute value; <b>rEL</b> (1) = relative value.<br><b>NOTE:</b> In case of relative values (par. <b>At2=1</b> ), parameter <b>HA2</b> should be set to positive values, whilst parameter <b>LA2</b> should only have negative values. | flag       | AbS/rEL          | rEL |     |     | rEL | AbS       |
| <b>SE2</b> | To configure alarm setpoint for probe <b>Pb2</b> .  | <b>dr2</b> | -999.0 ... 999.0 | 0   |     |     | 0   | 0         |
| <b>LA2</b> | Probe <b>Pb2</b> minimum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE2</b> or absolute value in relation to <b>At2</b> ) which will generate an alarm signal when the value read drops below it.   | <b>dr2</b> | -999.0 ... HA1   | -50 |     |     | -50 | 0         |
| <b>HA2</b> | Probe <b>Pb2</b> maximum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE2</b> or absolute value in relation to <b>At2</b> ) which will generate an alarm signal when the value read goes above it.  | <b>dr2</b> | LA1 ... 999.0    | 50  |     |     | 50  | 0         |
| <b>tA2</b> | Delay signalling temperature alarm on probe <b>Pb2</b> .<br><b>This parameter refers to high/low temperature alarms LA2 and HA2 only.</b>   | min        | 0 ... 250        | 0   |     |     | 0   | 0         |
| <b>At3</b> | Parameter <b>HA3</b> and <b>LA3</b> mode intended as the absolute temperature value or the setpoint differential.<br><b>AbS</b> (0) = absolute value; <b>rEL</b> (1) = relative value.<br><b>NOTE:</b> In case of relative values (par. <b>At3=1</b> ), parameter <b>HA3</b> should be set to positive values, whilst parameter <b>LA3</b> should only have negative values.    | flag       | AbS/rEL          |     | rEL |     | rEL | AbS       |
| <b>SE3</b> | To configure alarm setpoint for probe <b>Pb3</b> .  | <b>dr3</b> | -999.0 ... 999.0 |     | 0   |     | 0   | 0         |
| <b>LA3</b> | Probe <b>Pb3</b> minimum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE3</b> or absolute value in relation to <b>At3</b> ) which will generate an alarm signal when the value read drops below it.   | <b>dr3</b> | -999.0 ... HA1   |     | -50 |     | -50 | 0         |
| <b>HA3</b> | Probe <b>Pb3</b> maximum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE3</b> or absolute value in relation to <b>At3</b> ) which will generate an alarm signal when the value read goes above it.  | <b>dr3</b> | LA1 ... 999.0    |     | 50  |     | 50  | 0         |
| <b>tA3</b> | Delay signalling temperature alarm on probe <b>Pb3</b> .<br><b>This parameter refers to high/low temperature alarms LA3 and HA3 only.</b>   | min        | 0 ... 250        |     | 0   |     | 0   | 0         |
| <b>At4</b> | Parameter <b>HA4</b> and <b>LA4</b> mode intended as the absolute temperature value or the setpoint differential.<br><b>AbS</b> (0) = absolute value; <b>rEL</b> (1) = relative value.<br><b>NOTE:</b> In case of relative values (par. <b>At4=1</b> ), parameter <b>HA4</b> should be set to positive values, whilst parameter <b>LA4</b> should only have negative values.    | flag       | AbS/rEL          |     | rEL |     | rEL | AbS       |
| <b>SE4</b> | To configure alarm setpoint for probe <b>Pb4</b> .  | <b>dr4</b> | -999.0 ... 999.0 |     | 0   |     | 0   | 0         |
| <b>LA4</b> | Probe <b>Pb4</b> minimum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE4</b> or absolute value in relation to <b>At4</b> ) which will generate an alarm signal when the value read drops below it.   | <b>dr4</b> | -999.0 ... HA1   |     | -50 |     | -50 | 0         |
| <b>HA4</b> | Probe <b>Pb4</b> maximum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE4</b> or absolute value in relation to <b>At4</b> ) which will generate an alarm signal when the value read goes above it.  | <b>dr4</b> | LA1 ... 999.0    |     | 50  |     | 50  | 0         |
| <b>tA4</b> | Delay signalling temperature alarm on probe <b>Pb4</b> .<br><b>This parameter refers to high/low temperature alarms LA4 and HA4 only.</b>   | min        | 0 ... 250        |     | 0   |     | 0   | 0         |



| PAR.   | DESCRIPTION  | UM         | RANGE            | AP1  | AP2 | AP3 | AP4 | AP5...AP8 |
|--|--|------------|------------------|--|-----|-----|-----|-----------|
| <b>At5</b>                                   | Parameter <b>HA5</b> and <b>LA5</b> mode intended as the absolute temperature value or the setpoint differential.<br><b>AbS</b> (0) = absolute value; <b>rEL</b> (1) = relative value.<br><b>NOTE:</b> In case of relative values (par. <b>At5=1</b> ), parameter <b>HA5</b> should be set to positive values, whilst parameter <b>LA5</b> should only have negative values. | flag       | AbS/rEL          | rEL  |     |     | rEL | AbS       |
| <b>SE5</b>                                   | To configure alarm setpoint for probe <b>Pb5</b> .   | <b>dr5</b> | -999.0 ... 999.0 | 0  |     |     | 0   | 0         |
| <b>LA5</b>                                   | Probe <b>Pb5</b> minimum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE5</b> or absolute value in relation to <b>At5</b> ) which will generate an alarm signal when the value read drops below it.  | <b>dr5</b> | -999.0 ... HA1   | -50  |     |     | -50 | 0         |
| <b>HA5</b>                                   | Probe <b>Pb5</b> maximum alarm.<br>Temperature value (intended as the distance from the setpoint <b>SE5</b> or absolute value in relation to <b>At5</b> ) which will generate an alarm signal when the value read goes above it.   | <b>dr5</b> | LA1 ... 999.0    | 50   |     |     | 50  | 0         |
| <b>tA5</b>                                   | Delay signalling temperature alarm on probe <b>Pb5</b> .<br><b>This parameter refers to high/low temperature alarms LA5 and HA5 only.</b>  | min        | 0 ... 250        | 0  |     |     | 0   | 0         |
| <b>PAO</b>                                   | Alarm override time after device is switched on following a power failure.<br><b>This parameter refers to high/low temperature alarms only.</b>  | min        | 0 ... 999        | 120  | 120 |     | 120 | 0         |
| <b>COMMUNICATION parameters (Add folder)</b> |  |            |                  |  |     |     |     |           |
| <b>PtS</b>                                   | Select protocol ( <b>t</b> (0) = Televis; <b>d</b> (1) = ModBus).  | flag       | t/d              | <b>t (Parameter not present in vectors)</b>  |     |     |     |           |
| <b>dEA</b>                                   | Device address: indicates the device address to the management protocol.   | num        | 0 ... 14         | <b>0 (Parameter not present in vectors)</b>  |     |     |     |           |
| <b>FAA</b>                                   | Family address: indicates the device family to the management protocol.  | num        | 0 ... 14         | <b>0 (Parameter not present in vectors)</b>  |     |     |     |           |
| <b>Adr</b>                                   | Modbus protocol controller address   | num        | 1 ... 250        | <b>1 (Parameter not present in vectors)</b>  |     |     |     |           |
| <b>Pty</b>                                   | To set the Modbus parity bit <b>n</b> (0) = none; <b>E</b> (1) = even; <b>o</b> (2) = uneven.  | num        | n/E/o            | <b>E (Parameter not present in vectors)</b>  |     |     |     |           |
| <b>StP</b>                                   | To select the modbus stop bit ( <b>1b</b> (0) = 1 stop bit; <b>2b</b> (1) = 2 stop bits)   | flag       | 1b/2b            | <b>1b (Parameter not present in vectors)</b> |     |     |     |           |
| <b>rEL</b>                                   | Firmware release. Reserved: read-only parameter  | /          | /                | /  | /   | /   | /   | /         |
| <b>tAb</b>                                   | Parameters table Reserved: read-only parameter   | /          | /                | /  | /   | /   | /   | /         |
| <b>H60</b>                                   | Display of selected application.<br><b>0</b> = disabled;<br><b>1</b> = Vector 1 ( <b>AP1</b> )<br><b>2</b> = Vector 2 ( <b>AP2</b> )<br><b>3</b> = Vector 3 ( <b>AP3</b> )<br><b>4</b> = Vector 4 ( <b>AP4</b> )<br><b>5</b> = Vector 5 ( <b>AP5</b> )<br><b>6</b> = Vector 6 ( <b>AP6</b> )<br><b>7</b> = Vector 7 ( <b>AP7</b> )<br><b>8</b> = Vector 8 ( <b>AP8</b> )     | num        | 1 ... 8          | <b>1 (Parameter not present in vectors)</b>  |     |     |     |           |
| <b>DISPLAY parameters (diS folder)</b>       |  |            |                  |  |     |     |     |           |
| <b>PS1</b>                                   | PAssword 1. When enabled ( <b>PS1 ≠ 0</b> ) this password provides access to level1 parameters ( <b>User</b> ).  | num        | 0 ... 250        | 0  | 0   | 0   | 0   | 0         |
| <b>PS2</b>                                   | PAssword 2. When enabled ( <b>PS2 ≠ 0</b> ), this password provides access to level2 parameters ( <b>Installer</b> ).  | num        | 0 ... 250        | 0  | 0   | 0   | 0   | 0         |
| <b>ndt</b>                                   | Display with decimal point.<br><b>n</b> (0) = no (integers only)<br><b>y</b> (1) = yes (display with decimal point).   | flag       | n/y              | n  | n   |     | n   | n         |
| <b>CA1</b>                                   | To calibrate probe <b>Pb1</b> . (The <b>UM</b> depends on the value of parameter <b>dr1</b> ).<br>Positive or negative temperature value added to the value read by <b>Pb1</b> .<br>This sum is used both for the temperature displayed and for regulation.  | <b>dr1</b> | -999.0 ... 999.0 | 0  |     |     | 0   | 0         |
| <b>CA2</b>                                   | To calibrate probe <b>Pb2</b> . (The <b>UM</b> depends on the value of parameter <b>dr2</b> ).<br>Positive or negative temperature value added to the value read by <b>Pb2</b> .<br>This sum is used both for the temperature displayed and for regulation.  | <b>dr2</b> | -999.0 ... 999.0 | 0  |     |     | 0   | 0         |
| <b>CA3</b>                                   | To calibrate probe <b>Pb3</b> . The <b>UM</b> depends on the value of parameter <b>dr3</b> .<br>Positive or negative temperature value added to the value read by <b>Pb3</b> .<br>This sum is used both for the temperature displayed and for regulation.  | <b>dr3</b> | -999.0 ... 999.0 |  | 0   |     | 0   | 0         |
| <b>CA4</b>                                   | To calibrate probe <b>Pb4</b> . The <b>UM</b> depends on the value of parameter <b>dr4</b> .<br>Positive or negative temperature value added to the value read by <b>Pb4</b> .<br>This sum is used both for the temperature displayed and for regulation.  | <b>dr4</b> | -999.0 ... 999.0 |  | 0   |     | 0   | 0         |
| <b>CA5</b>                                   | To calibrate probe <b>Pb5</b> . The <b>UM</b> depends on the value of parameter <b>dr5</b> .<br>Positive or negative temperature value added to the value read by <b>Pb5</b> .<br>This sum is used both for the temperature displayed and for regulation.  | <b>dr5</b> | -999.0 ... 999.0 | 0  |     |     | 0   | 0         |

| PAR.   | DESCRIPTION  | UM  | RANGE        | AP1 | AP2 | AP3 | AP4 | AP5...AP8 |
|--|--|-----|--------------|-----|-----|-----|-----|-----------|
| <b>Ldd</b>                                       | Time-out value to unlock display.  | min | 0 ... 250    | 0   | 0   |     | 0   | 0         |
| <b>dr1</b>                                       | Unit of measure probe <b>Pb1</b> .<br><b>C</b> (0) = selects °C as the unit of measure and switches on the relative icon<br><b>F</b> (1) = selects °F as the unit of measure but does not switch on an icon<br><b>rH</b> (2) = selects %RH (relative humidity) as the unit of measure and switches on the relative icon<br><b>bAr</b> (3) = selects BAR (pressure) as the unit of measure and switches on the relative icon<br><b>n</b> (4) = no unit of measure selected and no icon switched on  | num | C/F/rH/bAr/n | C   |     |     | C   | C         |
| <b>dr2</b>                                       | Unit of measure probe <b>Pb2</b> . Same as <b>dr1</b> .  | num | C/F/rH/bAr/n | C   |     |     | C   | C         |
| <b>dr3</b>                                       | Unit of measure probe <b>Pb3</b> . Same as <b>dr1</b> .  | num | C/F/rH/bAr/n |     | C   |     | rH  | C         |
| <b>dr4</b>                                       | Unit of measure probe <b>Pb4</b> . Same as <b>dr1</b> .  | num | C/F/rH/bAr/n |     | C   |     | C   | C         |
| <b>dr5</b>                                       | Unit of measure probe <b>Pb5</b> . Same as <b>dr1</b> .  | num | C/F/rH/bAr/n | C   |     |     | C   | C         |
| <b>ddd</b>                                       | Selects type of value to display.<br><b>0</b> = shows the communication state ( <b>SL:On</b> if active - <b>SL:OF</b> if not active)<br><b>1</b> = displays the values read by <b>Pb1</b><br><b>2</b> = displays the values read by <b>Pb2</b><br><b>3</b> = displays the values read by <b>Pb3</b><br><b>4</b> = displays the values read by <b>Pb4</b><br><b>5</b> = displays the values read by <b>Pb5</b><br><b>6</b> = displays the value of the <b>dewpoint</b><br><b>7</b> = shows the state of digital input <b>DI1</b> ( <b>I1:On</b> if active - <b>I1:OF</b> if not active)<br><b>8</b> = shows the state of digital input <b>DI2</b> ( <b>I2:On</b> if active - <b>I2:OF</b> if not active)<br><b>9</b> = shows the state of digital input <b>DI3</b> ( <b>I3:On</b> if active - <b>I3:OF</b> if not active)<br><b>10</b> = shows the state of digital input <b>DI4</b> ( <b>I4:On</b> if active - <b>I4:OF</b> if not active)<br><b>11</b> = shows the state of digital input <b>DI5</b> ( <b>I5:On</b> if active - <b>I5:OF</b> if not active)<br><b>12</b> = shows the state of digital input <b>DI6</b> ( <b>I6:On</b> if active - <b>I6:OF</b> if not active)<br><b>13</b> = shows the state of digital input <b>DI7</b> ( <b>I7:On</b> if active - <b>I7:OF</b> if not active)<br><b>14</b> = shows the state of digital output <b>OUT1</b> ( <b>o1:On</b> if active - <b>o1:OF</b> if not active)<br><b>15</b> = shows the state of digital output <b>OUT2</b> ( <b>o2:On</b> if active - <b>o2:OF</b> if not active)<br><b>16</b> = shows the state of digital output <b>OUT3</b> ( <b>o3:On</b> if active - <b>o3:OF</b> if not active)<br><b>17</b> = shows the state of digital output <b>OUT4</b> ( <b>o4:On</b> if active - <b>o4:OF</b> if not active)<br><b>18</b> = shows the state of digital output <b>OUT5</b> ( <b>o5:On</b> if active - <b>o5:OF</b> if not active)<br><b>19</b> = shows the state of digital output <b>OUT6</b> ( <b>o6:On</b> if active - <b>o6:OF</b> if not active) | num | 0 ... 19     | 1   | 3   | 7   | 6   | 0         |
| <b>COPY CARD/UNICARD parameters (FPr folder)</b> |  |     |              |     |     |     |     |           |
| <b>UL</b>  | Upload. To transfer programming parameters from instrument to Copy Card.   | /   | /            | /   | /   | /   | /   | /         |
| <b>dL</b>  | Download. To transfer programming parameters from Copy Card to instrument.   | /   | /            | /   | /   | /   | /   | /         |
| <b>Fr</b>  | Formatting. To erase data on Copy Card.<br><b>IMPORTANT: If parameter "Fr" is used, the data entered will be permanently lost. This operation cannot be reversed.</b>  | /   | /            | /   | /   | /   | /   | /         |

## TELEVISOUT TABLES

### TELEVISOUT "USER" MENU PARAMETERS TABLE

| PAR.                             | DESCRIPTION  | UM         | RANGE      | AP1 | AP2...AP8 |
|----------------------------------|--|------------|------------|-----|-----------|
| <b>DIGITAL INPUT parameters</b>  |  |            |            |     |           |
| <b>H11</b>                       | To configure digital input 1 ( <b>DI1</b> ). <b>0</b> = disabled   | num        | -8 ... 8   |     | 0         |
| <b>H12</b>                       | To configure digital input 2 ( <b>DI2</b> ). <b>0</b> = disabled   | num        | -8 ... 8   |     | 0         |
| <b>i1L</b>                       | To enable digital input <b>DI1</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). | flag       | n/y        |     | n         |
| <b>i2L</b>                       | To enable digital input <b>DI2</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). | flag       | n/y        |     | n         |
| <b>i1d</b>                       | To configure the acquisition mode for digital input <b>DI1</b> .   | flag       | Ed/LE      |     | Ed        |
| <b>i2d</b>                       | To configure the acquisition mode for the activation of digital input <b>DI2</b> .   | flag       | Ed/LE      |     | Ed        |
| <b>dt1</b>                       | To set the unit of measure for parameter <b>d11</b> . <b>SEC</b> = seconds; <b>Pri</b> = minutes.                                  | flag       | SEC/Pri    |     | SEC       |
| <b>d11</b>                       | Delay signalling alarm on digital input <b>DI1</b> .   | <b>dt1</b> | 0 ... 250  |     | 0         |
| <b>dt2</b>                       | To set the unit of measure for parameter <b>d12</b> . <b>SEC</b> = seconds; <b>Pri</b> = minutes.                                  | flag       | SEC/Pri    |     | SEC       |
| <b>d12</b>                       | Delay signalling alarm on digital input <b>DI2</b> .   | <b>dt2</b> | 0 ... 250  |     | 0         |
| <b>En1</b>                       | Number of activations of digital input <b>DI1</b> . <b>0</b> = disabled  | num        | 0 ... 15   |     | 0         |
| <b>E11</b>                       | Activation count interval ( <b>En1</b> ) for digital input <b>DI1</b> .  | min        | 0 ... 200  |     | 0         |
| <b>En2</b>                       | Number of activations of digital input <b>DI2</b> . <b>0</b> = disabled  | num        | 0 ... 15   |     | 0         |
| <b>E12</b>                       | Activation count interval ( <b>En2</b> ) for digital input <b>DI2</b> .  | min        | 0 ... 200  |     | 0         |
| <b>DIGITAL OUTPUT parameters</b> |  |            |            |     |           |
| <b>H21</b>                       | To configure digital output 1 ( <b>OUT1</b> ).   | num        | -14 ... 14 | -1  | 0         |
| <b>H22</b>                       | To configure digital output 2 ( <b>OUT2</b> ).   | num        | -14 ... 14 | -2  | 0         |
| <b>H23</b>                       | To configure digital output 3 ( <b>OUT3</b> ).   | num        | -14 ... 14 |     | 0         |
| <b>H24</b>                       | To configure digital output 4 ( <b>OUT4</b> ).   | num        | -14 ... 14 |     | 0         |
| <b>H25</b>                       | To configure analogue output 1 ( <b>OUT5</b> ).  | num        | -14 ... 14 |     | 0         |
| <b>H26</b>                       | To configure analogue output 2 ( <b>OUT6</b> ).  | num        | -14 ... 14 |     | 0         |
| <b>Od0</b>                       | Delay to activate outputs from switch on or after power failure.   | min        | 0 ... 250  | 0   | 0         |
| <b>o1i</b>                       | ON time phone dialler relay 1 ( <b>OUT1</b> ). Indicates how long the digital output is active for (ON).                           | sec        | 0 ... 250  |     | 0         |
| <b>o1d</b>                       | OFF time phone dialler relay 1 ( <b>OUT1</b> ). Indicates how long the digital output is off for (OFF).                            | sec        | 0 ... 250  |     | 0         |
| <b>o2i</b>                       | ON time phone dialler relay 2 ( <b>OUT2</b> ). Indicates how long the digital output is active for (ON).                           | sec        | 0 ... 250  |     | 0         |
| <b>o2d</b>                       | OFF time phone dialler relay 2 ( <b>OUT2</b> ). Indicates how long the digital output is off for (OFF).                            | sec        | 0 ... 250  |     | 0         |
| <b>o3i</b>                       | ON time phone dialler relay 3 ( <b>OUT3</b> ). Indicates how long the digital output is active for (ON).                           | sec        | 0 ... 250  |     | 0         |
| <b>o3d</b>                       | OFF time phone dialler relay 3 ( <b>OUT3</b> ). Indicates how long the digital output is off for (OFF).                            | sec        | 0 ... 250  |     | 0         |
| <b>o4i</b>                       | ON time phone dialler relay 4 ( <b>OUT4</b> ). Indicates how long the digital output is active for (ON).                           | sec        | 0 ... 250  |     | 0         |
| <b>o4d</b>                       | OFF time phone dialler relay 4 ( <b>OUT4</b> ). Indicates how long the digital output is off for (OFF).                            | sec        | 0 ... 250  |     | 0         |
| <b>o5i</b>                       | ON time phone dialler relay 5 ( <b>OUT5</b> ). Indicates how long the digital output is active for (ON).                           | sec        | 0 ... 250  |     | 0         |
| <b>o5d</b>                       | OFF time phone dialler relay 5 ( <b>OUT5</b> ). Indicates how long the digital output is off for (OFF).                            | sec        | 0 ... 250  |     | 0         |
| <b>o6i</b>                       | ON time phone dialler relay 6 ( <b>OUT6</b> ). Indicates how long the digital output is active for (ON).                           | sec        | 0 ... 250  |     | 0         |
| <b>o6d</b>                       | OFF time phone dialler relay 6 ( <b>OUT6</b> ). Indicates how long the digital output is off for (OFF).                            | sec        | 0 ... 250  |     | 0         |
| <b>ooF</b>                       | To activate/disable outputs when the controller is OFF. <b>n</b> (0) = no; <b>y</b> (1) = yes.                                     | flag       | n/y        |     | n         |

| PAR.                                   | DESCRIPTION  | UM                        | RANGE     | AP1                          | AP2...AP8 |                                  |  |
|--|--|---------------------------|-----------|------------------------------|-----------|----------------------------------|--|
| <b>ALARM parameters</b>                |  |                           |           |                              |           |                                  |  |
| <b>PAO</b>                             | Alarm override time after device is switched on following a power failure.   | min                       | 0 ... 999 |                              | 0         |                                  |  |
| <b>Atd</b>                             | Duration of LINK <sup>2</sup> supervision alarm. <b>0</b> = alarm disabled.  | min                       | 0 ... 250 |                              | 0         |                                  |  |
| <b>Art</b>                             | LINK <sup>2</sup> supervision alarm activation period. <b>0</b> = disabled   | min                       | 0 ... 250 |                              | 0         |                                  |  |
| <b>dtA</b>                             | Alarm acknowledgement time If the time set in parameter dtA elapses after disabling, and the alarm is still present, the situation before it was acknowledged is restored (relay activated if present and alarm LED permanently on). | sec                       | 0 ... 250 |                              | 0         |                                  |  |
| <b>CLC</b>                             | Activation time for no-link/failed communication alarm Once the set time has elapsed, the WTV enables digital outputs configured as general and no-link alarms, and turns on the alarm LED.  | min                       | 0 ... 250 | 0                            | 0         |                                  |  |
| <b>COMMUNICATION parameters</b>        |  |                           |           |                              |           |                                  |  |
| <b>rEL</b>                             | Firmware release. Reserved: read-only parameter  | /                         | /         | /                            | /         |                                  |  |
| <b>tAb</b>                             | Parameters table. Reserved: read-only parameter  | /                         | /         | /                            | /         |                                  |  |
| <b>DISPLAY parameters</b>              |  |                           |           |                              |           |                                  |  |
| <b>PS1</b>                             | PASsword 1. When enabled ( <b>PS1 ≠ 0</b> ) this password provides access to level1 parameters ( <b>User</b> ).  | num                       | 0 ... 250 | 0                            | 0         |                                  |  |
| <b>ddd</b>                             | Selects type of value to display.  | num                       | 0 ... 19  |                              | 0         |                                  |  |
| <b>COPY CARD/UNICARD parameters</b>    |  |                           |           |                              |           |                                  |  |
| <b>UL</b>                              | Upload. To transfer programming parameters from instrument to Copy Card.   | /                         | /         | /                            | /         |                                  |  |
| <b>dL</b>                              | Download. To transfer programming parameters from Copy Card to instrument.   | /                         | /         | /                            | /         |                                  |  |
| <b>Fr</b>                              | Formatting. To erase data on Copy Card.  | /                         | /         | /                            | /         |                                  |  |
| <b>FUNCTIONS</b>                       |  |                           |           |                              |           |                                  |  |
| The following functions are available: |  |                           |           |                              |           |                                  |  |
|  |  | <b>Function</b>           |           | <b>Function label ACTIVE</b> |           | <b>Function label not active</b> |  |
|  |  | DO1 alarm acknowledgement |           | tAo1                         |           | tAo1                             |  |
|  |  | DO2 alarm acknowledgement |           | tAo2                         |           | tAo2                             |  |
| <b>PA2</b>                             | Folder that permits access to the "Installer" menu. If <b>PS2≠0</b> , the password will be requested.  |                           |           |                              |           |                                  |  |

- NOTES:** \* The parameters in the "USER" menu include PA2 which gives access to "Installer" menu.  
 \*\* For the full list of parameters, see the "Installer Menu Parameters Table".


## TELEVISOUT "INSTALLER" MENU PARAMETERS TABLE

| PAR.  | DESCRIPTION   | UM         | RANGE      | AP1 | AP2...AP8 |
|---|---|------------|------------|-----|-----------|
| <b>DIGITAL INPUT parameters (di folder)</b>   |   |            |            |     |           |
| <b>H11</b>                                    | To configure digital input 1 ( <b>DI1</b> ).<br><b>0</b> = disabled<br><b>1</b> = acknowledge digital output <b>OUT1</b><br><b>2</b> = not used<br><b>3</b> = not used<br><b>4</b> = not used<br><b>5</b> = not used<br><b>6</b> = not used<br><b>7</b> = external alarm<br><b>8</b> = general<br><b>NOTE:</b> - The "+" sign indicates that the input is active when the contact is closed.<br>- The "-" sign indicates that the input is active when the contact is open.   | num        | -8 ... 8   |     | 0         |
| <b>H12</b>                                    | To configure digital input 2 ( <b>DI2</b> ). Same as <b>H11</b> .   | num        | -8 ... 8   |     | 0         |
| <b>i1L</b>                                    | To enable digital input <b>DI1</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu.  | flag       | n/y        |     | n         |
| <b>i2L</b>                                    | To enable digital input <b>DI2</b> to block the value of the analogue input shown in the main menu (set in parameter <b>ddd</b> ). <b>n</b> (0) = no; <b>y</b> (1) = yes.<br><b>NOTE:</b> The real value will be sent to the supervisor and shown in the state menu.  | flag       | n/y        |     | n         |
| <b>i1d</b>                                    | To configure the acquisition mode for digital input <b>DI1</b> .<br><b>Ed</b> (0) = acquisition activated on the positive edge of the impulse on the digital input.<br><b>LE</b> (1) = acquisition activated when the digital input is active.  | flag       | Ed/LE      |     | Ed        |
| <b>i2d</b>                                    | To configure the acquisition mode for the activation of digital input <b>DI2</b> . Same as <b>i1d</b> .   | flag       | Ed/LE      |     | Ed        |
| <b>dt1</b>                                    | To set the unit of measure for parameter <b>d11</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes   | flag       | SEC/Pri    |     | SEC       |
| <b>d11</b>                                    | Delay signalling alarm on digital input <b>DI1</b> .  | <b>dt1</b> | 0 ... 250  |     | 0         |
| <b>dt2</b>                                    | To set the unit of measure for parameter <b>d12</b> .<br><b>SEC</b> (0) = seconds<br><b>Pri</b> (1) = minutes   | flag       | SEC/Pri    |     | SEC       |
| <b>d12</b>                                    | Delay signalling alarm on digital input <b>DI2</b> .  | <b>dt2</b> | 0 ... 250  |     | 0         |
| <b>En1</b>                                    | Number of activations of digital input <b>DI1</b> . <b>0</b> = disabled   | num        | 0 ... 15   |     | 0         |
| <b>Ei1</b>                                    | Activation count interval ( <b>En1</b> ) for digital input <b>DI1</b> .   | min        | 0 ... 200  |     | 0         |
| <b>En2</b>                                    | Number of activations of digital input <b>DI2</b> . <b>0</b> = disabled   | num        | 0 ... 15   |     | 0         |
| <b>Ei2</b>                                    | Activation count interval ( <b>En2</b> ) for digital input <b>DI2</b> .   | min        | 0 ... 200  |     | 0         |
| <b>DIGITAL OUTPUT parameters (Out folder)</b> |   |            |            |     |           |
| <b>H21</b>                                    | To configure digital output 1 ( <b>OUT1</b> ).<br><b>0</b> = disabled<br><b>1</b> = no-link<br><b>2</b> = general alarm<br><b>3</b> = temperature alarm probe <b>Pb1</b><br><b>4</b> = temperature alarm probe <b>Pb2</b><br><b>5</b> = temperature alarm probe <b>Pb3</b><br><b>6</b> = temperature alarm probe <b>Pb4</b><br><b>7</b> = temperature alarm <b>Pb5</b><br><b>8</b> = alarm digital input <b>DI1</b><br><b>9</b> = alarm digital input <b>DI2</b><br><b>10</b> = alarm digital input <b>DI3</b><br><b>11</b> = alarm digital input <b>DI4</b><br><b>12</b> = alarm digital input <b>DI5</b><br><b>13</b> = alarm digital input <b>DI6</b><br><b>14</b> = alarm digital input <b>DI7</b><br><b>NOTE:</b> - The "+" sign indicates that the relay will activate when there is an alarm.<br>- The "-" sign indicates that the relay will not activate when there is an alarm. | num        | -14 ... 14 | -1  | 0         |
| <b>H22</b>                                    | To configure digital output 2 ( <b>OUT2</b> ). Same as <b>H21</b> .   | num        | -14 ... 14 | -2  | 0         |
| <b>H23</b>                                    | To configure digital output 3 ( <b>OUT3</b> ). Same as <b>H21</b> .   | num        | -14 ... 14 |     | 0         |

| PAR.   | DESCRIPTION  | UM   | RANGE      | AP1  | AP2...AP8 |
|--|--|------|------------|--|-----------|
| <b>H24</b>                                   | To configure digital output 4 ( <b>OUT4</b> ). Same as <b>H21</b> .  | num  | -14 ... 14 |  | 0         |
| <b>H25</b>                                   | To configure analogue output 1 ( <b>OUT5</b> ). Same as <b>H21</b> .   | num  | -14 ... 14 |  | 0         |
| <b>H26</b>                                   | To configure analogue output 2 ( <b>OUT6</b> ). Same as <b>H21</b> .   | num  | -14 ... 14 |  | 0         |
| <b>Od0</b>                                   | Delay to activate outputs from switch on or after power failure.   | min  | 0 ... 250  | 0  | 0         |
| <b>o1i</b>                                   | ON time phone dialler relay 1 ( <b>OUT1</b> ).<br>Indicates how long the digital output is active for (ON).  | sec  | 0 ... 250  |  | 0         |
| <b>o1d</b>                                   | OFF time phone dialler relay 1 ( <b>OUT1</b> ).<br>Indicates how long the digital output is off for (OFF).   | sec  | 0 ... 250  |  | 0         |
| <b>o2i</b>                                   | ON time phone dialler relay 2 ( <b>OUT2</b> ).<br>Indicates how long the digital output is active for (ON).  | sec  | 0 ... 250  |  | 0         |
| <b>o2d</b>                                   | OFF time phone dialler relay 2 ( <b>OUT2</b> ).<br>Indicates how long the digital output is off for (OFF).   | sec  | 0 ... 250  |  | 0         |
| <b>o3i</b>                                   | ON time phone dialler relay 3 ( <b>OUT3</b> ).<br>Indicates how long the digital output is active for (ON).  | sec  | 0 ... 250  |  | 0         |
| <b>o3d</b>                                   | OFF time phone dialler relay 3 ( <b>OUT3</b> ).<br>Indicates how long the digital output is off for (OFF).   | sec  | 0 ... 250  |  | 0         |
| <b>o4i</b>                                   | ON time phone dialler relay 4 ( <b>OUT4</b> ).<br>Indicates how long the digital output is active for (ON).  | sec  | 0 ... 250  |  | 0         |
| <b>o4d</b>                                   | OFF time phone dialler relay 4 ( <b>OUT4</b> ).<br>Indicates how long the digital output is off for (OFF).   | sec  | 0 ... 250  |  | 0         |
| <b>o5i</b>                                   | ON time phone dialler relay 5 ( <b>OUT5</b> ).<br>Indicates how long the digital output is active for (ON).  | sec  | 0 ... 250  |  | 0         |
| <b>o5d</b>                                   | OFF time phone dialler relay 5 ( <b>OUT5</b> ).<br>Indicates how long the digital output is off for (OFF).   | sec  | 0 ... 250  |  | 0         |
| <b>o6i</b>                                   | ON time phone dialler relay 6 ( <b>OUT6</b> ).<br>Indicates how long the digital output is active for (ON).  | sec  | 0 ... 250  |  | 0         |
| <b>o6d</b>                                   | OFF time phone dialler relay 6 ( <b>OUT6</b> ).<br>Indicates how long the digital output is off for (OFF).   | sec  | 0 ... 250  |  | 0         |
| <b>ooF</b>                                   | To activate/disable outputs when the controller is OFF. <b>n</b> (0) = no; <b>y</b> (1) = yes.   | flag | n/y        | n  | n         |
| <b>ALARM parameters (AL folder)</b>          |  |      |            |  |           |
| <b>PAO</b>                                   | Alarm override time after device is switched on following a power failure.<br><b>This parameter refers to high/low temperature alarms only.</b>  | min  | 0 ... 999  |  | 0         |
| <b>Atd</b>                                   | Duration of LINK <sup>2</sup> supervision alarm. <b>0</b> = alarm disabled.  | min  | 0 ... 250  |  | 0         |
| <b>Art</b>                                   | LINK <sup>2</sup> supervision alarm activation period. <b>0</b> = disabled   | min  | 0 ... 250  |  | 0         |
| <b>dtA</b>                                   | Alarm acknowledgement time If the time set in parameter <b>dtA</b> elapses after disabling, and the alarm is still present, the situation before it was acknowledged is restored (relay activated if present and alarm LED permanently on).  | sec  | 0 ... 250  |  | 0         |
| <b>CLC</b>                                   | Activation time for no-link/failed communication alarm Once the set time has elapsed, the EWTV enables digital outputs configured as general and no-link alarms, and turns on the alarm LED.<br><b>NOTE:</b> This function is only enabled if the following conditions occur:<br>1) At least one relay output has been configured as a general alarm.<br>2) At least one relay output has been configured as no-link.<br>3) CLC > 0<br>4) The supervisor has not blocked communication via the relative command. | min  | 0 ... 250  | 0  | 0         |
| <b>COMMUNICATION parameters (Add folder)</b> |  |      |            |  |           |
| <b>PtS</b>                                   | Protocol selection<br><b>t</b> (0) = Televis<br><b>d</b> (1) = ModBus  | flag | t/d        | <b>t (Parameter not present in vectors)</b>  |           |
| <b>dEA</b>                                   | Device address: indicates the device address to the management protocol.   | num  | 0 ... 14   | <b>0 (Parameter not present in vectors)</b>  |           |
| <b>FAA</b>                                   | Family address: indicates the device family to the management protocol.  | num  | 0 ... 14   | <b>0 (Parameter not present in vectors)</b>  |           |
| <b>Adr</b>                                   | Modbus protocol controller address   | num  | 1 ... 250  | <b>1 (Parameter not present in vectors)</b>  |           |
| <b>Pty</b>                                   | To set the Modbus parity bit<br><b>n</b> (0) = none<br><b>E</b> (1) = even<br><b>o</b> (2) = uneven  | num  | n/E/o      | <b>E (Parameter not present in vectors)</b>  |           |
| <b>StP</b>                                   | To select the Modbus stop bit<br><b>1b</b> (0) = 1 stop bit<br><b>2b</b> (1) = 2 stop bits   | flag | 1b/2b      | <b>1b (Parameter not present in vectors)</b> |           |

| PAR.   | DESCRIPTION  | UM  | RANGE     | AP1   | AP2...AP8 |
|--|--|-----|-----------|---|-----------|
| <b>rEL</b>                                       | Firmware release. Reserved: read-only parameter  | /   | /         | /   | /         |
| <b>tAb</b>                                       | Parameters table Reserved: read-only parameter   | /   | /         | /   | /         |
| <b>H60</b>                                       | Display of selected application.<br><b>0</b> = disabled;<br><b>1</b> = Vector 1 ( <b>AP1</b> )<br><b>2</b> = Vector 2 ( <b>AP2</b> )<br><b>3</b> = Vector 3 ( <b>AP3</b> )<br><b>4</b> = Vector 4 ( <b>AP4</b> )<br><b>5</b> = Vector 5 ( <b>AP5</b> )<br><b>6</b> = Vector 6 ( <b>AP6</b> )<br><b>7</b> = Vector 7 ( <b>AP7</b> )<br><b>8</b> = Vector 8 ( <b>AP8</b> )   | num | 1 ... 8   | 1 ( <b>Parameter not present in vectors</b> ) |           |
| <b>DISPLAY parameters (diS folder)</b>           |  |     |           |   |           |
| <b>PS1</b>                                       | PAssword 1. When enabled ( <b>PS1 ≠ 0</b> ) this password provides access to level1 parameters ( <b>User</b> ).  | num | 0 ... 250 | 0   | 0         |
| <b>PS2</b>                                       | PAssword 2. When enabled ( <b>PS2 ≠ 0</b> ), this password provides access to level2 parameters ( <b>Installer</b> ).  | num | 0 ... 250 | 0   | 0         |
| <b>ddd</b>                                       | Selects type of value to display.<br><b>0</b> = shows the communication state ( <b>SL:On</b> if active - <b>SL:OF</b> if not active)<br><b>1</b> = displays the values read by <b>Pb1</b><br><b>2</b> = displays the values read by <b>Pb2</b><br><b>3</b> = displays the values read by <b>Pb3</b><br><b>4</b> = displays the values read by <b>Pb4</b><br><b>5</b> = displays the values read by <b>Pb5</b><br><b>6</b> = displays the value of the <b>dewpoint</b><br><b>7</b> = shows the state of digital input <b>DI1 (I1:On</b> if active - <b>I1:OF</b> if not active)<br><b>8</b> = shows the state of digital input <b>DI2 (I2:On</b> if active - <b>I2:OF</b> if not active)<br><b>9</b> = shows the state of digital input <b>DI3 (I3:On</b> if active - <b>I3:OF</b> if not active)<br><b>10</b> = shows the state of digital input <b>DI4 (I4:On</b> if active - <b>I4:OF</b> if not active)<br><b>11</b> = shows the state of digital input <b>DI5 (I5:On</b> if active - <b>I5:OF</b> if not active)<br><b>12</b> = shows the state of digital input <b>DI6 (I6:On</b> if active - <b>I6:OF</b> if not active)<br><b>13</b> = shows the state of digital input <b>DI7 (I7:On</b> if active - <b>I7:OF</b> if not active)<br><b>14</b> = shows the state of digital output <b>OUT1 (o1:On</b> if active - <b>o1:OF</b> if not active)<br><b>15</b> = shows the state of digital output <b>OUT2 (o2:On</b> if active - <b>o2:OF</b> if not active)<br><b>16</b> = shows the state of digital output <b>OUT3 (o3:On</b> if active - <b>o3:OF</b> if not active)<br><b>17</b> = shows the state of digital output <b>OUT4 (o4:On</b> if active - <b>o4:OF</b> if not active)<br><b>18</b> = shows the state of digital output <b>OUT5 (o5:On</b> if active - <b>o5:OF</b> if not active)<br><b>19</b> = shows the state of digital output <b>OUT6 (o6:On</b> if active - <b>o6:OF</b> if not active) | num | 0 ... 19  | 0   | 0         |
| <b>COPY CARD/UNICARD parameters (FPr folder)</b> |  |     |           |   |           |
| <b>UL</b>  | Upload. To transfer programming parameters from instrument to Copy Card.   | /   | /         | /   | /         |
| <b>dL</b>  | Download. To transfer programming parameters from Copy Card to instrument.   | /   | /         | /   | /         |
| <b>Fr</b>  | Formatting. To erase data on Copy Card.<br><b>IMPORTANT: If parameter "Fr" is used, the data entered will be permanently lost. This operation cannot be reversed.</b>  | /   | /         | /   | /         |

**ALARMS AND SIGNALS TABLE**


When an alarm condition is detected, the alarm icon "  " will come on.  
If enabled, alarm relays will also activate.

Alarms can be acknowledged by the supervisor, by an appropriately configured digital input or from the function menu.  
When acknowledged, the relays configured as alarms disable and the alarm LED blinks.

Once the time set in parameter **dtA** has elapsed, if the alarm is still present even after it was acknowledged, the original situation is restored (possible relay active and alarm LED permanently on).

All alarms reset automatically (i.e. disappear when the underlying cause is removed).

The alarm codes are as follows:

| Code  | Description                 | LED<br> | Reset     | Parameters involved to<br>ENABLE ALARM | Alarms by Model |            |
|-------|-----------------------------|--|-----------|--|-----------------|------------|
|       |                             |  |           |  | TelevisIn       | TelevisOut |
| E1    | Probe Pb1 error             | ON   | Automatic |  | ✓               | ✗          |
| E2    | Probe Pb2 error             | ON   | Automatic |  | ✓               | ✗          |
| E3    | Probe Pb3 error             | ON   | Automatic |  | ✓               | ✗          |
| E4    | Probe Pb4 error.            | ON   | Automatic |  | ✓               | ✗          |
| E5    | Probe Pb5 error.            | ON   | Automatic |  | ✓               | ✗          |
| AH1   | Pb1 high alarm              | ON   | Automatic | AFd, HA1, LA1, PAO                     | ✓               | ✗          |
| AL1   | Pb1 low alarm               | ON   | Automatic | AFd, HA1, LA1, PAO                     | ✓               | ✗          |
| AH2   | Pb2 high alarm              | ON   | Automatic | AFd, HA2, LA2, PAO                     | ✓               | ✗          |
| AL2   | Pb2 low alarm               | ON   | Automatic | AFd, HA2, LA2, PAO                     | ✓               | ✗          |
| AH3   | Pb3 high alarm              | ON   | Automatic | AFd, HA3, LA3, PAO                     | ✓               | ✗          |
| AL3   | Pb3 low alarm               | ON   | Automatic | AFd, HA3, LA3, PAO                     | ✓               | ✗          |
| AH4   | Pb4 high alarm              | ON   | Automatic | AFd, HA4, LA4, PAO                     | ✓               | ✗          |
| AL4   | Pb4 low alarm               | ON   | Automatic | AFd, HA4, LA4, PAO                     | ✓               | ✗          |
| AH5   | Pb5 high alarm              | ON   | Automatic | AFd, HA5, LA5, PAO                     | ✓               | ✗          |
| AL5   | Pb5 low alarm               | ON   | Automatic | AFd, HA5, LA5, PAO                     | ✓               | ✗          |
| EA1   | External alarm on DI1       | ON   | Automatic | H11, En1, Ei1                          | ✓               | ✓          |
| EA2   | External alarm on DI2       | ON   | Automatic | H12, En2, Ei2                          | ✓               | ✓          |
| EA3   | External alarm on DI3/Pb1   | ON   | Automatic | H13, En3, Ei3                          | ✓               | ✗          |
| EA4   | External alarm on DI4/Pb2   | ON   | Automatic | H14, En4, Ei4                          | ✓               | ✗          |
| EA5   | External alarm on DI5/Pb3   | ON   | Automatic | H15, En5, Ei5                          | ✓               | ✗          |
| EA6   | External alarm on DI6/Pb4   | ON   | Automatic | H16, En6, Ei6                          | ✓               | ✗          |
| EA7   | External alarm on DI7/Pb5   | ON   | Automatic | H17, En7, Ei7                          | ✓               | ✗          |
| A1    | General alarm on OUT1       | ON   | Automatic | H21                                    | ✓               | ✓          |
| A2    | General alarm on OUT2       | ON   | Automatic | H22                                    | ✗               | ✓          |
| A3    | General alarm on OUT3       | ON   | Automatic | H23                                    | ✗               | ✓          |
| A4    | General alarm on OUT4       | ON   | Automatic | H24                                    | ✗               | ✓          |
| A5    | General alarm on OUT5/DI1   | ON   | Automatic | H25                                    | ✗               | ✓          |
| A6    | General alarm on OUT6/DI2   | ON   | Automatic | H26                                    | ✗               | ✓          |
| L_OF  | No-link alarm               | ON   | Automatic | H21, H22, H23, H24, H25, H26           | ✗               | ✓          |
| SL:OF | Communication failure alarm | ON   | Automatic |  | ✓               | ✓          |

**NOTES:**

- 1) If alarm exclusion times have been applied ("AL" folder in Parameter Table), the alarm will not be signalled.
- 2) With the exception of faulty probe and compressor overheating alarms, all other alarms will record the corresponding label in the AL folder in the "MACHINE STATE" menu.
- 3) Faulty probe alarms are shown on the display via labels E1 ... E5, depending whether the alarm refers to probes Pb1... PB5.



### Cause/effect table

Controllers in the EWPlus EO family are able to perform complete diagnostics of the system and report any operating trouble with specific alarms, display and record particular events, defined by the user, to achieve greater control over the system.

| Label      | Fault                      | Cause  | Effects  | Remedy  |
|------------|----------------------------|--|--|---|
| <b>E1</b>  | Probe Pb1 faulty           | <ul style="list-style-type: none"> <li>Measured values are outside operating range</li> <li>probe faulty/short-circuited/open</li> </ul> | <ul style="list-style-type: none"> <li><b>E1</b> label shown on display</li> <li>Alarm icon permanently on</li> </ul>                  | <ul style="list-style-type: none"> <li>check probe wiring</li> <li>replace probe</li> </ul>                                   |
| <b>E2</b>  | Probe Pb2 faulty           | <ul style="list-style-type: none"> <li>Measured values are outside operating range</li> <li>probe faulty/short-circuited/open</li> </ul> | <ul style="list-style-type: none"> <li><b>E2</b> label shown on display</li> <li>Alarm icon permanently on.</li> </ul>                 | <ul style="list-style-type: none"> <li>check probe wiring</li> <li>replace probe</li> </ul>                                   |
| <b>E3</b>  | Probe Pb3 faulty           | <ul style="list-style-type: none"> <li>Measured values are outside operating range</li> <li>probe faulty/short-circuited/open</li> </ul> | <ul style="list-style-type: none"> <li><b>E3</b> label shown on display</li> <li>Alarm icon permanently on.</li> </ul>                 | <ul style="list-style-type: none"> <li>check probe wiring</li> <li>replace probe</li> </ul>                                   |
| <b>E4</b>  | Probe Pb4 faulty           | <ul style="list-style-type: none"> <li>Measured values are outside operating range</li> <li>probe faulty/short-circuited/open</li> </ul> | <ul style="list-style-type: none"> <li><b>E4</b> label shown on display</li> <li>Alarm icon permanently on</li> </ul>                  | <ul style="list-style-type: none"> <li>check probe wiring</li> <li>replace probe</li> </ul>                                   |
| <b>E5</b>  | Probe Pb5 faulty           | <ul style="list-style-type: none"> <li>Measured values are outside operating range</li> <li>probe faulty/short-circuited/open</li> </ul> | <ul style="list-style-type: none"> <li><b>E5</b> label shown on display</li> <li>Alarm icon permanently on</li> </ul>                  | <ul style="list-style-type: none"> <li>check probe wiring</li> <li>replace probe</li> </ul>                                   |
| <b>AH1</b> | HIGH temperature alarm Pb1 | Value read by probe Pb1 > HA1 after time set in "tA1".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AH1</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb1 to return below <b>(HA1-AFd)</b>.</li> </ul>    |
| <b>AL1</b> | LOW temperature alarm Pb1  | Value read by probe Pb1 > LA1 after time set in "tA1".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AL1</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb1 to rise above <b>(LA1+AFd)</b>.</li> </ul>      |
| <b>AH2</b> | HIGH temperature alarm Pb2 | Value read by probe Pb2 > HA2 after time set in "tA2".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AH2</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb2 to return below <b>(HA2-AFd)</b>.</li> </ul>    |
| <b>AL2</b> | LOW temperature alarm Pb2  | Value read by probe Pb2 > LA2 after time set in "tA2".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AL2</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb2 to rise back above <b>(LA2+AFd)</b>.</li> </ul> |
| <b>AH3</b> | HIGH temperature alarm Pb3 | Value read by probe Pb3 > HA3 after time set in "tA3".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AH3</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb3 to return below <b>(HA3-AFd)</b>.</li> </ul>    |
| <b>AL3</b> | LOW temperature alarm Pb3  | Value read by probe Pb3 > LA3 after time set in "tA3".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AL3</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb3 to rise back above <b>(LA3+AFd)</b>.</li> </ul> |
| <b>AH4</b> | HIGH temperature alarm Pb4 | Value read by probe Pb4 > HA4 after time set in "tA4".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AH4</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb4 to return below <b>(HA4-AFd)</b>.</li> </ul>    |
| <b>AL4</b> | LOW temperature alarm Pb4  | Value read by probe Pb4 > LA4 after time set in "tA4".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AL4</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb4 to rise back above <b>(LA4+AFd)</b>.</li> </ul> |
| <b>AH5</b> | HIGH temperature alarm Pb5 | Value read by probe Pb5 > HA5 after time set in "tA5".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AH5</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb5 to return below <b>(HA5-AFd)</b>.</li> </ul>    |
| <b>AL5</b> | LOW temperature alarm Pb5  | Value read by probe Pb5 > LA5 after time set in "tA5".<br>(see "MAX/MIN TEMPERATURE ALARMS")   | <ul style="list-style-type: none"> <li>Label <b>AL5</b> recorded in the <b>AL</b> folder</li> <li>No effect on control</li> </ul>      | <ul style="list-style-type: none"> <li>Wait for temperature value read by Pb5 to rise back above <b>(LA5+AFd)</b>.</li> </ul> |
| <b>EA1</b> | External Alarm             | Digital input DI1 activated<br><b>(H11 = ±7)</b>   | <ul style="list-style-type: none"> <li>Label <b>EA1</b> recorded in the <b>AL</b> folder</li> <li>Alarm icon permanently on</li> </ul> | <ul style="list-style-type: none"> <li>Check and remove the external cause which triggered the alarm on DI1</li> </ul>        |
| <b>EA2</b> | External Alarm             | Digital input DI2 activated<br><b>(H12 = ±7)</b>   | <ul style="list-style-type: none"> <li>Label <b>EA2</b> recorded in the <b>AL</b> folder</li> <li>Alarm icon permanently on</li> </ul> | <ul style="list-style-type: none"> <li>Check and remove the external cause which triggered the alarm on Di2</li> </ul>        |

| Label        | Fault                         | Cause   | Effects   | Remedy  |
|--------------|-------------------------------|---|---|---|
| <b>EA3</b>   | External Alarm                | Digital input DI3/Pb1 activated<br>( <b>H13 = ±7</b> )                                  | <ul style="list-style-type: none"> <li>• Label <b>EA3</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>  | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on DI3/Pb1</li> </ul>  |
| <b>EA4</b>   | External Alarm                | Digital input DI4/Pb2 activated<br>( <b>H14 = ±7</b> )                                  | <ul style="list-style-type: none"> <li>• Label <b>EA4</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>  | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on DI4/Pb2</li> </ul>  |
| <b>EA5</b>   | External Alarm                | Digital input DI5/Pb3 activated<br>( <b>H15 = ±7</b> )                                  | <ul style="list-style-type: none"> <li>• Label <b>EA5</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>  | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on DI5/Pb3</li> </ul>  |
| <b>EA6</b>   | External Alarm                | Digital input DI6/Pb4 activated<br>( <b>H16 = ±7</b> )                                  | <ul style="list-style-type: none"> <li>• Label <b>EA6</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>  | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on DI6/Pb4</li> </ul>  |
| <b>EA7</b>   | External Alarm                | Digital input DI7/Pb5 activated<br>( <b>H17 = ±7</b> )                                  | <ul style="list-style-type: none"> <li>• Label <b>EA7</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>  | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on DI7/Pb5</li> </ul>  |
| <b>A1</b>    | General alarm from supervisor | Activation of digital output OUT1 configured as general alarm<br>( <b>H21 = 2</b> )     | <ul style="list-style-type: none"> <li>• Label <b>A1</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>   | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on OUT1</li> </ul>     |
| <b>A2</b>    | General alarm from supervisor | Activation of digital output OUT2 configured as general alarm<br>( <b>H22 = 2</b> )     | <ul style="list-style-type: none"> <li>• Label <b>A2</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>   | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on OUT2</li> </ul>     |
| <b>A3</b>    | General alarm from supervisor | Activation of digital output OUT3 configured as general alarm<br>( <b>H23 = 2</b> )     | <ul style="list-style-type: none"> <li>• Label <b>A3</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>   | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on OUT3</li> </ul>     |
| <b>A4</b>    | General alarm from supervisor | Activation of digital output OUT4 configured as general alarm<br>( <b>H24 = 2</b> )     | <ul style="list-style-type: none"> <li>• Label <b>A4</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>   | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on OUT4</li> </ul>     |
| <b>A5</b>    | General alarm from supervisor | Activation of digital output OUT5/DI1 configured as general alarm<br>( <b>H25 = 2</b> ) | <ul style="list-style-type: none"> <li>• Label <b>A5</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>   | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on OUT5/DI1</li> </ul> |
| <b>A6</b>    | General alarm from supervisor | Activation of digital output OUT6/DI2 configured as general alarm<br>( <b>H26 = 2</b> ) | <ul style="list-style-type: none"> <li>• Label <b>A6</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul>   | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm on OUT6/DI2</li> </ul> |
| <b>L_OF</b>  | No-link alarm from supervisor | Activation of a digital output configured as no-link.<br>( <b>H21...H26 = 1</b> )       | <ul style="list-style-type: none"> <li>• Label <b>L_OF</b> recorded in the <b>AL</b> folder</li> <li>• Alarm icon permanently on</li> </ul> | <ul style="list-style-type: none"> <li>• Check and remove the external cause which triggered the alarm</li> </ul>             |
| <b>SL:OF</b> | No-link alarm                 | The device is no longer communicating with the supervisor                               | <ul style="list-style-type: none"> <li>• <b>SL:OF</b> label shown on display</li> <li>• Alarm icon permanently on</li> </ul>                | <ul style="list-style-type: none"> <li>• Restore communication between the device and the supervisor.</li> </ul>              |

## DESCRIPTION OF ALARMS

### PROBE ALARM

#### OPERATING CONDITIONS

When one of the probes is out of the nominal operating range or in the case of an open probe or a probe in short circuit, an alarm is generated if this condition persists for longer than 10 seconds.

The alarm condition is indicated on the display by means of the following error codes and alarm LEDs:

- **E1** = Probe Pb1 failure
- **E2** = Probe Pb2 failure
- **E3** = Probe Pb3 failure
- **E4** = Probe Pb4 failure
- **E5** = Probe Pb5 failure

When active, error code **E1** remains permanently on.

Error code **E2** alternates with the temperature read by probe Pb1 every 2 seconds.

When codes **E1**, **E2**, and **E3** occur at the same time, they are shown in the following sequence: E1 x 2 secs, E2 x 2 secs, E3 x 2 secs, etc.

### SIGNALLING

| Code      | Meaning          | TelevisIn | TelevisOut |
|-----------|------------------|-----------|------------|
| <b>E1</b> | Probe Pb1 error  | ✓         | ✗          |
| <b>E2</b> | Probe Pb2 error  | ✓         | ✗          |
| <b>E3</b> | Probe Pb3 error  | ✓         | ✗          |
| <b>E4</b> | Probe Pb4 error. | ✓         | ✗          |
| <b>E5</b> | Probe Pb5 error. | ✓         | ✗          |

### ALARM ACKNOWLEDGEMENT

In the alarm condition, it is possible to acknowledge the alarm and/or relay configured as an alarm, even if the alarm condition persists, by pressing any key or using the corresponding function in the menu. The alarm LED will start to blink.

Eliminating the cause of the alarm disarms the acknowledgement.

The probe fault alarm is not stored by the controller.

## MINIMUM AND MAXIMUM TEMPERATURE ALARM

**!** **IMPORTANT:** applies to TelevisIn only.

### OPERATING CONDITIONS

Each analogue input is linked to a high or low temperature/pressure alarm regulator with the relative configuration parameters.

**NOTE:** Only the values for probes listed as present are considered in the device.

The temperature limits defined in parameters **HA1...HA5** and **LA1...LA5** are determined by parameters **At1...At5** which specify if they represent the absolute temperature value or a setpoint differential (in the case of offset on the entered setpoint, the high and low alarms will refer to this new control setpoint).

- If **At1 = AbS(olute)**, the temperature limits (**HA1** and **LA1**) for probe Pb1 are absolute.
- If **At1 = rEL(ative)**, the temperature limits (**HA1** and **LA1**) for probe Pb1 refer to **SE1**.
- If **At2 = AbS(olute)**, the temperature limits (**HA2** and **LA2**) for probe Pb2 are absolute.
- If **At2 = rEL(ative)**, the temperature limits (**HA2** and **LA2**) for probe Pb2 refer to **SE2**.
- If **At3 = AbS(olute)**, the temperature limits (**HA3** and **LA3**) for probe Pb3 are absolute.
- If **At3 = rEL(ative)**, the temperature limits (**HA3** and **LA3**) for probe Pb3 refer to **SE3**.
- If **At4 = AbS(olute)**, the temperature limits (**HA4** and **LA4**) for probe Pb4 are absolute.
- If **At4 = rEL(ative)**, the temperature limits (**HA4** and **LA4**) for probe Pb4 refer to **SE4**.
- If **At5 = AbS(olute)**, the temperature limits (**HA5** and **LA5**) for probe Pb5 are absolute.
- If **At5 = rEL(ative)**, the temperature limits (**HA5** and **LA5**) for probe Pb5 refer to **SE5**.

Temperature/pressure alarm signals on each analogue input can be delayed by a time set in parameters **tA1...tA5**. Furthermore, all temperature/pressure alarms can be delayed after the switching-on of the device by a time set in parameter **PAO**.

**NOTE:** to obtain the minimum alarm below the setpoint in the event **At1...At5 = rEL(ative)** **LA1...LA5** must be  $< 0$

### ALARM CONDITION

An alarm condition is indicated by the error code for the actual physical input in error shown in the alarm folder, whilst the alarm LED and relay (if configured) are turned on:

- **AL1** or **AH1** for Pb1 error
- **AL2** or **AH2** for Pb2 error
- **AL3** or **AH3** for Pb3 error
- **AL4** or **AH4** for Pb4 error
- **AL5** or **AH5** for Pb5 error

A high/low alarm is generated when the temperature of probe Pb $x$  (with  $x = 1...5$ ) is:

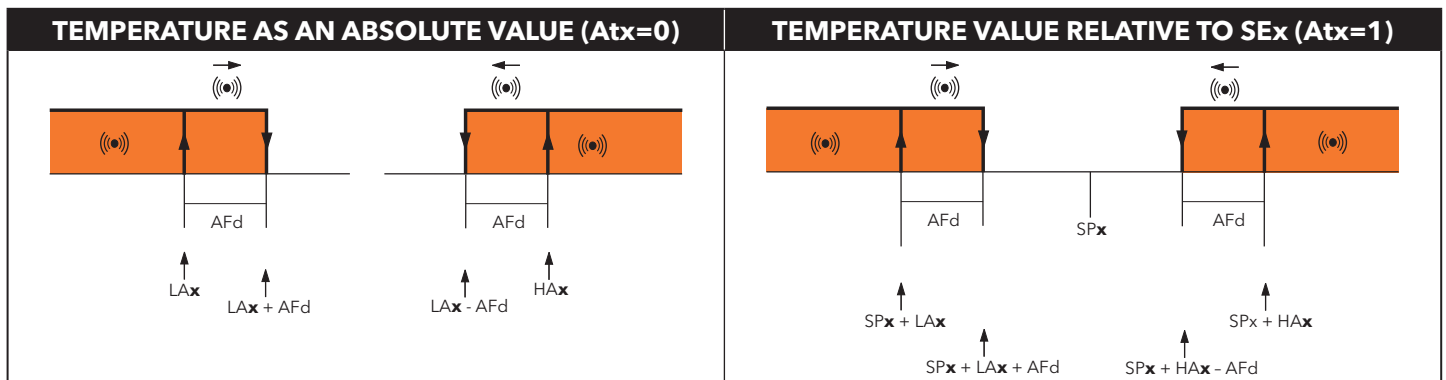
- High alarm:  $\geq \text{HA}_x$  if **Atx=AbS(olute)** and  $\geq$  than **(Sex + HA $x$ )** if **Atx=rEL(ative)**
- Low alarm:  $\leq \text{LA}_x$  if **Atx=AbS(olute)** and  $\leq$  than **(Sex + LA $x$ )** if **Atx=rEL(ative)**

If **Atx=AbS(olute)** the values of **HA $x$**  and **LA $x$**  must be with a sign, if **Atx=rEL(ative)** it is necessary that **HA $x$  > 0** and **LA $x$  < 0**.

When one of the aforementioned conditions occurs and no alarm exclusion times have been set (see exclude alarm parameters **tA1...tA5**), the alarm LED comes on and/or relay configured as alarm is activated (if present).

The maximum/minimum alarm will be reset when the temperature of probe Pb1 is:

- Reset from high alarm:  $\leq (\text{HA}_x - \text{AFd})$  if **Atx=Ab(solute)** and  $\leq (\text{Sex} + \text{HA}_x - \text{AFd})$  if **Atx=rE(lative)**
- Reset after low alarm:  $\geq (\text{LA}_x + \text{AFd})$  if **Atx=Ab(solute)** and  $\geq (\text{Sex} + \text{LA}_x + \text{AFd})$  if **Atx=rE(lative)**





- NOTE:**
- During a defrost cycle, high and low temperature alarms are overridden.
  - Occurrence of this alarm does not effect any regulation in progress.

## SIGNALLING

| Code       | Meaning                                       | TelevisIn | TelevisOut |
|------------|---|-----------|------------|
| <b>AH1</b> | High temperature alarm referring to probe Pb1 | ✓         | ✗          |
| <b>AL1</b> | Low temperature alarm referring to probe Pb1  | ✓         | ✗          |
| <b>AH2</b> | High temperature alarm referring to probe Pb2 | ✓         | ✗          |
| <b>AL2</b> | Low temperature alarm referring to probe Pb2  | ✓         | ✗          |
| <b>AH3</b> | High temperature alarm referring to probe Pb3 | ✓         | ✗          |
| <b>AL3</b> | Low temperature alarm referring to probe Pb3  | ✓         | ✗          |
| <b>AH4</b> | High temperature alarm referring to probe Pb4 | ✓         | ✗          |
| <b>AL4</b> | Low temperature alarm referring to probe Pb4  | ✓         | ✗          |
| <b>AH5</b> | High temperature alarm referring to probe Pb5 | ✓         | ✗          |
| <b>AL5</b> | Low temperature alarm referring to probe Pb5  | ✓         | ✗          |

## ALARM ACKNOWLEDGEMENT

When an alarm has occurred, the relay configured as alarm can be overridden by pressing any key or via a menu function even if the alarm condition persists.

The alarm LED will start to blink. Eliminating the cause of the alarm disarms the acknowledgement.

The probe fault alarm is not stored by the controller.

## USER PARAMETERS

| Label      | Description  | TelevisIn | TelevisOut |
|------------|--|-----------|------------|
| <b>SE1</b> | To configure alarm setpoint for probe Pb1.                         | ✓         | ✗          |
| <b>SE2</b> | To configure alarm setpoint for probe Pb2.                         | ✓         | ✗          |
| <b>SE3</b> | To configure alarm setpoint for probe Pb3.                         | ✓         | ✗          |
| <b>SE4</b> | To configure alarm setpoint for probe Pb4.                         | ✓         | ✗          |
| <b>SE5</b> | To configure alarm setpoint for probe Pb5.                         | ✓         | ✗          |
| <b>At1</b> | Parameter HA1 and LA1 (absolute or relative) mode for setpoint SE1 | ✓         | ✗          |
| <b>At2</b> | Parameter HA2 and LA2 (absolute or relative) mode for setpoint SE2 | ✓         | ✗          |
| <b>At3</b> | Parameter HA3 and LA3 (absolute or relative) mode for setpoint SE3 | ✓         | ✗          |
| <b>At4</b> | Parameter HA4 and LA4 (absolute or relative) mode for setpoint SE4 | ✓         | ✗          |
| <b>At5</b> | Parameter HA5 and LA5 (absolute or relative) mode for setpoint SE5 | ✓         | ✗          |
| <b>Afd</b> | Alarm activation differential                                      | ✓         | ✗          |
| <b>HA1</b> | Maximum alarm threshold probe Pb1                                  | ✓         | ✗          |
| <b>LA1</b> | Minimum alarm threshold probe Pb1                                  | ✓         | ✗          |
| <b>HA2</b> | Maximum alarm threshold probe Pb2                                  | ✓         | ✗          |
| <b>LA2</b> | Minimum alarm threshold probe Pb2                                  | ✓         | ✗          |
| <b>HA3</b> | Maximum alarm threshold probe Pb3                                  | ✓         | ✗          |
| <b>LA3</b> | Minimum alarm threshold probe Pb3                                  | ✓         | ✗          |
| <b>HA4</b> | Maximum alarm threshold probe Pb4                                  | ✓         | ✗          |
| <b>LA4</b> | Minimum alarm threshold probe Pb4                                  | ✓         | ✗          |
| <b>HA5</b> | Maximum alarm threshold probe Pb5                                  | ✓         | ✗          |
| <b>LA5</b> | Minimum alarm threshold probe Pb5                                  | ✓         | ✗          |
| <b>PAO</b> | Temperature alarms disabling time from power-on                    | ✓         | ✗          |
| <b>tA1</b> | Time delay to signal temperature alarm on probe Pb1                | ✓         | ✗          |
| <b>tA2</b> | Time delay to signal temperature alarm on probe Pb2                | ✓         | ✗          |
| <b>tA3</b> | Time delay to signal temperature alarm on probe Pb3                | ✓         | ✗          |
| <b>tA4</b> | Time delay to signal temperature alarm on probe Pb4                | ✓         | ✗          |
| <b>tA5</b> | Time delay to signal temperature alarm on probe Pb5                | ✓         | ✗          |

## EXTERNAL ALARM

### OPERATING CONDITIONS

All digital inputs can be configured as external alarms via parameters **H11...H17**.  
An alarm activates if **En<sub>x</sub>** activations occur in the time period set in **Ei<sub>x</sub>** (x equals the number of a physical input).

The action consist of:

- Permanent illumination of alarm LED
- Label **EA1...EA7** recorded in alarm folder (depending on physical input that is in error).
- Activation of the relay configured as alarm (if enabled)

### SIGNALLING

| Code       | Meaning                         | TelevisIn | TelevisOut |
|------------|---------------------------------|-----------|------------|
| <b>EA1</b> | External alarm on input DI1     | ✓         | ✓          |
| <b>EA2</b> | External alarm on input DI2     | ✓         | ✓          |
| <b>EA3</b> | External alarm on input DI3/PB1 | ✓         | ✗          |
| <b>EA4</b> | External alarm on input DI4/PB2 | ✓         | ✗          |
| <b>EA5</b> | External alarm on input DI5/PB3 | ✓         | ✗          |
| <b>EA6</b> | External alarm on input DI6/PB4 | ✓         | ✗          |
| <b>EA7</b> | External alarm on input DI7/PB5 | ✓         | ✗          |

### USER PARAMETERS

| Label      | Description  | TelevisIn | TelevisOut |
|------------|--|-----------|------------|
| <b>En1</b> | Number of activations of digital input DI1. <b>0</b> = disabled. | ✓         | ✓          |
| <b>Ei1</b> | Activation count interval ( <b>En1</b> ) for digital input DI1.  | ✓         | ✓          |
| <b>En2</b> | Number of activations of digital input DI2. <b>0</b> = disabled. | ✓         | ✓          |
| <b>Ei2</b> | Activation count interval ( <b>En2</b> ) for digital input DI2.  | ✓         | ✓          |
| <b>En3</b> | Number of activations of digital input DI3. <b>0</b> = disabled. | ✓         | ✗          |
| <b>Ei3</b> | Activation count interval ( <b>En3</b> ) for digital input DI3.  | ✓         | ✗          |
| <b>En4</b> | Number of activations of digital input DI4. <b>0</b> = disabled. | ✓         | ✗          |
| <b>Ei4</b> | Activation count interval ( <b>En4</b> ) for digital input DI4.  | ✓         | ✗          |
| <b>En5</b> | Number of activations of digital input DI5. <b>0</b> = disabled. | ✓         | ✗          |
| <b>Ei5</b> | Activation count interval ( <b>En5</b> ) for digital input DI5.  | ✓         | ✗          |
| <b>En6</b> | Number of activations of digital input DI6. <b>0</b> = disabled. | ✓         | ✗          |
| <b>Ei6</b> | Activation count interval ( <b>En6</b> ) for digital input DI6.  | ✓         | ✗          |
| <b>En7</b> | Number of activations of digital input DI7. <b>0</b> = disabled. | ✓         | ✗          |
| <b>Ei7</b> | Activation count interval ( <b>En7</b> ) for digital input DI7.  | ✓         | ✗          |

## COMMUNICATION FAILURE ALARM

### OPERATING CONDITIONS

Once the given time limit (parameter **CLC**) has elapsed, if no valid communication packets have been picked up on the RS-485 network, TelevisIn/TelevisOut activates the digital outputs configured as general and no-link alarms, and lights up the alarm LED. The function only enables if:

- There is at least one relay configured as a general alarm (**H21...H26 = 2**)
- There is at least one relay configured as no-link (**H21...H26 = 1**)
- **CLC > 0** (TelevisOut only)
- The supervisor has not blocked communication via the relative command.

In any case, if there is no communication, the ☀ icon will be off.

### USER PARAMETERS

| Label      | Description  | TelevisIn | TelevisOut |
|------------|--|-----------|------------|
| <b>CLC</b> | Activation time for no-link/failed communication alarm | ✗         | ✓          |
| <b>H21</b> | To configure digital output 1 ( <b>OUT1</b> ).         | ✓         | ✓          |
| <b>H22</b> | To configure digital output 2 ( <b>OUT2</b> ).         | ✗         | ✓          |
| <b>H23</b> | To configure digital output 3 ( <b>OUT3</b> ).         | ✗         | ✓          |
| <b>H24</b> | To configure digital output 4 ( <b>OUT4</b> ).         | ✗         | ✓          |
| <b>H25</b> | To configure analogue output 1 ( <b>OUT5/DI1</b> ).    | ✗         | ✓          |
| <b>H26</b> | To configure analogue output 2 ( <b>OUT6/DI2</b> ).    | ✗         | ✓          |

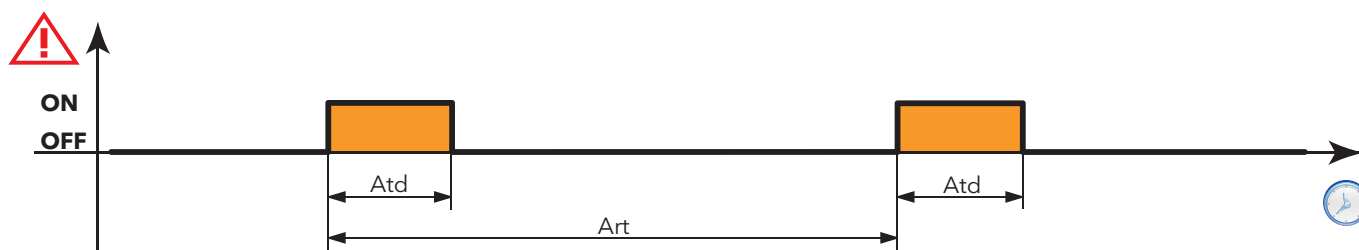
## SUPERVISOR TEST ALARM

### OPERATING CONDITIONS

TelevisIn & TelevisOut regularly generate an alarm which is not shown on the display, as it is just for the supervisor.

The time the alarm persists for and the activation time are set in parameters **Atd** and **Art**.

If **Atd** equals zero, the alarm will be disabled.



### USER PARAMETERS

| Label      | Description  | TelevisIn | TelevisOut |
|------------|--|-----------|------------|
| <b>Atd</b> | Duration of LINK <sup>2</sup> supervision alarm.       | ✗         | ✓          |
| <b>Art</b> | LINK <sup>2</sup> supervision alarm activation period. | ✗         | ✓          |

## GENERAL SUPERVISOR ALARM

### OPERATING CONDITIONS

The supervisor can activate a relay configured as a general alarm (**H21...H26 = 2**) The alarm condition is indicated by the error code listed in the alarm folder (**Ax**, where **x** equals the actual physical output **OUT1...OUT6** activated) and the illuminated alarm LED.

### SIGNALLING

| Code      | Meaning                                   | TelevisIn | TelevisOut |
|-----------|---|-----------|------------|
| <b>A1</b> | digital output OUT1 activation alarm      | ✓         | ✓          |
| <b>A2</b> | digital output OUT2 activation alarm      | ✗         | ✓          |
| <b>A3</b> | digital output OUT3 activation alarm      | ✗         | ✓          |
| <b>A4</b> | digital output OUT4 activation alarm      | ✗         | ✓          |
| <b>A5</b> | analogue output OUT5/DI1 activation alarm | ✗         | ✓          |
| <b>A6</b> | analogue output OUT6/DI2 activation alarm | ✗         | ✓          |

### USER PARAMETERS

| Label      | Description   | TelevisIn | TelevisOut |
|------------|---|-----------|------------|
| <b>H21</b> | To configure digital output 1 ( <b>OUT1</b> ).      | ✓         | ✓          |
| <b>H22</b> | To configure digital output 2 ( <b>OUT2</b> ).      | ✗         | ✓          |
| <b>H23</b> | To configure digital output 3 ( <b>OUT3</b> ).      | ✗         | ✓          |
| <b>H24</b> | To configure digital output 4 ( <b>OUT4</b> ).      | ✗         | ✓          |
| <b>H25</b> | To configure analogue output 1 ( <b>OUT5/DI1</b> ). | ✗         | ✓          |
| <b>H26</b> | To configure analogue output 2 ( <b>OUT6/DI2</b> ). | ✗         | ✓          |

## SUPERVISOR NO-LINK ALARM

### OPERATING CONDITIONS

The supervisor can activate a relay configured as no-link (**H21...H26 = 1**)

The alarm condition is indicated by the label **L\_OF** listed in the alarm folder and the illuminated alarm LED.

### SIGNALLING

| Code        | Meaning                  | TelevisIn | TelevisOut |
|-------------|--------------------------|-----------|------------|
| <b>L_OF</b> | Supervisor no-link alarm | ✓         | ✓          |

### USER PARAMETERS

| Label      | Description   | TelevisIn | TelevisOut |
|------------|---|-----------|------------|
| <b>H21</b> | To configure digital output 1 ( <b>OUT1</b> ).      | ✓         | ✓          |
| <b>H22</b> | To configure digital output 2 ( <b>OUT2</b> ).      | ✗         | ✓          |
| <b>H23</b> | To configure digital output 3 ( <b>OUT3</b> ).      | ✗         | ✓          |
| <b>H24</b> | To configure digital output 4 ( <b>OUT4</b> ).      | ✗         | ✓          |
| <b>H25</b> | To configure analogue output 1 ( <b>OUT5/DI1</b> ). | ✗         | ✓          |
| <b>H26</b> | To configure analogue output 2 ( <b>OUT6/DI2</b> ). | ✗         | ✓          |



Modbus is a client/server protocol for communication between devices connected in a network.

Modbus devices communicate using a master-slave technique in which only one device (master) can send messages.

The other devices in the network (slave) respond, returning the data requested by the master or executing the action contained in the message sent.

A slave is a device connected to a network that processes information and sends the results to the master using the Modbus protocol. The master device can send messages to individual slaves or to the entire network (broadcast) whilst slaves can only respond individually to the master.

The Modbus standard used by Eliwell employs the RTU code for data transmission.

## DATA FORMAT (RTU)

The coding model used defines the structure of messages transmitted on the network and the way in which this information is deciphered. The type of coding is usually selected on the basis of specific parameters (parity, etc.); furthermore, some devices support only specific coding models, although it must be the same one for all devices connected in a Modbus network.

The protocol uses the RTU binary method with bytes configured as follows: **8 bit for data, even parity bit (configurable), 1 stop bit.**

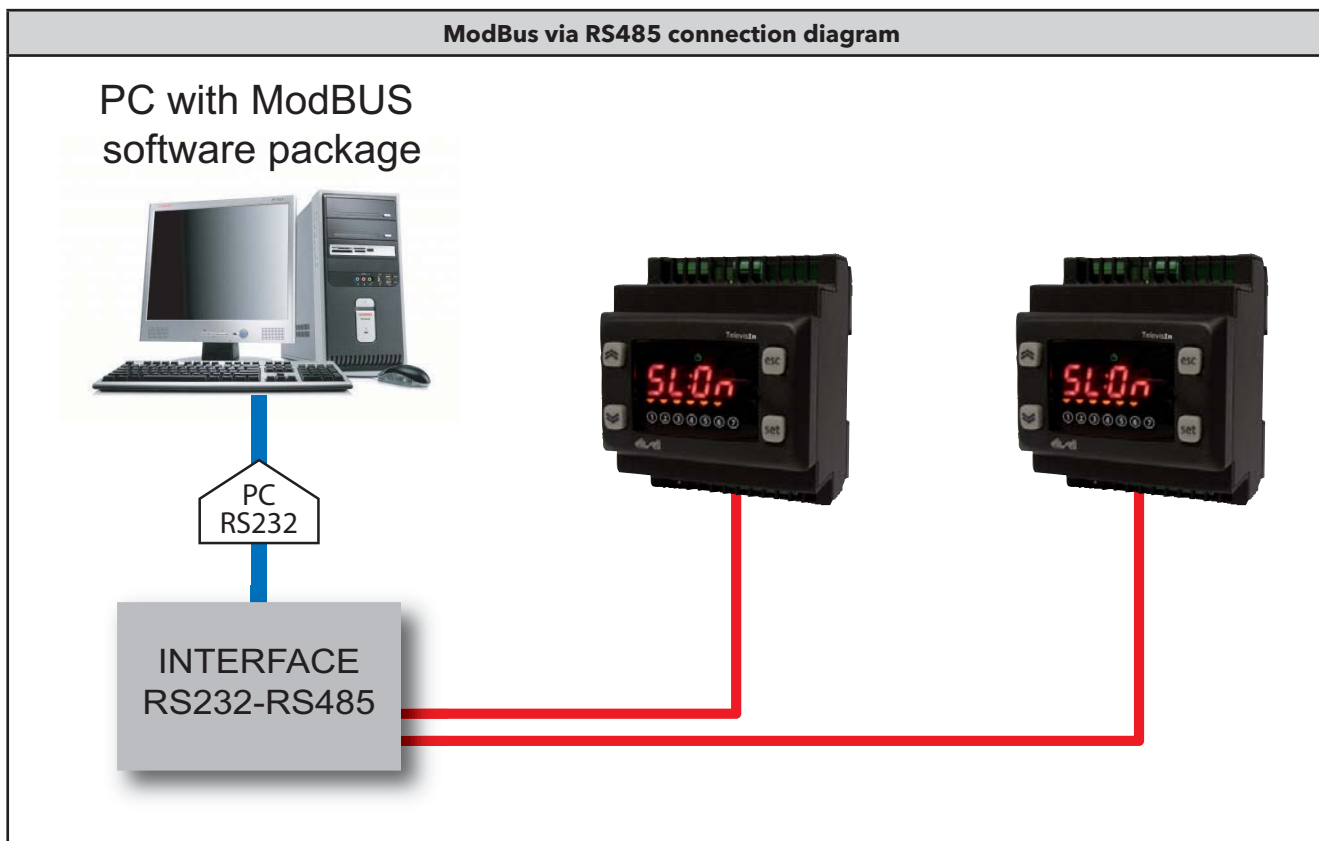
Parameter setting allows the full configuration of the device

They can be modified using:

- Device keypad
- Copy Card
- Sending data via Modbus protocol directly to an individual controller or broadcasting it, using the address 0 (broadcast)

## NETWORK

The connection diagram when using Modbus is shown below:



## MODBUS COMMANDS AVAILABLE AND DATA AREAS

The following commands are implemented:

| Modbus command | Description of command   |            |                   |          |                               |          |                               |          |                                    |
|----------------|--|------------|-------------------|----------|-------------------------------|----------|-------------------------------|----------|------------------------------------|
| <b>3</b>       | Read 16 consecutive registers for Client side<br>Read 1 single register for parameters.  |            |                   |          |                               |          |                               |          |                                    |
| <b>16</b>      | Write 15 consecutive registers for Client side<br>Write 1 register for the parameters  |            |                   |          |                               |          |                               |          |                                    |
| <b>43</b>      | Read device ID<br>It is possible to read the following 3 fields: <table border="1" data-bbox="625 607 1433 763"> <thead> <tr> <th>Field code</th> <th>Field description</th> </tr> </thead> <tbody> <tr> <td><b>0</b></td> <td>Manufacturer ID (=“Invensys”)</td> </tr> <tr> <td><b>1</b></td> <td>Device model/polycarbonate ID</td> </tr> <tr> <td><b>2</b></td> <td>Device family (MSK499)/ version ID</td> </tr> </tbody> </table> | Field code | Field description | <b>0</b> | Manufacturer ID (=“Invensys”) | <b>1</b> | Device model/polycarbonate ID | <b>2</b> | Device family (MSK499)/ version ID |
| Field code     | Field description  |            |                   |          |                               |          |                               |          |                                    |
| <b>0</b>       | Manufacturer ID (=“Invensys”)  |            |                   |          |                               |          |                               |          |                                    |
| <b>1</b>       | Device model/polycarbonate ID  |            |                   |          |                               |          |                               |          |                                    |
| <b>2</b>       | Device family (MSK499)/ version ID   |            |                   |          |                               |          |                               |          |                                    |

### Length restrictions

|  |          |
|--|----------|
| Maximum length in bytes of messages sent to device         | 30 BYTES |
| Maximum length in bytes of messages received by the device | 30 BYTES |

## ADDRESS CONFIGURATION

The serial **TTL** - which we will call COM1 - can be used to configure the device, parameters, states, and variables with Modbus via the Modbus protocol.

The address of a device within a ModBus message is made up of one byte and is formed by the family code and the instrument code, indicated by **dBA**, made up of parameters **FAA** and **dEA** respectively.

The address (Device Address) is thus formed of two nibbles:

**dEA**: low nibble  
**FAA**: high nibble

To calculate the address starting from parameters FAA and dEA:

$$dBA = FAA \times 16 + dEA$$

The address 0 is used for broadcast messages that all slaves recognise. Slaves don't respond to broadcast messages.

The parameters for configuring the device are:

**The address of a device in a ModBus message is set via parameter Adr.**

| Parameter  | Description                        | Value | Range  |
|------------|------------------------------------|-------|--|
| <b>PtS</b> | Select COM1 (TTL) protocol         | t     | t = Televis<br>d = Modbus  |
| <b>dEA</b> | Device index in family             | 0     | 0 ... 14   |
| <b>FAA</b> | Device family                      | 0     | 0 ... 14   |
| <b>Adr</b> | Modbus protocol controller address | 1     | 1 ... 250  |
| <b>Pty</b> | Modbus protocol parity bit         | E     | <ul style="list-style-type: none"> <li>• n= NONE</li> <li>• E= EVEN</li> <li>• o= ODD</li> </ul> |
| <b>StP</b> | Modbus protocol stop bit           | 1b    | <ul style="list-style-type: none"> <li>• 1b= 1 BIT</li> <li>• 2b= 2 BIT</li> </ul>               |

**NOTE: To guarantee proper function, the controller must be switched off then back on again when parameters Pty and Stp are modified.**

## PARAMETER VISIBILITY AND VALUES

There are 2 hardware models (TelevisIn and TelevisOut) with varying numbers of inputs and outputs. Depending on the model, some configuration parameters may not (usually) be visible and/or be of no significance given that the associated resource is not present.

### ! IMPORTANT:

- 1) When not indicated otherwise, the parameter is always visible and modifiable, unless customized settings have been configured via serial.
- 2) If folder visibility is modified, the new setting will apply to all parameters in the folder.

## PARAMETER/VISIBILITY TABLE AND CLIENT TABLE

The tables below list all information required to read, write and decode all accessible resources in the device. There are three tables:

- the "**PARAMETERS TABLE**" lists all controller configuration parameters saved in the device's non-volatile memory, including visibility.
- the "**FOLDER VISIBILITY TABLE**" lists the visibilities of all folders and the parameters contained within them.
- the "**CLIENT TABLE**" includes all I/O and alarm state resources available in the volatile memory of the device.

### Description of columns:

#### FOLDER

This indicates the label of the folder containing the parameter in question.

#### LABEL

This indicates the label used to display the parameters in the menu of the controller.

#### PAR. ADDRESS

The whole part represents the address of the MODBUS register containing the value of the resource to be read or written in the controller. The value after the point indicates the position of the most significant data bit inside the register; if not indicated it is taken to be zero. This information is always provided when the register contains more than one information item, and it is necessary to distinguish which bits actually represent the data (the working size of the data indicated in the column DATA SIZE is also taken into consideration).

Given that the modbus registers have the size of one WORD (16 bit), the index number after the point can vary from 0 (least significant bit -LSb-) to 15 (most significant bit -MSb-).

Examples (in binary form the least significant bit is the first on the right):

| VAL | PAR. ADDRESS | DATA SIZE | Value | Content of register               |
|-----|--------------|-----------|-------|-----------------------------------|
|     | 8806         | WORD      | 1350  | 1350 (0000010101000110)           |
|     | 8806         | BYTE      | 70    | 1350 (000001010 <b>1000110</b> )  |
|     | 8806.8       | BYTE      | 5     | 1350 ( <b>0000010101000110</b> )  |
|     | 8806.14      | 1 BIT     | 0     | 1350 (0 <b>0000010101000110</b> ) |
|     | 8806.7       | 4 BIT     | 10    | 1350 (00000 <b>10101000110</b> )  |

**IMPORTANT:** when the register contains more than one piece of data, the write procedure is as follows:

- Read current value of register
- Modify bits for the resource concerned
- Write register

#### VIS PAR. ADDRESS

The same as above. In this case, the MODBUS register address contains the visibility value of the parameter.

By default all parameters have:

- Data size 2 bit
- Range 0...3
- \*\*Visibility 3
- U.M. num

#### \*\*Value Meaning

- Value 3 = parameter or folder always visible
- Value 2 = **manufacturer level**; these parameters can only be viewed by entering the manufacturer's password (see parameter PS2) (all parameters declared as always visible, parameters visible at the installation engineer level and manufacturer's level will be visible).
- Value 1 = **installer level**; these parameters can only be viewed on entering the installer's password (see parameter PS1) (all parameters declared as always visible and parameters visible at the installer level will be visible).
- Value 0 = parameter or folder NOT visible

1. Parameters and/or folders with a level of visibility <>3 (password-protected) will only be visible if the correct password is entered (installer or manufacturer) following this procedure:

2. Parameters and/or folders with a level of visibility = 3 are always visible even without a password: in this case, the following procedure is not necessary.

Examples (in binary form the least significant bit is the first on the right):

**Default visibility:**

| VAL PAR. ADDRESS | DATA SIZE | Value | Content of register |   |
|------------------|-----------|-------|---------------------|---|
| 49336.6          | 2 BIT     | 3     | 65535               | ----- (00000000 <b>11</b> 11111111111111) |
| 49337            | 2 BIT     | 3     | 65535               | (00000000111111 <b>11</b> 1111111111)     |
| 49337.2          | 2 BIT     | 3     | 65535               | (000000001111 <b>11</b> 1111111111)       |
| 49337.4          | 2 BIT     | 3     | 65535               | (00000000 <b>11</b> 11111111111111)       |
| 49337.6          | 2 BIT     | 3     | 65535               | (00000000 <b>11</b> 11111111111111)       |

**R/W**

Indicates if resources are read/write, read-only or write-only:

- R The resource is read-only
- W The resource is write-only
- RW The resource is read/write

**DESCRIPTION**

This is the description of the meaning of the **parameters** in the **LABEL** column.

**DATA SIZE**

Indicates the size of the data in bits.

- WORD = 16 bit
- BYTE = 8 bit
- "n" bit = 0...15 bit based on the value of "n"

**CPL**

When the field indicates "Y", the value read by the register needs to be converted because the value represents a number with a sign. In the other cases the value is always positive or null.

To carry out conversion, proceed as follows:

- If the value in the register is between 0 and 32,767, the result is the value itself (zero and positive values)
- If the value in the register is between 32,768 and 65,535, the result is the value of the register - 65,536 (negative values)

**RANGE**

Describes the interval of values that can be assigned to the parameter. It can be correlated with other instrument parameters (indicated with the parameter label).

**M.U.**

Measure Units for values converted according to the rules indicated in the CPL and EXP columns.

## PARAMETER TABLE

| Folder | Label | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE            | M.U.              |
|--------|-------|--------------------|-------------------|-----|--|-----------|-----|------------------|-------------------|
| Ai     | H41   | 49234              | 49368             | RW  | Probe 1 present  | BYTE      |     | 0 ... 2          | num               |
| Ai     | H42   | 49235              | 49369             | RW  | Probe 2 present  | BYTE      |     | 0 ... 2          | num               |
| Ai     | H43   | 49236              | 49370             | RW  | Probe 3 present  | BYTE      |     | 0 ... 2          | num               |
| Ai     | H44   | 49237              | 49371             | RW  | Probe 4 present  | BYTE      |     | 0 ... 2          | num               |
| Ai     | H45   | 49238              | 49372             | RW  | Probe 5 present  | BYTE      |     | 0 ... 2          | num               |
| Ai     | H00   | 49345              | 49373             | RW  | To select analogue input type 1-2-5                        | BYTE      |     | 0 ... 2          | num               |
| Ai     | H01   | 49346              | 49374             | RW  | To select analogue input type 3                            | BYTE      |     | 0 ... 5          | num               |
| Ai     | H02   | 49347              | 49375             | RW  | To select analogue input type 4                            | BYTE      |     | 0 ... 5          | num               |
| Ai     | H03   | 16388              | 49376             | RW  | Bottom limit for current input 1                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| Ai     | H04   | 16390              | 49377             | RW  | Upper limit for current input 1                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| Ai     | H05   | 16392              | 49378             | RW  | Bottom limit for current input 2                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| Ai     | H06   | 16394              | 49379             | RW  | Upper limit for current input 2                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| Ai     | rUP   | 49321              | 49380             | RW  | Humidity input for dewpoint calculation                    | BYTE      |     | 0 ... 2          | num               |
| Ai     | rtP   | 49322              | 49381             | RW  | Temperature input for dewpoint calculation                 | BYTE      |     | 0 ... 5          | num               |
| Ai     | H11   | 49239              | 49382             | RW  | Configurability and polarity of digital input 1            | BYTE      | Y   | -8 ... 8         | num               |
| Ai     | H12   | 49240              | 49383             | RW  | Configurability and polarity of digital input 2            | BYTE      | Y   | -8 ... 8         | num               |
| Ai     | H13   | 49241              | 49384             | RW  | Configurability and polarity of digital input 3            | BYTE      | Y   | -8 ... 8         | num               |
| Ai     | H14   | 49242              | 49385             | RW  | Configurability and polarity of digital input 4            | BYTE      | Y   | -8 ... 8         | num               |
| Ai     | H15   | 49243              | 49386             | RW  | Configurability and polarity of digital input 5            | BYTE      | Y   | -8 ... 8         | num               |
| Ai     | H16   | 49244              | 49387             | RW  | Configurability and polarity of digital input 6            | BYTE      | Y   | -8 ... 8         | num               |
| Ai     | H17   | 49245              | 49388             | RW  | Configurability and polarity of digital input 7            | BYTE      | Y   | -8 ... 8         | num               |
| Ai     | i1L   | 49246              | 49389             | RW  | To enable block on temperature update from digital input 1 | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i2L   | 49247              | 49390             | RW  | To enable block on temperature update from digital input 2 | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i3L   | 49248              | 49391             | RW  | To enable block on temperature update from digital input 3 | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i4L   | 49249              | 49392             | RW  | To enable block on temperature update from digital input 4 | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i5L   | 49250              | 49393             | RW  | To enable block on temperature update from digital input 5 | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i6L   | 49251              | 49394             | RW  | To enable block on temperature update from digital input 6 | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i7L   | 49252              | 49395             | RW  | To enable block on temperature update from digital input 7 | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i1d   | 49253              | 49396             | RW  | Acquisition mode (edge or level) digital input 1           | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i2d   | 49254              | 49397             | RW  | Acquisition mode (edge or level) digital input 2           | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i3d   | 49255              | 49398             | RW  | Acquisition mode (edge or level) digital input 3           | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i4d   | 49256              | 49399             | RW  | Acquisition mode (edge or level) digital input 4           | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i5d   | 49257              | 49400             | RW  | Acquisition mode (edge or level) digital input 5           | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i6d   | 49258              | 49401             | RW  | Acquisition mode (edge or level) digital input 6           | BYTE      |     | 0 ... 1          | flag              |
| Ai     | i7d   | 49259              | 49402             | RW  | Acquisition mode (edge or level) digital input 7           | BYTE      |     | 0 ... 1          | flag              |
| Ai     | dt1   | 49260              | 49403             | RW  | Unit of measure for delay signalling alarm 1               | BYTE      |     | 0 ... 1          | flag              |
| Ai     | d11   | 49267              | 49404             | RW  | Delay time signalling alarm from DI1                       | BYTE      |     | 0 ... 250        | sec/min           |
| Ai     | dt2   | 49261              | 49405             | RW  | Unit of measure for delay signalling alarm 2               | BYTE      |     | 0 ... 1          | flag              |
| Ai     | d12   | 49268              | 49406             | RW  | Delay time signalling alarm from DI2                       | BYTE      |     | 0 ... 250        | sec/min           |
| Ai     | dt3   | 49262              | 49407             | RW  | Unit of measure for delay signalling alarm 3               | BYTE      |     | 0 ... 1          | flag              |
| Ai     | d13   | 49269              | 49408             | RW  | Delay time signalling alarm from DI3                       | BYTE      |     | 0 ... 250        | sec/min           |
| Ai     | dt4   | 49263              | 49409             | RW  | Unit of measure for delay signalling alarm 4               | BYTE      |     | 0 ... 1          | flag              |
| Ai     | d14   | 49270              | 49410             | RW  | Delay time signalling alarm from DI4                       | BYTE      |     | 0 ... 250        | sec/min           |
| Ai     | dt5   | 49264              | 49411             | RW  | Unit of measure for delay signalling alarm 5               | BYTE      |     | 0 ... 1          | flag              |
| Ai     | d15   | 49271              | 49412             | RW  | Delay time signalling alarm from DI5                       | BYTE      |     | 0 ... 250        | sec/min           |
| Ai     | dt6   | 49265              | 49413             | RW  | Unit of measure for delay signalling alarm 6               | BYTE      |     | 0 ... 1          | flag              |
| Ai     | d16   | 49272              | 49414             | RW  | Delay time signalling alarm from DI6                       | BYTE      |     | 0 ... 250        | sec/min           |
| Ai     | dt7   | 49266              | 49415             | RW  | Unit of measure for delay signalling alarm 7               | BYTE      |     | 0 ... 1          | flag              |
| Ai     | d17   | 49273              | 49416             | RW  | Delay time signalling alarm from DI7                       | BYTE      |     | 0 ... 250        | sec/min           |
| Ai     | En1   | 49274              | 49417             | RW  | Number of activations of digital input 1                   | BYTE      |     | 0 ... 15         | num               |

| Folder | Label | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE            | M.U.              |
|--------|-------|--------------------|-------------------|-----|---|-----------|-----|------------------|-------------------|
| Ai     | Ei1   | 49281              | 49418             | RW  | Count interval for activation of digital input 1      | BYTE      |     | 0 ... 200        | min               |
| Ai     | En2   | 49275              | 49419             | RW  | Number of activations of digital input 2              | BYTE      |     | 0 ... 15         | num               |
| Ai     | Ei2   | 49282              | 49420             | RW  | Count interval for activation of digital input 2      | BYTE      |     | 0 ... 200        | min               |
| Ai     | En3   | 49276              | 49421             | RW  | Number of activations of digital input 3              | BYTE      |     | 0 ... 15         | num               |
| Ai     | Ei3   | 49283              | 49422             | RW  | Count interval for activation of digital input 3      | BYTE      |     | 0 ... 200        | min               |
| Ai     | En4   | 49277              | 49423             | RW  | Number of activations of digital input 4              | BYTE      |     | 0 ... 15         | num               |
| Ai     | Ei4   | 49284              | 49424             | RW  | Count interval for activation of digital input 4      | BYTE      |     | 0 ... 200        | min               |
| Ai     | En5   | 49278              | 49425             | RW  | Number of activations of digital input 5              | BYTE      |     | 0 ... 15         | num               |
| Ai     | Ei5   | 49285              | 49426             | RW  | Count interval for activation of digital input 5      | BYTE      |     | 0 ... 200        | min               |
| Ai     | En6   | 49279              | 49427             | RW  | Number of activations of digital input 6              | BYTE      |     | 0 ... 15         | num               |
| Ai     | Ei6   | 49286              | 49428             | RW  | Count interval for activation of digital input 6      | BYTE      |     | 0 ... 200        | min               |
| Ai     | En7   | 49280              | 49429             | RW  | Number of activations of digital input 7              | BYTE      |     | 0 ... 15         | num               |
| Ai     | Ei7   | 49287              | 49430             | RW  | Count interval for activation of digital input 7      | BYTE      |     | 0 ... 200        | min               |
| Ai     | H21   | 49288              | 49431             | RW  | Configurability of digital output 1                   | BYTE      | Y   | -14 ... 14       | num               |
| Ai     | H22   | 49289              | 49432             | RW  | Configurability of digital output 2                   | BYTE      | Y   | -14 ... 14       | num               |
| Ai     | H23   | 49290              | 49433             | RW  | Configurability of digital output 3                   | BYTE      | Y   | -14 ... 14       | num               |
| Ai     | H24   | 49291              | 49434             | RW  | Configurability of digital output 4                   | BYTE      | Y   | -14 ... 14       | num               |
| Ai     | H25   | 49292              | 49435             | RW  | Configurability of digital output 5                   | BYTE      | Y   | -14 ... 14       | num               |
| Ai     | H26   | 49293              | 49436             | RW  | Configurability of digital output 6                   | BYTE      | Y   | -14 ... 14       | num               |
| Ai     | Od0   | 49323              | 49437             | RW  | Delay output enabling from power-on                   | BYTE      |     | 0 ... 250        | min               |
| Ai     | o1i   | 49294              | 49438             | RW  | Pulse length for telephone dialler, output 1          | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o1d   | 49300              | 49439             | RW  | Pulse repeat interval for telephone dialler, output 1 | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o2i   | 49295              | 49440             | RW  | Pulse length for telephone dialler, output 2          | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o2d   | 49301              | 49441             | RW  | Pulse repeat interval for telephone dialler, output 2 | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o3i   | 49296              | 49442             | RW  | Pulse length for telephone dialler, output 3          | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o3d   | 49302              | 49443             | RW  | Pulse repeat interval for telephone dialler, output 3 | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o4i   | 49297              | 49444             | RW  | Pulse length for telephone dialler, output 4          | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o4d   | 49303              | 49445             | RW  | Pulse repeat interval for telephone dialler, output 4 | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o5i   | 49298              | 49446             | RW  | Pulse length for telephone dialler, output 5          | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o5d   | 49304              | 49447             | RW  | Pulse repeat interval for telephone dialler, output 5 | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o6i   | 49299              | 49448             | RW  | Pulse length for telephone dialler, output 6          | BYTE      |     | 0 ... 250        | sec               |
| Ai     | o6d   | 49305              | 49449             | RW  | Pulse repeat interval for telephone dialler, output 6 | BYTE      |     | 0 ... 250        | sec               |
| Ai     | ooF   | 49324              | 49450             | RW  | To disable outputs with device OFF                    | BYTE      |     | 0 ... 1          | flag              |
| AL     | AfD   | 49325              | 49451             | RW  | Alarm activation differential                         | BYTE      |     | 0.1 ... 15.0     | num/°C/°F/%RH/bar |
| AL     | At1   | 49306              | 49452             | RW  | Alarm mode (absolute and relative) probe 1            | BYTE      |     | 0 ... 1          | flag              |
| AL     | SE1   | 16396              | 49453             | RW  | Alarm setpoint for probe 1                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AL     | LA1   | 16406              | 49454             | RW  | Minimum alarm threshold 1                             | WORD      | Y   | -999.0 ... HA1   | num/°C/°F/%RH/bar |
| AL     | HA1   | 16416              | 49455             | RW  | Maximum alarm threshold 1                             | WORD      | Y   | LA1 ... 999.0    | num/°C/°F/%RH/bar |
| AL     | tA1   | 49311              | 49456             | RW  | Delay for high/low alarm on probe 1                   | BYTE      |     | 0 ... 250        | min               |
| AL     | At2   | 49307              | 49457             | RW  | Alarm mode (absolute and relative) probe 2            | BYTE      |     | 0 ... 1          | flag              |
| AL     | SE2   | 16398              | 49458             | RW  | Alarm setpoint for probe 2                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AL     | LA2   | 16408              | 49459             | RW  | Minimum alarm threshold 2                             | WORD      | Y   | -999.0 ... HA2   | num/°C/°F/%RH/bar |
| AL     | HA2   | 16418              | 49460             | RW  | Maximum alarm threshold 2                             | WORD      | Y   | LA2 ... 999.0    | num/°C/°F/%RH/bar |
| AL     | tA2   | 49312              | 49461             | RW  | Delay for high/low alarm on probe 2                   | BYTE      |     | 0 ... 250        | min               |
| AL     | At3   | 49308              | 49462             | RW  | Alarm mode (absolute and relative) probe 3            | BYTE      |     | 0 ... 1          | flag              |
| AL     | SE3   | 16400              | 49463             | RW  | Alarm setpoint for probe 3                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AL     | LA3   | 16410              | 49464             | RW  | Minimum alarm threshold 3                             | WORD      | Y   | -999.0 ... HA3   | num/°C/°F/%RH/bar |
| AL     | HA3   | 16420              | 49465             | RW  | Maximum alarm threshold 3                             | WORD      | Y   | LA3 ... 999.0    | num/°C/°F/%RH/bar |

| Folder                          | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE            | M.U.              |
|---------------------------------|--------|--------------------|-------------------|-----|---|-----------|-----|------------------|-------------------|
| AL                              | tA3    | 49313              | 49466             | RW  | Delay for high/low alarm on probe 3   | BYTE      |     | 0 ... 250        | min               |
| AL                              | At4    | 49309              | 49467             | RW  | Alarm mode (absolute and relative) probe 4  | BYTE      |     | 0 ... 1          | flag              |
| AL                              | SE4    | 16402              | 49468             | RW  | Alarm setpoint for probe 4  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AL                              | LA4    | 16412              | 49469             | RW  | Minimum alarm threshold 4   | WORD      | Y   | -999.0 ... HA4   | num/°C/°F/%RH/bar |
| AL                              | HA4    | 16422              | 49470             | RW  | Maximum alarm threshold 4   | WORD      | Y   | LA4 ... 999.0    | num/°C/°F/%RH/bar |
| AL                              | tA4    | 49314              | 49471             | RW  | Delay for high/low alarm on probe 4   | BYTE      |     | 0 ... 250        | min               |
| AL                              | At5    | 49310              | 49472             | RW  | Alarm mode (absolute and relative) probe 5  | BYTE      |     | 0 ... 1          | flag              |
| AL                              | SE5    | 16404              | 49473             | RW  | Alarm setpoint for probe 5  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AL                              | LA5    | 16414              | 49474             | RW  | Minimum alarm threshold 5   | WORD      | Y   | -999.0 ... HA5   | num/°C/°F/%RH/bar |
| AL                              | HA5    | 16424              | 49475             | RW  | Maximum alarm threshold 5   | WORD      | Y   | LA5 ... 999.0    | num/°C/°F/%RH/bar |
| AL                              | tA5    | 49315              | 49476             | RW  | Delay for high/low alarm on probe 5   | BYTE      |     | 0 ... 250        | min               |
| AL                              | PAO    | 16436              | 49477             | RW  | Temperature alarms disabling time from power-on   | WORD      |     | 0 ... 999        | min               |
| AL                              | Atd    | 49326              | 49478             | RW  | Regular watchdog alarm activation duration  | BYTE      |     | 0 ... 250        | min               |
| AL                              | Art    | 49327              | 49479             | RW  | Regular watchdog alarm activation period  | BYTE      |     | 0 ... 250        | min               |
| AL                              | dtA    | 49328              | 49480             | RW  | Alarm acknowledgement time  | BYTE      |     | 0 ... 250        | sec               |
| AL                              | CLC    | 49329              | 49481             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled                        | BYTE      |     | 0 ... 250        | min               |
| Add                             | F-PtS  | 49330              | 49482             | RW  | Protocol selection  | BYTE      |     | 0 ... 1          | flag              |
| Add                             | F-dEA  | 49331              | 49483             | RW  | Device address  | BYTE      |     | 0 ... 14         | num               |
| Add                             | F-FAA  | 49332              | 49484             | RW  | Family address  | BYTE      |     | 0 ... 14         | num               |
| Add                             | F-Adr  | 49333              | 49485             | RW  | Modbus protocol controller address  | BYTE      |     | 1 ... 250        | num               |
| Add                             | F-PtY  | 49334              | 49486             | RW  | MODBUS parity bit   | BYTE      |     | 0 ... 2          | num               |
| Add                             | F-StP  | 49335              | 49487             | RW  | MODBUS stop bit   | BYTE      |     | 0 ... 1          | flag              |
| Add                             | rEL    | ---                | 49488             | RW  | Device version visibility   | BYTE      |     | 0 ... 3          | num               |
| Add                             | tAb    | ---                | 49489             | RW  | Parameters table visibility   | BYTE      |     | 0 ... 3          | num               |
| Add                             | F-H60  | 49341              | 49490             | RW  | Parameter vector selector   | BYTE      |     | 1 ... 255        | num               |
| diS                             | PS1    | 49336              | 49491             | RW  | Password 1 value  | BYTE      |     | 0 ... 250        | num               |
| diS                             | PS2    | 49337              | 49492             | RW  | Password 2 value  | BYTE      |     | 0 ... 250        | num               |
| diS                             | ndt    | 49338              | 49493             | RW  | Display with decimal point  | BYTE      |     | 0 ... 1          | flag              |
| diS                             | CA1    | 16426              | 49494             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| diS                             | CA2    | 16428              | 49495             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| diS                             | CA3    | 16430              | 49496             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| diS                             | CA4    | 16432              | 49497             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| diS                             | CA5    | 16434              | 49498             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| diS                             | Ldd    | 49339              | 49499             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250        | min               |
| diS                             | dr1    | 49316              | 49500             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4          | num               |
| diS                             | dr2    | 49317              | 49501             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4          | num               |
| diS                             | dr3    | 49318              | 49502             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4          | num               |
| diS                             | dr4    | 49319              | 49503             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4          | num               |
| diS                             | dr5    | 49320              | 49504             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4          | num               |
| diS                             | ddd    | 49340              | 49505             | RW  | To select of main display value   | BYTE      |     | 0 ... 19         | num               |
| FPr                             | vis_UL | ---                | 49506             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3          | num               |
| FPr                             | vis_dL | ---                | 49507             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3          | num               |
| FPr                             | vis_Fr | ---                | 49508             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3          | num               |
| <b>APPLICATION 1 PARAMETERS</b> |        |                    |                   |     |   |           |     |                  |                   |
| V1                              | V1-H41 | 49606              | 49722             | RW  | Probe 1 present   | BYTE      |     | 0 ... 2          | num               |
| V1                              | V1-H42 | 49607              | 49723             | RW  | Probe 2 present   | BYTE      |     | 0 ... 2          | num               |
| V1                              | V1-H43 | 49608              | 49724             | RW  | Probe 3 present   | BYTE      |     | 0 ... 2          | num               |
| V1                              | V1-H44 | 49609              | 49725             | RW  | Probe 4 present   | BYTE      |     | 0 ... 2          | num               |
| V1                              | V1-H45 | 49610              | 49726             | RW  | Probe 5 present   | BYTE      |     | 0 ... 2          | num               |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE            | M.U.              |
|--------|--------|--------------------|-------------------|-----|--|-----------|-----|------------------|-------------------|
| V1     | V1-H00 | 49707              | 49727             | RW  | To select analogue input type 1-2-5                        | BYTE      |     | 0 ... 2          | num               |
| V1     | V1-H01 | 49708              | 49728             | RW  | To select analogue input type 3                            | BYTE      |     | 0 ... 5          | num               |
| V1     | V1-H02 | 49709              | 49729             | RW  | To select analogue input type 4                            | BYTE      |     | 0 ... 5          | num               |
| V1     | V1-H03 | 16768              | 49730             | RW  | Bottom limit for current input 1                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V1     | V1-H04 | 16770              | 49731             | RW  | Upper limit for current input 1                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V1     | V1-H05 | 16772              | 49732             | RW  | Bottom limit for current input 2                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V1     | V1-H06 | 16774              | 49733             | RW  | Upper limit for current input 2                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V1     | V1-rUP | 49693              | 49734             | RW  | Humidity input for dewpoint calculation                    | BYTE      |     | 0 ... 2          | num               |
| V1     | V1-rtP | 49694              | 49735             | RW  | Temperature input for dewpoint calculation                 | BYTE      |     | 0 ... 5          | num               |
| V1     | V1-H11 | 49611              | 49736             | RW  | Configurability and polarity of digital input 1            | BYTE      | Y   | -8 ... 8         | num               |
| V1     | V1-H12 | 49612              | 49737             | RW  | Configurability and polarity of digital input 2            | BYTE      | Y   | -8 ... 8         | num               |
| V1     | V1-H13 | 49613              | 49738             | RW  | Configurability and polarity of digital input 3            | BYTE      | Y   | -8 ... 8         | num               |
| V1     | V1-H14 | 49614              | 49739             | RW  | Configurability and polarity of digital input 4            | BYTE      | Y   | -8 ... 8         | num               |
| V1     | V1-H15 | 49615              | 49740             | RW  | Configurability and polarity of digital input 5            | BYTE      | Y   | -8 ... 8         | num               |
| V1     | V1-H16 | 49616              | 49741             | RW  | Configurability and polarity of digital input 6            | BYTE      | Y   | -8 ... 8         | num               |
| V1     | V1-H17 | 49617              | 49742             | RW  | Configurability and polarity of digital input 7            | BYTE      | Y   | -8 ... 8         | num               |
| V1     | V1-i1L | 49618              | 49743             | RW  | To enable block on temperature update from digital input 1 | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i2L | 49619              | 49744             | RW  | To enable block on temperature update from digital input 2 | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i3L | 49620              | 49745             | RW  | To enable block on temperature update from digital input 3 | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i4L | 49621              | 49746             | RW  | To enable block on temperature update from digital input 4 | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i5L | 49622              | 49747             | RW  | To enable block on temperature update from digital input 5 | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i6L | 49623              | 49748             | RW  | To enable block on temperature update from digital input 6 | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i7L | 49624              | 49749             | RW  | To enable block on temperature update from digital input 7 | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i1d | 49625              | 49750             | RW  | Acquisition mode (edge or level) digital input 1           | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i2d | 49626              | 49751             | RW  | Acquisition mode (edge or level) digital input 2           | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i3d | 49627              | 49752             | RW  | Acquisition mode (edge or level) digital input 3           | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i4d | 49628              | 49753             | RW  | Acquisition mode (edge or level) digital input 4           | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i5d | 49629              | 49754             | RW  | Acquisition mode (edge or level) digital input 5           | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i6d | 49630              | 49755             | RW  | Acquisition mode (edge or level) digital input 6           | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-i7d | 49631              | 49756             | RW  | Acquisition mode (edge or level) digital input 7           | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-dt1 | 49632              | 49757             | RW  | Unit of measure for delay signalling alarm 1               | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-d11 | 49639              | 49758             | RW  | Delay time signalling alarm from DI1                       | BYTE      |     | 0 ... 250        | sec/min           |
| V1     | V1-dt2 | 49633              | 49759             | RW  | Unit of measure for delay signalling alarm 2               | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-d12 | 49640              | 49760             | RW  | Delay time signalling alarm from DI2                       | BYTE      |     | 0 ... 250        | sec/min           |
| V1     | V1-dt3 | 49634              | 49761             | RW  | Unit of measure for delay signalling alarm 3               | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-d13 | 49641              | 49762             | RW  | Delay time signalling alarm from DI3                       | BYTE      |     | 0 ... 250        | sec/min           |
| V1     | V1-dt4 | 49635              | 49763             | RW  | Unit of measure for delay signalling alarm 4               | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-d14 | 49642              | 49764             | RW  | Delay time signalling alarm from DI4                       | BYTE      |     | 0 ... 250        | sec/min           |
| V1     | V1-dt5 | 49636              | 49765             | RW  | Unit of measure for delay signalling alarm 5               | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-d15 | 49643              | 49766             | RW  | Delay time signalling alarm from DI5                       | BYTE      |     | 0 ... 250        | sec/min           |
| V1     | V1-dt6 | 49637              | 49767             | RW  | Unit of measure for delay signalling alarm 6               | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-d16 | 49644              | 49768             | RW  | Delay time signalling alarm from DI6                       | BYTE      |     | 0 ... 250        | sec/min           |
| V1     | V1-dt7 | 49638              | 49769             | RW  | Unit of measure for delay signalling alarm 7               | BYTE      |     | 0 ... 1          | flag              |
| V1     | V1-d17 | 49645              | 49770             | RW  | Delay time signalling alarm from DI7                       | BYTE      |     | 0 ... 250        | sec/min           |
| V1     | V1-En1 | 49646              | 49771             | RW  | Number of activations of digital input 1                   | BYTE      |     | 0 ... 15         | num               |
| V1     | V1-Ei1 | 49653              | 49772             | RW  | Count interval for activation of digital input 1           | BYTE      |     | 0 ... 200        | min               |
| V1     | V1-En2 | 49647              | 49773             | RW  | Number of activations of digital input 2                   | BYTE      |     | 0 ... 15         | num               |
| V1     | V1-Ei2 | 49654              | 49774             | RW  | Count interval for activation of digital input 2           | BYTE      |     | 0 ... 200        | min               |
| V1     | V1-En3 | 49648              | 49775             | RW  | Number of activations of digital input 3                   | BYTE      |     | 0 ... 15         | num               |
| V1     | V1-Ei3 | 49655              | 49776             | RW  | Count interval for activation of digital input 3           | BYTE      |     | 0 ... 200        | min               |
| V1     | V1-En4 | 49649              | 49777             | RW  | Number of activations of digital input 4                   | BYTE      |     | 0 ... 15         | num               |
| V1     | V1-Ei4 | 49656              | 49778             | RW  | Count interval for activation of digital input 4           | BYTE      |     | 0 ... 200        | min               |



| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|--------|--------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V1     | V1-En5 | 49650              | 49779             | RW  | Number of activations of digital input 5              | BYTE      |     | 0 ... 15          | num               |
| V1     | V1-Ei5 | 49657              | 49780             | RW  | Count interval for activation of digital input 5      | BYTE      |     | 0 ... 200         | min               |
| V1     | V1-En6 | 49651              | 49781             | RW  | Number of activations of digital input 6              | BYTE      |     | 0 ... 15          | num               |
| V1     | V1-Ei6 | 49658              | 49782             | RW  | Count interval for activation of digital input 6      | BYTE      |     | 0 ... 200         | min               |
| V1     | V1-En7 | 49652              | 49783             | RW  | Number of activations of digital input 7              | BYTE      |     | 0 ... 15          | num               |
| V1     | V1-Ei7 | 49659              | 49784             | RW  | Count interval for activation of digital input 7      | BYTE      |     | 0 ... 200         | min               |
| V1     | V1-H21 | 49660              | 49785             | RW  | Configurability of digital output 1                   | BYTE      | Y   | -14 ... 14        | num               |
| V1     | V1-H22 | 49661              | 49786             | RW  | Configurability of digital output 2                   | BYTE      | Y   | -14 ... 14        | num               |
| V1     | V1-H23 | 49662              | 49787             | RW  | Configurability of digital output 3                   | BYTE      | Y   | -14 ... 14        | num               |
| V1     | V1-H24 | 49663              | 49788             | RW  | Configurability of digital output 4                   | BYTE      | Y   | -14 ... 14        | num               |
| V1     | V1-H25 | 49664              | 49789             | RW  | Configurability of digital output 5                   | BYTE      | Y   | -14 ... 14        | num               |
| V1     | V1-H26 | 49665              | 49790             | RW  | Configurability of digital output 6                   | BYTE      | Y   | -14 ... 14        | num               |
| V1     | V1-Od0 | 49695              | 49791             | RW  | Delay output enabling from power-on                   | BYTE      |     | 0 ... 250         | min               |
| V1     | V1-o1i | 49666              | 49792             | RW  | Pulse length for telephone dialler, output 1          | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o1d | 49672              | 49793             | RW  | Pulse repeat interval for telephone dialler, output 1 | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o2i | 49667              | 49794             | RW  | Pulse length for telephone dialler, output 2          | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o2d | 49673              | 49795             | RW  | Pulse repeat interval for telephone dialler, output 2 | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o3i | 49668              | 49796             | RW  | Pulse length for telephone dialler, output 3          | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o3d | 49674              | 49797             | RW  | Pulse repeat interval for telephone dialler, output 3 | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o4i | 49669              | 49798             | RW  | Pulse length for telephone dialler, output 4          | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o4d | 49675              | 49799             | RW  | Pulse repeat interval for telephone dialler, output 4 | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o5i | 49670              | 49800             | RW  | Pulse length for telephone dialler, output 5          | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o5d | 49676              | 49801             | RW  | Pulse repeat interval for telephone dialler, output 5 | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o6i | 49671              | 49802             | RW  | Pulse length for telephone dialler, output 6          | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-o6d | 49677              | 49803             | RW  | Pulse repeat interval for telephone dialler, output 6 | BYTE      |     | 0 ... 250         | sec               |
| V1     | V1-ooF | 49696              | 49804             | RW  | To disable outputs with device OFF                    | BYTE      |     | 0 ... 1           | flag              |
| V1     | V1-AFd | 49697              | 49805             | RW  | Alarm activation differential                         | BYTE      |     | 0.1 ... 15.0      | num/°C/°F/%RH/bar |
| V1     | V1-At1 | 49678              | 49806             | RW  | Alarm mode (absolute and relative) probe 1            | BYTE      |     | 0 ... 1           | flag              |
| V1     | V1-SE1 | 16776              | 49807             | RW  | Alarm setpoint for probe 1                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-LA1 | 16786              | 49808             | RW  | Minimum alarm threshold 1                             | WORD      | Y   | -999.0 ... V1-HA1 | num/°C/°F/%RH/bar |
| V1     | V1-HA1 | 16796              | 49809             | RW  | Maximum alarm threshold 1                             | WORD      | Y   | V1-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-tA1 | 49683              | 49810             | RW  | Delay for high/low alarm on probe 1                   | BYTE      |     | 0 ... 250         | min               |
| V1     | V1-At2 | 49679              | 49811             | RW  | Alarm mode (absolute and relative) probe 2            | BYTE      |     | 0 ... 1           | flag              |
| V1     | V1-SE2 | 16778              | 49812             | RW  | Alarm setpoint for probe 2                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-LA2 | 16788              | 49813             | RW  | Minimum alarm threshold 2                             | WORD      | Y   | -999.0 ... V1-HA2 | num/°C/°F/%RH/bar |
| V1     | V1-HA2 | 16798              | 49814             | RW  | Maximum alarm threshold 2                             | WORD      | Y   | V1-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-tA2 | 49684              | 49815             | RW  | Delay for high/low alarm on probe 2                   | BYTE      |     | 0 ... 250         | min               |
| V1     | V1-At3 | 49680              | 49816             | RW  | Alarm mode (absolute and relative) probe 3            | BYTE      |     | 0 ... 1           | flag              |
| V1     | V1-SE3 | 16780              | 49817             | RW  | Alarm setpoint for probe 3                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-LA3 | 16790              | 49818             | RW  | Minimum alarm threshold 3                             | WORD      | Y   | -999.0 ... V1-HA3 | num/°C/°F/%RH/bar |
| V1     | V1-HA3 | 16800              | 49819             | RW  | Maximum alarm threshold 3                             | WORD      | Y   | V1-LA3 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-tA3 | 49685              | 49820             | RW  | Delay for high/low alarm on probe 3                   | BYTE      |     | 0 ... 250         | min               |
| V1     | V1-At4 | 49681              | 49821             | RW  | Alarm mode (absolute and relative) probe 4            | BYTE      |     | 0 ... 1           | flag              |
| V1     | V1-SE4 | 16782              | 49822             | RW  | Alarm setpoint for probe 4                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-LA4 | 16792              | 49823             | RW  | Minimum alarm threshold 4                             | WORD      | Y   | -999.0 ... V1-HA4 | num/°C/°F/%RH/bar |
| V1     | V1-HA4 | 16802              | 49824             | RW  | Maximum alarm threshold 4                             | WORD      | Y   | V1-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V1     | V1-tA4 | 49686              | 49825             | RW  | Delay for high/low alarm on probe 4                   | BYTE      |     | 0 ... 250         | min               |
| V1     | V1-At5 | 49682              | 49826             | RW  | Alarm mode (absolute and relative) probe 5            | BYTE      |     | 0 ... 1           | flag              |

| Folder                          | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|---------------------------------|-----------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V1                              | V1-SE5    | 16784              | 49827             | RW  | Alarm setpoint for probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1                              | V1-LA5    | 16794              | 49828             | RW  | Minimum alarm threshold 5   | WORD      | Y   | -999.0 ... V1-HA5 | num/°C/°F/%RH/bar |
| V1                              | V1-HA5    | 16804              | 49829             | RW  | Maximum alarm threshold 5   | WORD      | Y   | V1-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V1                              | V1-tA5    | 49687              | 49830             | RW  | Delay for high/low alarm on probe 5   | BYTE      |     | 0 ... 250         | min               |
| V1                              | V1-PA0    | 16816              | 49831             | RW  | Temperature alarms disabling time from power-on   | WORD      |     | 0 ... 999         | min               |
| V1                              | V1-Atd    | 49698              | 49832             | RW  | Regular watchdog alarm activation duration  | BYTE      |     | 0 ... 250         | min               |
| V1                              | V1-Art    | 49699              | 49833             | RW  | Regular watchdog alarm activation period  | BYTE      |     | 0 ... 250         | min               |
| V1                              | V1-dtA    | 49700              | 49834             | RW  | Alarm acknowledgement time  | BYTE      |     | 0 ... 250         | sec               |
| V1                              | V1-CLC    | 49701              | 49835             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled                        | BYTE      |     | 0 ... 250         | min               |
| V1                              | V1-PS1    | 49702              | 49836             | RW  | Password 1 value  | BYTE      |     | 0 ... 250         | num               |
| V1                              | V1-PS2    | 49703              | 49837             | RW  | Password 2 value  | BYTE      |     | 0 ... 250         | num               |
| V1                              | V1-ndt    | 49704              | 49838             | RW  | Display with decimal point  | BYTE      |     | 0 ... 1           | flag              |
| V1                              | V1-CA1    | 16806              | 49839             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1                              | V1-CA2    | 16808              | 49840             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1                              | V1-CA3    | 16810              | 49841             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1                              | V1-CA4    | 16812              | 49842             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1                              | V1-CA5    | 16814              | 49843             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V1                              | V1-Ldd    | 49705              | 49844             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250         | min               |
| V1                              | V1-dr1    | 49688              | 49845             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4           | num               |
| V1                              | V1-dr2    | 49689              | 49846             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4           | num               |
| V1                              | V1-dr3    | 49690              | 49847             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4           | num               |
| V1                              | V1-dr4    | 49691              | 49848             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4           | num               |
| V1                              | V1-dr5    | 49692              | 49849             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4           | num               |
| V1                              | V1-ddd    | 49706              | 49850             | RW  | To select of main display value   | BYTE      |     | 0 ... 19          | num               |
| V1                              | V1-vis_UL | ---                | 49851             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3           | num               |
| V1                              | V1-vis_dL | ---                | 49852             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3           | num               |
| V1                              | V1-vis_Fr | ---                | 49853             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3           | num               |
| <b>APPLICATION 2 PARAMETERS</b> |           |                    |                   |     |   |           |     |                   |                   |
| V2                              | V2-H41    | 49990              | 50106             | RW  | Probe 1 present   | BYTE      |     | 0 ... 2           | num               |
| V2                              | V2-H42    | 49991              | 50107             | RW  | Probe 2 present   | BYTE      |     | 0 ... 2           | num               |
| V2                              | V2-H43    | 49992              | 50108             | RW  | Probe 3 present   | BYTE      |     | 0 ... 2           | num               |
| V2                              | V2-H44    | 49993              | 50109             | RW  | Probe 4 present   | BYTE      |     | 0 ... 2           | num               |
| V2                              | V2-H45    | 49994              | 50110             | RW  | Probe 5 present   | BYTE      |     | 0 ... 2           | num               |
| V2                              | V2-H00    | 50091              | 50111             | RW  | To select analogue input type 1-2-5   | BYTE      |     | 0 ... 2           | num               |
| V2                              | V2-H01    | 50092              | 50112             | RW  | To select analogue input type 3   | BYTE      |     | 0 ... 5           | num               |
| V2                              | V2-H02    | 50093              | 50113             | RW  | To select analogue input type 4   | BYTE      |     | 0 ... 5           | num               |
| V2                              | V2-H03    | 17152              | 50114             | RW  | Bottom limit for current input 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2                              | V2-H04    | 17154              | 50115             | RW  | Upper limit for current input 1   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2                              | V2-H05    | 17156              | 50116             | RW  | Bottom limit for current input 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2                              | V2-H06    | 17158              | 50117             | RW  | Upper limit for current input 2   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2                              | V2-rUP    | 50077              | 50118             | RW  | Humidity input for dewpoint calculation   | BYTE      |     | 0 ... 2           | num               |
| V2                              | V2-rtP    | 50078              | 50119             | RW  | Temperature input for dewpoint calculation  | BYTE      |     | 0 ... 5           | num               |
| V2                              | V2-H11    | 49995              | 50120             | RW  | Configurability and polarity of digital input 1   | BYTE      | Y   | -8 ... 8          | num               |
| V2                              | V2-H12    | 49996              | 50121             | RW  | Configurability and polarity of digital input 2   | BYTE      | Y   | -8 ... 8          | num               |
| V2                              | V2-H13    | 49997              | 50122             | RW  | Configurability and polarity of digital input 3   | BYTE      | Y   | -8 ... 8          | num               |
| V2                              | V2-H14    | 49998              | 50123             | RW  | Configurability and polarity of digital input 4   | BYTE      | Y   | -8 ... 8          | num               |
| V2                              | V2-H15    | 49999              | 50124             | RW  | Configurability and polarity of digital input 5   | BYTE      | Y   | -8 ... 8          | num               |
| V2                              | V2-H16    | 50000              | 50125             | RW  | Configurability and polarity of digital input 6   | BYTE      | Y   | -8 ... 8          | num               |
| V2                              | V2-H17    | 50001              | 50126             | RW  | Configurability and polarity of digital input 7   | BYTE      | Y   | -8 ... 8          | num               |
| V2                              | V2-i1L    | 50002              | 50127             | RW  | To enable block on temperature update from digital input 1                                  | BYTE      |     | 0 ... 1           | flag              |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE      | M.U.    |
|--------|--------|--------------------|-------------------|-----|--|-----------|-----|------------|---------|
| V2     | V2-i2L | 50003              | 50128             | RW  | To enable block on temperature update from digital input 2 | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i3L | 50004              | 50129             | RW  | To enable block on temperature update from digital input 3 | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i4L | 50005              | 50130             | RW  | To enable block on temperature update from digital input 4 | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i5L | 50006              | 50131             | RW  | To enable block on temperature update from digital input 5 | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i6L | 50007              | 50132             | RW  | To enable block on temperature update from digital input 6 | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i7L | 50008              | 50133             | RW  | To enable block on temperature update from digital input 7 | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i1d | 50009              | 50134             | RW  | Acquisition mode (edge or level) digital input 1           | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i2d | 50010              | 50135             | RW  | Acquisition mode (edge or level) digital input 2           | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i3d | 50011              | 50136             | RW  | Acquisition mode (edge or level) digital input 3           | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i4d | 50012              | 50137             | RW  | Acquisition mode (edge or level) digital input 4           | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i5d | 50013              | 50138             | RW  | Acquisition mode (edge or level) digital input 5           | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i6d | 50014              | 50139             | RW  | Acquisition mode (edge or level) digital input 6           | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-i7d | 50015              | 50140             | RW  | Acquisition mode (edge or level) digital input 7           | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-dt1 | 50016              | 50141             | RW  | Unit of measure for delay signalling alarm 1               | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-d11 | 50023              | 50142             | RW  | Delay time signalling alarm from DI1                       | BYTE      |     | 0 ... 250  | sec/min |
| V2     | V2-dt2 | 50017              | 50143             | RW  | Unit of measure for delay signalling alarm 2               | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-d12 | 50024              | 50144             | RW  | Delay time signalling alarm from DI2                       | BYTE      |     | 0 ... 250  | sec/min |
| V2     | V2-dt3 | 50018              | 50145             | RW  | Unit of measure for delay signalling alarm 3               | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-d13 | 50025              | 50146             | RW  | Delay time signalling alarm from DI3                       | BYTE      |     | 0 ... 250  | sec/min |
| V2     | V2-dt4 | 50019              | 50147             | RW  | Unit of measure for delay signalling alarm 4               | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-d14 | 50026              | 50148             | RW  | Delay time signalling alarm from DI4                       | BYTE      |     | 0 ... 250  | sec/min |
| V2     | V2-dt5 | 50020              | 50149             | RW  | Unit of measure for delay signalling alarm 5               | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-d15 | 50027              | 50150             | RW  | Delay time signalling alarm from DI5                       | BYTE      |     | 0 ... 250  | sec/min |
| V2     | V2-dt6 | 50021              | 50151             | RW  | Unit of measure for delay signalling alarm 6               | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-d16 | 50028              | 50152             | RW  | Delay time signalling alarm from DI6                       | BYTE      |     | 0 ... 250  | sec/min |
| V2     | V2-dt7 | 50022              | 50153             | RW  | Unit of measure for delay signalling alarm 7               | BYTE      |     | 0 ... 1    | flag    |
| V2     | V2-d17 | 50029              | 50154             | RW  | Delay time signalling alarm from DI7                       | BYTE      |     | 0 ... 250  | sec/min |
| V2     | V2-En1 | 50030              | 50155             | RW  | Number of activations of digital input 1                   | BYTE      |     | 0 ... 15   | num     |
| V2     | V2-Ei1 | 50037              | 50156             | RW  | Count interval for activation of digital input 1           | BYTE      |     | 0 ... 200  | min     |
| V2     | V2-En2 | 50031              | 50157             | RW  | Number of activations of digital input 2                   | BYTE      |     | 0 ... 15   | num     |
| V2     | V2-Ei2 | 50038              | 50158             | RW  | Count interval for activation of digital input 2           | BYTE      |     | 0 ... 200  | min     |
| V2     | V2-En3 | 50032              | 50159             | RW  | Number of activations of digital input 3                   | BYTE      |     | 0 ... 15   | num     |
| V2     | V2-Ei3 | 50039              | 50160             | RW  | Count interval for activation of digital input 3           | BYTE      |     | 0 ... 200  | min     |
| V2     | V2-En4 | 50033              | 50161             | RW  | Number of activations of digital input 4                   | BYTE      |     | 0 ... 15   | num     |
| V2     | V2-Ei4 | 50040              | 50162             | RW  | Count interval for activation of digital input 4           | BYTE      |     | 0 ... 200  | min     |
| V2     | V2-En5 | 50034              | 50163             | RW  | Number of activations of digital input 5                   | BYTE      |     | 0 ... 15   | num     |
| V2     | V2-Ei5 | 50041              | 50164             | RW  | Count interval for activation of digital input 5           | BYTE      |     | 0 ... 200  | min     |
| V2     | V2-En6 | 50035              | 50165             | RW  | Number of activations of digital input 6                   | BYTE      |     | 0 ... 15   | num     |
| V2     | V2-Ei6 | 50042              | 50166             | RW  | Count interval for activation of digital input 6           | BYTE      |     | 0 ... 200  | min     |
| V2     | V2-En7 | 50036              | 50167             | RW  | Number of activations of digital input 7                   | BYTE      |     | 0 ... 15   | num     |
| V2     | V2-Ei7 | 50043              | 50168             | RW  | Count interval for activation of digital input 7           | BYTE      |     | 0 ... 200  | min     |
| V2     | V2-H21 | 50044              | 50169             | RW  | Configurability of digital output 1                        | BYTE      | Y   | -14 ... 14 | num     |
| V2     | V2-H22 | 50045              | 50170             | RW  | Configurability of digital output 2                        | BYTE      | Y   | -14 ... 14 | num     |
| V2     | V2-H23 | 50046              | 50171             | RW  | Configurability of digital output 3                        | BYTE      | Y   | -14 ... 14 | num     |
| V2     | V2-H24 | 50047              | 50172             | RW  | Configurability of digital output 4                        | BYTE      | Y   | -14 ... 14 | num     |
| V2     | V2-H25 | 50048              | 50173             | RW  | Configurability of digital output 5                        | BYTE      | Y   | -14 ... 14 | num     |
| V2     | V2-H26 | 50049              | 50174             | RW  | Configurability of digital output 6                        | BYTE      | Y   | -14 ... 14 | num     |
| V2     | V2-Od0 | 50079              | 50175             | RW  | Delay output enabling from power-on                        | BYTE      |     | 0 ... 250  | min     |
| V2     | V2-o1i | 50050              | 50176             | RW  | Pulse length for telephone dialler, output 1               | BYTE      |     | 0 ... 250  | sec     |
| V2     | V2-o1d | 50056              | 50177             | RW  | Pulse repeat interval for telephone dialler, output 1      | BYTE      |     | 0 ... 250  | sec     |
| V2     | V2-o2i | 50051              | 50178             | RW  | Pulse length for telephone dialler, output 2               | BYTE      |     | 0 ... 250  | sec     |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE             | M.U.              |
|--------|--------|--------------------|-------------------|-----|--|-----------|-----|-------------------|-------------------|
| V2     | V2-o2d | 50057              | 50179             | RW  | Pulse repeat interval for telephone dialler, output 2                | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o3i | 50052              | 50180             | RW  | Pulse length for telephone dialler, output 3                         | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o3d | 50058              | 50181             | RW  | Pulse repeat interval for telephone dialler, output 3                | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o4i | 50053              | 50182             | RW  | Pulse length for telephone dialler, output 4                         | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o4d | 50059              | 50183             | RW  | Pulse repeat interval for telephone dialler, output 4                | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o5i | 50054              | 50184             | RW  | Pulse length for telephone dialler, output 5                         | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o5d | 50060              | 50185             | RW  | Pulse repeat interval for telephone dialler, output 5                | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o6i | 50055              | 50186             | RW  | Pulse length for telephone dialler, output 6                         | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-o6d | 50061              | 50187             | RW  | Pulse repeat interval for telephone dialler, output 6                | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-ooF | 50080              | 50188             | RW  | To disable outputs with device OFF                                   | BYTE      |     | 0 ... 1           | flag              |
| V2     | V2-AFd | 50081              | 50189             | RW  | Alarm activation differential  | BYTE      |     | 0.1 ... 15.0      | num/°C/°F/%RH/bar |
| V2     | V2-At1 | 50062              | 50190             | RW  | Alarm mode (absolute and relative) probe 1                           | BYTE      |     | 0 ... 1           | flag              |
| V2     | V2-SE1 | 17160              | 50191             | RW  | Alarm setpoint for probe 1   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-LA1 | 17170              | 50192             | RW  | Minimum alarm threshold 1  | WORD      | Y   | -999.0 ... V2-HA1 | num/°C/°F/%RH/bar |
| V2     | V2-HA1 | 17180              | 50193             | RW  | Maximum alarm threshold 1  | WORD      | Y   | V2-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-tA1 | 50067              | 50194             | RW  | Delay for high/low alarm on probe 1                                  | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-At2 | 50063              | 50195             | RW  | Alarm mode (absolute and relative) probe 2                           | BYTE      |     | 0 ... 1           | flag              |
| V2     | V2-SE2 | 17162              | 50196             | RW  | Alarm setpoint for probe 2   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-LA2 | 17172              | 50197             | RW  | Minimum alarm threshold 2  | WORD      | Y   | -999.0 ... V2-HA2 | num/°C/°F/%RH/bar |
| V2     | V2-HA2 | 17182              | 50198             | RW  | Maximum alarm threshold 2  | WORD      | Y   | V2-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-tA2 | 50068              | 50199             | RW  | Delay for high/low alarm on probe 2                                  | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-At3 | 50064              | 50200             | RW  | Alarm mode (absolute and relative) probe 3                           | BYTE      |     | 0 ... 1           | flag              |
| V2     | V2-SE3 | 17164              | 50201             | RW  | Alarm setpoint for probe 3   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-LA3 | 17174              | 50202             | RW  | Minimum alarm threshold 3  | WORD      | Y   | -999.0 ... V2-HA3 | num/°C/°F/%RH/bar |
| V2     | V2-HA3 | 17184              | 50203             | RW  | Maximum alarm threshold 3  | WORD      | Y   | V2-LA3 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-tA3 | 50069              | 50204             | RW  | Delay for high/low alarm on probe 3                                  | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-At4 | 50065              | 50205             | RW  | Alarm mode (absolute and relative) probe 4                           | BYTE      |     | 0 ... 1           | flag              |
| V2     | V2-SE4 | 17166              | 50206             | RW  | Alarm setpoint for probe 4   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-LA4 | 17176              | 50207             | RW  | Minimum alarm threshold 4  | WORD      | Y   | -999.0 ... V2-HA4 | num/°C/°F/%RH/bar |
| V2     | V2-HA4 | 17186              | 50208             | RW  | Maximum alarm threshold 4  | WORD      | Y   | V2-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-tA4 | 50070              | 50209             | RW  | Delay for high/low alarm on probe 4                                  | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-At5 | 50066              | 50210             | RW  | Alarm mode (absolute and relative) probe 5                           | BYTE      |     | 0 ... 1           | flag              |
| V2     | V2-SE5 | 17168              | 50211             | RW  | Alarm setpoint for probe 5   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-LA5 | 17178              | 50212             | RW  | Minimum alarm threshold 5  | WORD      | Y   | -999.0 ... V2-HA5 | num/°C/°F/%RH/bar |
| V2     | V2-HA5 | 17188              | 50213             | RW  | Maximum alarm threshold 5  | WORD      | Y   | V2-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-tA5 | 50071              | 50214             | RW  | Delay for high/low alarm on probe 5                                  | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-PA0 | 17200              | 50215             | RW  | Temperature alarms disabling time from power-on                      | WORD      |     | 0 ... 999         | min               |
| V2     | V2-Atd | 50082              | 50216             | RW  | Regular watchdog alarm activation duration                           | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-Art | 50083              | 50217             | RW  | Regular watchdog alarm activation period                             | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-dtA | 50084              | 50218             | RW  | Alarm acknowledgement time   | BYTE      |     | 0 ... 250         | sec               |
| V2     | V2-CLC | 50085              | 50219             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled | BYTE      |     | 0 ... 250         | min               |
| V2     | V2-PS1 | 50086              | 50220             | RW  | Password 1 value   | BYTE      |     | 0 ... 250         | num               |
| V2     | V2-PS2 | 50087              | 50221             | RW  | Password 2 value   | BYTE      |     | 0 ... 250         | num               |
| V2     | V2-ndt | 50088              | 50222             | RW  | Display with decimal point   | BYTE      |     | 0 ... 1           | flag              |
| V2     | V2-CA1 | 17190              | 50223             | RW  | To calibrate probe 1   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-CA2 | 17192              | 50224             | RW  | To calibrate probe 2   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-CA3 | 17194              | 50225             | RW  | To calibrate probe 3   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V2     | V2-CA4 | 17196              | 50226             | RW  | To calibrate probe 4   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |

| Folder                          | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE            | M.U.              |
|---------------------------------|-----------|--------------------|-------------------|-----|---|-----------|-----|------------------|-------------------|
| V2                              | V2-CA5    | 17198              | 50227             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V2                              | V2-Ldd    | 50089              | 50228             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250        | min               |
| V2                              | V2-dr1    | 50072              | 50229             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4          | num               |
| V2                              | V2-dr2    | 50073              | 50230             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4          | num               |
| V2                              | V2-dr3    | 50074              | 50231             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4          | num               |
| V2                              | V2-dr4    | 50075              | 50232             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4          | num               |
| V2                              | V2-dr5    | 50076              | 50233             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4          | num               |
| V2                              | V2-ddd    | 50090              | 50234             | RW  | To select of main display value   | BYTE      |     | 0 ... 19         | num               |
| V2                              | V2-vis_UL | ---                | 50235             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3          | num               |
| V2                              | V2-vis_dL | ---                | 50236             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3          | num               |
| V2                              | V2-vis_Fr | ---                | 50237             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3          | num               |
| <b>APPLICATION 3 PARAMETERS</b> |           |                    |                   |     |   |           |     |                  |                   |
| V3                              | V3-H41    | 50374              | 50490             | RW  | Probe 1 present   | BYTE      |     | 0 ... 2          | num               |
| V3                              | V3-H42    | 50375              | 50491             | RW  | Probe 2 present   | BYTE      |     | 0 ... 2          | num               |
| V3                              | V3-H43    | 50376              | 50492             | RW  | Probe 3 present   | BYTE      |     | 0 ... 2          | num               |
| V3                              | V3-H44    | 50377              | 50493             | RW  | Probe 4 present   | BYTE      |     | 0 ... 2          | num               |
| V3                              | V3-H45    | 50378              | 50494             | RW  | Probe 5 present   | BYTE      |     | 0 ... 2          | num               |
| V3                              | V3-H00    | 50475              | 50495             | RW  | To select analogue input type 1-2-5   | BYTE      |     | 0 ... 2          | num               |
| V3                              | V3-H01    | 50476              | 50496             | RW  | To select analogue input type 3   | BYTE      |     | 0 ... 5          | num               |
| V3                              | V3-H02    | 50477              | 50497             | RW  | To select analogue input type 4   | BYTE      |     | 0 ... 5          | num               |
| V3                              | V3-H03    | 17536              | 50498             | RW  | Bottom limit for current input 1  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V3                              | V3-H04    | 17538              | 50499             | RW  | Upper limit for current input 1   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V3                              | V3-H05    | 17540              | 50500             | RW  | Bottom limit for current input 2  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V3                              | V3-H06    | 17542              | 50501             | RW  | Upper limit for current input 2   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V3                              | V3-rUP    | 50461              | 50502             | RW  | Humidity input for dewpoint calculation   | BYTE      |     | 0 ... 2          | num               |
| V3                              | V3-rtP    | 50462              | 50503             | RW  | Temperature input for dewpoint calculation  | BYTE      |     | 0 ... 5          | num               |
| V3                              | V3-H11    | 50379              | 50504             | RW  | Configurability and polarity of digital input 1   | BYTE      | Y   | -8 ... 8         | num               |
| V3                              | V3-H12    | 50380              | 50505             | RW  | Configurability and polarity of digital input 2   | BYTE      | Y   | -8 ... 8         | num               |
| V3                              | V3-H13    | 50381              | 50506             | RW  | Configurability and polarity of digital input 3   | BYTE      | Y   | -8 ... 8         | num               |
| V3                              | V3-H14    | 50382              | 50507             | RW  | Configurability and polarity of digital input 4   | BYTE      | Y   | -8 ... 8         | num               |
| V3                              | V3-H15    | 50383              | 50508             | RW  | Configurability and polarity of digital input 5   | BYTE      | Y   | -8 ... 8         | num               |
| V3                              | V3-H16    | 50384              | 50509             | RW  | Configurability and polarity of digital input 6   | BYTE      | Y   | -8 ... 8         | num               |
| V3                              | V3-H17    | 50385              | 50510             | RW  | Configurability and polarity of digital input 7   | BYTE      | Y   | -8 ... 8         | num               |
| V3                              | V3-i1L    | 50386              | 50511             | RW  | To enable block on temperature update from digital input 1                                  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i2L    | 50387              | 50512             | RW  | To enable block on temperature update from digital input 2                                  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i3L    | 50388              | 50513             | RW  | To enable block on temperature update from digital input 3                                  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i4L    | 50389              | 50514             | RW  | To enable block on temperature update from digital input 4                                  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i5L    | 50390              | 50515             | RW  | To enable block on temperature update from digital input 5                                  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i6L    | 50391              | 50516             | RW  | To enable block on temperature update from digital input 6                                  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i7L    | 50392              | 50517             | RW  | To enable block on temperature update from digital input 7                                  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i1d    | 50393              | 50518             | RW  | Acquisition mode (edge or level) digital input 1  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i2d    | 50394              | 50519             | RW  | Acquisition mode (edge or level) digital input 2  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i3d    | 50395              | 50520             | RW  | Acquisition mode (edge or level) digital input 3  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i4d    | 50396              | 50521             | RW  | Acquisition mode (edge or level) digital input 4  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i5d    | 50397              | 50522             | RW  | Acquisition mode (edge or level) digital input 5  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i6d    | 50398              | 50523             | RW  | Acquisition mode (edge or level) digital input 6  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-i7d    | 50399              | 50524             | RW  | Acquisition mode (edge or level) digital input 7  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-dt1    | 50400              | 50525             | RW  | Unit of measure for delay signalling alarm 1  | BYTE      |     | 0 ... 1          | flag              |
| V3                              | V3-d11    | 50407              | 50526             | RW  | Delay time signalling alarm from DI1  | BYTE      |     | 0 ... 250        | sec/min           |
| V3                              | V3-dt2    | 50401              | 50527             | RW  | Unit of measure for delay signalling alarm 2  | BYTE      |     | 0 ... 1          | flag              |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE            | M.U.              |
|--------|--------|--------------------|-------------------|-----|---|-----------|-----|------------------|-------------------|
| V3     | V3-d12 | 50408              | 50528             | RW  | Delay time signalling alarm from DI2                  | BYTE      |     | 0 ... 250        | sec/min           |
| V3     | V3-dt3 | 50402              | 50529             | RW  | Unit of measure for delay signalling alarm 3          | BYTE      |     | 0 ... 1          | flag              |
| V3     | V3-d13 | 50409              | 50530             | RW  | Delay time signalling alarm from DI3                  | BYTE      |     | 0 ... 250        | sec/min           |
| V3     | V3-dt4 | 50403              | 50531             | RW  | Unit of measure for delay signalling alarm 4          | BYTE      |     | 0 ... 1          | flag              |
| V3     | V3-d14 | 50410              | 50532             | RW  | Delay time signalling alarm from DI4                  | BYTE      |     | 0 ... 250        | sec/min           |
| V3     | V3-dt5 | 50404              | 50533             | RW  | Unit of measure for delay signalling alarm 5          | BYTE      |     | 0 ... 1          | flag              |
| V3     | V3-d15 | 50411              | 50534             | RW  | Delay time signalling alarm from DI5                  | BYTE      |     | 0 ... 250        | sec/min           |
| V3     | V3-dt6 | 50405              | 50535             | RW  | Unit of measure for delay signalling alarm 6          | BYTE      |     | 0 ... 1          | flag              |
| V3     | V3-d16 | 50412              | 50536             | RW  | Delay time signalling alarm from DI6                  | BYTE      |     | 0 ... 250        | sec/min           |
| V3     | V3-dt7 | 50406              | 50537             | RW  | Unit of measure for delay signalling alarm 7          | BYTE      |     | 0 ... 1          | flag              |
| V3     | V3-d17 | 50413              | 50538             | RW  | Delay time signalling alarm from DI7                  | BYTE      |     | 0 ... 250        | sec/min           |
| V3     | V3-En1 | 50414              | 50539             | RW  | Number of activations of digital input 1              | BYTE      |     | 0 ... 15         | num               |
| V3     | V3-Ei1 | 50421              | 50540             | RW  | Count interval for activation of digital input 1      | BYTE      |     | 0 ... 200        | min               |
| V3     | V3-En2 | 50415              | 50541             | RW  | Number of activations of digital input 2              | BYTE      |     | 0 ... 15         | num               |
| V3     | V3-Ei2 | 50422              | 50542             | RW  | Count interval for activation of digital input 2      | BYTE      |     | 0 ... 200        | min               |
| V3     | V3-En3 | 50416              | 50543             | RW  | Number of activations of digital input 3              | BYTE      |     | 0 ... 15         | num               |
| V3     | V3-Ei3 | 50423              | 50544             | RW  | Count interval for activation of digital input 3      | BYTE      |     | 0 ... 200        | min               |
| V3     | V3-En4 | 50417              | 50545             | RW  | Number of activations of digital input 4              | BYTE      |     | 0 ... 15         | num               |
| V3     | V3-Ei4 | 50424              | 50546             | RW  | Count interval for activation of digital input 4      | BYTE      |     | 0 ... 200        | min               |
| V3     | V3-En5 | 50418              | 50547             | RW  | Number of activations of digital input 5              | BYTE      |     | 0 ... 15         | num               |
| V3     | V3-Ei5 | 50425              | 50548             | RW  | Count interval for activation of digital input 5      | BYTE      |     | 0 ... 200        | min               |
| V3     | V3-En6 | 50419              | 50549             | RW  | Number of activations of digital input 6              | BYTE      |     | 0 ... 15         | num               |
| V3     | V3-Ei6 | 50426              | 50550             | RW  | Count interval for activation of digital input 6      | BYTE      |     | 0 ... 200        | min               |
| V3     | V3-En7 | 50420              | 50551             | RW  | Number of activations of digital input 7              | BYTE      |     | 0 ... 15         | num               |
| V3     | V3-Ei7 | 50427              | 50552             | RW  | Count interval for activation of digital input 7      | BYTE      |     | 0 ... 200        | min               |
| V3     | V3-H21 | 50428              | 50553             | RW  | Configurability of digital output 1                   | BYTE      | Y   | -14 ... 14       | num               |
| V3     | V3-H22 | 50429              | 50554             | RW  | Configurability of digital output 2                   | BYTE      | Y   | -14 ... 14       | num               |
| V3     | V3-H23 | 50430              | 50555             | RW  | Configurability of digital output 3                   | BYTE      | Y   | -14 ... 14       | num               |
| V3     | V3-H24 | 50431              | 50556             | RW  | Configurability of digital output 4                   | BYTE      | Y   | -14 ... 14       | num               |
| V3     | V3-H25 | 50432              | 50557             | RW  | Configurability of digital output 5                   | BYTE      | Y   | -14 ... 14       | num               |
| V3     | V3-H26 | 50433              | 50558             | RW  | Configurability of digital output 6                   | BYTE      | Y   | -14 ... 14       | num               |
| V3     | V3-Od0 | 50463              | 50559             | RW  | Delay output enabling from power-on                   | BYTE      |     | 0 ... 250        | min               |
| V3     | V3-o1i | 50434              | 50560             | RW  | Pulse length for telephone dialler, output 1          | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o1d | 50440              | 50561             | RW  | Pulse repeat interval for telephone dialler, output 1 | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o2i | 50435              | 50562             | RW  | Pulse length for telephone dialler, output 2          | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o2d | 50441              | 50563             | RW  | Pulse repeat interval for telephone dialler, output 2 | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o3i | 50436              | 50564             | RW  | Pulse length for telephone dialler, output 3          | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o3d | 50442              | 50565             | RW  | Pulse repeat interval for telephone dialler, output 3 | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o4i | 50437              | 50566             | RW  | Pulse length for telephone dialler, output 4          | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o4d | 50443              | 50567             | RW  | Pulse repeat interval for telephone dialler, output 4 | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o5i | 50438              | 50568             | RW  | Pulse length for telephone dialler, output 5          | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o5d | 50444              | 50569             | RW  | Pulse repeat interval for telephone dialler, output 5 | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o6i | 50439              | 50570             | RW  | Pulse length for telephone dialler, output 6          | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-o6d | 50445              | 50571             | RW  | Pulse repeat interval for telephone dialler, output 6 | BYTE      |     | 0 ... 250        | sec               |
| V3     | V3-ooF | 50464              | 50572             | RW  | To disable outputs with device OFF                    | BYTE      |     | 0 ... 1          | flag              |
| V3     | V3-AFd | 50465              | 50573             | RW  | Alarm activation differential                         | BYTE      |     | 0.1 ... 15.0     | num/°C/°F/%RH/bar |
| V3     | V3-At1 | 50446              | 50574             | RW  | Alarm mode (absolute and relative) probe 1            | BYTE      |     | 0 ... 1          | flag              |
| V3     | V3-SE1 | 17544              | 50575             | RW  | Alarm setpoint for probe 1                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |

| Folder                          | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|---------------------------------|-----------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V3                              | V3-LA1    | 17554              | 50576             | RW  | Minimum alarm threshold 1   | WORD      | Y   | -999.0 ... V3-HA1 | num/°C/°F/%RH/bar |
| V3                              | V3-HA1    | 17564              | 50577             | RW  | Maximum alarm threshold 1   | WORD      | Y   | V3-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-tA1    | 50451              | 50578             | RW  | Delay for high/low alarm on probe 1   | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-At2    | 50447              | 50579             | RW  | Alarm mode (absolute and relative) probe 2  | BYTE      |     | 0 ... 1           | flag              |
| V3                              | V3-SE2    | 17546              | 50580             | RW  | Alarm setpoint for probe 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-LA2    | 17556              | 50581             | RW  | Minimum alarm threshold 2   | WORD      | Y   | -999.0 ... V3-HA2 | num/°C/°F/%RH/bar |
| V3                              | V3-HA2    | 17566              | 50582             | RW  | Maximum alarm threshold 2   | WORD      | Y   | V3-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-tA2    | 50452              | 50583             | RW  | Delay for high/low alarm on probe 2   | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-At3    | 50448              | 50584             | RW  | Alarm mode (absolute and relative) probe 3  | BYTE      |     | 0 ... 1           | flag              |
| V3                              | V3-SE3    | 17548              | 50585             | RW  | Alarm setpoint for probe 3  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-LA3    | 17558              | 50586             | RW  | Minimum alarm threshold 3   | WORD      | Y   | -999.0 ... V3-HA3 | num/°C/°F/%RH/bar |
| V3                              | V3-HA3    | 17568              | 50587             | RW  | Maximum alarm threshold 3   | WORD      | Y   | V3-LA3 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-tA3    | 50453              | 50588             | RW  | Delay for high/low alarm on probe 3   | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-At4    | 50449              | 50589             | RW  | Alarm mode (absolute and relative) probe 4  | BYTE      |     | 0 ... 1           | flag              |
| V3                              | V3-SE4    | 17550              | 50590             | RW  | Alarm setpoint for probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-LA4    | 17560              | 50591             | RW  | Minimum alarm threshold 4   | WORD      | Y   | -999.0 ... V3-HA4 | num/°C/°F/%RH/bar |
| V3                              | V3-HA4    | 17570              | 50592             | RW  | Maximum alarm threshold 4   | WORD      | Y   | V3-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-tA4    | 50454              | 50593             | RW  | Delay for high/low alarm on probe 4   | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-At5    | 50450              | 50594             | RW  | Alarm mode (absolute and relative) probe 5  | BYTE      |     | 0 ... 1           | flag              |
| V3                              | V3-SE5    | 17552              | 50595             | RW  | Alarm setpoint for probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-LA5    | 17562              | 50596             | RW  | Minimum alarm threshold 5   | WORD      | Y   | -999.0 ... V3-HA5 | num/°C/°F/%RH/bar |
| V3                              | V3-HA5    | 17572              | 50597             | RW  | Maximum alarm threshold 5   | WORD      | Y   | V3-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-tA5    | 50455              | 50598             | RW  | Delay for high/low alarm on probe 5   | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-PA0    | 17584              | 50599             | RW  | Temperature alarms disabling time from power-on   | WORD      |     | 0 ... 999         | min               |
| V3                              | V3-Atd    | 50466              | 50600             | RW  | Regular watchdog alarm activation duration  | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-Art    | 50467              | 50601             | RW  | Regular watchdog alarm activation period  | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-dtA    | 50468              | 50602             | RW  | Alarm acknowledgement time  | BYTE      |     | 0 ... 250         | sec               |
| V3                              | V3-CLC    | 50469              | 50603             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled                        | BYTE      |     | 0 ... 250         | min               |
| V3                              | V3-PS1    | 50470              | 50604             | RW  | Password 1 value  | BYTE      |     | 0 ... 250         | num               |
| V3                              | V3-PS2    | 50471              | 50605             | RW  | Password 2 value  | BYTE      |     | 0 ... 250         | num               |
| V3                              | V3-ndt    | 50472              | 50606             | RW  | Display with decimal point  | BYTE      |     | 0 ... 1           | flag              |
| V3                              | V3-CA1    | 17574              | 50607             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-CA2    | 17576              | 50608             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-CA3    | 17578              | 50609             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-CA4    | 17580              | 50610             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-CA5    | 17582              | 50611             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V3                              | V3-Ldd    | 50473              | 50612             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250         | minutes           |
| V3                              | V3-dr1    | 50456              | 50613             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4           | num               |
| V3                              | V3-dr2    | 50457              | 50614             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4           | num               |
| V3                              | V3-dr3    | 50458              | 50615             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4           | num               |
| V3                              | V3-dr4    | 50459              | 50616             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4           | num               |
| V3                              | V3-dr5    | 50460              | 50617             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4           | num               |
| V3                              | V3-ddd    | 50474              | 50618             | RW  | To select of main display value   | BYTE      |     | 0 ... 19          | num               |
| V3                              | V3-vis_UL | ---                | 50619             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3           | num               |
| V3                              | V3-vis_dL | ---                | 50620             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3           | num               |
| V3                              | V3-vis_Fr | ---                | 50621             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3           | num               |
| <b>APPLICATION 4 PARAMETERS</b> |           |                    |                   |     |   |           |     |                   |                   |
| V4                              | V4-H41    | 50758              | 50874             | RW  | Probe 1 present   | BYTE      |     | 0 ... 2           | num               |
| V4                              | V4-H42    | 50759              | 50875             | RW  | Probe 2 present   | BYTE      |     | 0 ... 2           | num               |
| V4                              | V4-H43    | 50760              | 50876             | RW  | Probe 3 present   | BYTE      |     | 0 ... 2           | num               |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE            | M.U.              |
|--------|--------|--------------------|-------------------|-----|--|-----------|-----|------------------|-------------------|
| V4     | V4-H44 | 50761              | 50877             | RW  | Probe 4 present  | BYTE      |     | 0 ... 2          | num               |
| V4     | V4-H45 | 50762              | 50878             | RW  | Probe 5 present  | BYTE      |     | 0 ... 2          | num               |
| V4     | V4-H00 | 50859              | 50879             | RW  | To select analogue input type 1-2-5                        | BYTE      |     | 0 ... 2          | num               |
| V4     | V4-H01 | 50860              | 50880             | RW  | To select analogue input type 3                            | BYTE      |     | 0 ... 5          | num               |
| V4     | V4-H02 | 50861              | 50881             | RW  | To select analogue input type 4                            | BYTE      |     | 0 ... 5          | num               |
| V4     | V4-H03 | 17920              | 50882             | RW  | Bottom limit for current input 1                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V4     | V4-H04 | 17922              | 50883             | RW  | Upper limit for current input 1                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V4     | V4-H05 | 17924              | 50884             | RW  | Bottom limit for current input 2                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V4     | V4-H06 | 17926              | 50885             | RW  | Upper limit for current input 2                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V4     | V4-rUP | 50845              | 50886             | RW  | Humidity input for dewpoint calculation                    | BYTE      |     | 0 ... 2          | num               |
| V4     | V4-rtP | 50846              | 50887             | RW  | Temperature input for dewpoint calculation                 | BYTE      |     | 0 ... 5          | num               |
| V4     | V4-H11 | 50763              | 50888             | RW  | Configurability and polarity of digital input 1            | BYTE      | Y   | -8 ... 8         | num               |
| V4     | V4-H12 | 50764              | 50889             | RW  | Configurability and polarity of digital input 2            | BYTE      | Y   | -8 ... 8         | num               |
| V4     | V4-H13 | 50765              | 50890             | RW  | Configurability and polarity of digital input 3            | BYTE      | Y   | -8 ... 8         | num               |
| V4     | V4-H14 | 50766              | 50891             | RW  | Configurability and polarity of digital input 4            | BYTE      | Y   | -8 ... 8         | num               |
| V4     | V4-H15 | 50767              | 50892             | RW  | Configurability and polarity of digital input 5            | BYTE      | Y   | -8 ... 8         | num               |
| V4     | V4-H16 | 50768              | 50893             | RW  | Configurability and polarity of digital input 6            | BYTE      | Y   | -8 ... 8         | num               |
| V4     | V4-H17 | 50769              | 50894             | RW  | Configurability and polarity of digital input 7            | BYTE      | Y   | -8 ... 8         | num               |
| V4     | V4-i1L | 50770              | 50895             | RW  | To enable block on temperature update from digital input 1 | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i2L | 50771              | 50896             | RW  | To enable block on temperature update from digital input 2 | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i3L | 50772              | 50897             | RW  | To enable block on temperature update from digital input 3 | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i4L | 50773              | 50898             | RW  | To enable block on temperature update from digital input 4 | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i5L | 50774              | 50899             | RW  | To enable block on temperature update from digital input 5 | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i6L | 50775              | 50900             | RW  | To enable block on temperature update from digital input 6 | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i7L | 50776              | 50901             | RW  | To enable block on temperature update from digital input 7 | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i1d | 50777              | 50902             | RW  | Acquisition mode (edge or level) digital input 1           | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i2d | 50778              | 50903             | RW  | Acquisition mode (edge or level) digital input 2           | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i3d | 50779              | 50904             | RW  | Acquisition mode (edge or level) digital input 3           | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i4d | 50780              | 50905             | RW  | Acquisition mode (edge or level) digital input 4           | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i5d | 50781              | 50906             | RW  | Acquisition mode (edge or level) digital input 5           | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i6d | 50782              | 50907             | RW  | Acquisition mode (edge or level) digital input 6           | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-i7d | 50783              | 50908             | RW  | Acquisition mode (edge or level) digital input 7           | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-dt1 | 50784              | 50909             | RW  | Unit of measure for delay signalling alarm 1               | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-d11 | 50791              | 50910             | RW  | Delay time signalling alarm from DI1                       | BYTE      |     | 0 ... 250        | sec/min           |
| V4     | V4-dt2 | 50785              | 50911             | RW  | Unit of measure for delay signalling alarm 2               | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-d12 | 50792              | 50912             | RW  | Delay time signalling alarm from DI2                       | BYTE      |     | 0 ... 250        | sec/min           |
| V4     | V4-dt3 | 50786              | 50913             | RW  | Unit of measure for delay signalling alarm 3               | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-d13 | 50793              | 50914             | RW  | Delay time signalling alarm from DI3                       | BYTE      |     | 0 ... 250        | sec/min           |
| V4     | V4-dt4 | 50787              | 50915             | RW  | Unit of measure for delay signalling alarm 4               | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-d14 | 50794              | 50916             | RW  | Delay time signalling alarm from DI4                       | BYTE      |     | 0 ... 250        | sec/min           |
| V4     | V4-dt5 | 50788              | 50917             | RW  | Unit of measure for delay signalling alarm 5               | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-d15 | 50795              | 50918             | RW  | Delay time signalling alarm from DI5                       | BYTE      |     | 0 ... 250        | sec/min           |
| V4     | V4-dt6 | 50789              | 50919             | RW  | Unit of measure for delay signalling alarm 6               | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-d16 | 50796              | 50920             | RW  | Delay time signalling alarm from DI6                       | BYTE      |     | 0 ... 250        | sec/min           |
| V4     | V4-dt7 | 50790              | 50921             | RW  | Unit of measure for delay signalling alarm 7               | BYTE      |     | 0 ... 1          | flag              |
| V4     | V4-d17 | 50797              | 50922             | RW  | Delay time signalling alarm from DI7                       | BYTE      |     | 0 ... 250        | sec/min           |
| V4     | V4-En1 | 50798              | 50923             | RW  | Number of activations of digital input 1                   | BYTE      |     | 0 ... 15         | num               |
| V4     | V4-Ei1 | 50805              | 50924             | RW  | Count interval for activation of digital input 1           | BYTE      |     | 0 ... 200        | min               |
| V4     | V4-En2 | 50799              | 50925             | RW  | Number of activations of digital input 2                   | BYTE      |     | 0 ... 15         | num               |
| V4     | V4-Ei2 | 50806              | 50926             | RW  | Count interval for activation of digital input 2           | BYTE      |     | 0 ... 200        | min               |
| V4     | V4-En3 | 50800              | 50927             | RW  | Number of activations of digital input 3                   | BYTE      |     | 0 ... 15         | num               |



| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|--------|--------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V4     | V4-Ei3 | 50807              | 50928             | RW  | Count interval for activation of digital input 3      | BYTE      |     | 0 ... 200         | min               |
| V4     | V4-En4 | 50801              | 50929             | RW  | Number of activations of digital input 4              | BYTE      |     | 0 ... 15          | num               |
| V4     | V4-Ei4 | 50808              | 50930             | RW  | Count interval for activation of digital input 4      | BYTE      |     | 0 ... 200         | min               |
| V4     | V4-En5 | 50802              | 50931             | RW  | Number of activations of digital input 5              | BYTE      |     | 0 ... 15          | num               |
| V4     | V4-Ei5 | 50809              | 50932             | RW  | Count interval for activation of digital input 5      | BYTE      |     | 0 ... 200         | min               |
| V4     | V4-En6 | 50803              | 50933             | RW  | Number of activations of digital input 6              | BYTE      |     | 0 ... 15          | num               |
| V4     | V4-Ei6 | 50810              | 50934             | RW  | Count interval for activation of digital input 6      | BYTE      |     | 0 ... 200         | min               |
| V4     | V4-En7 | 50804              | 50935             | RW  | Number of activations of digital input 7              | BYTE      |     | 0 ... 15          | num               |
| V4     | V4-Ei7 | 50811              | 50936             | RW  | Count interval for activation of digital input 7      | BYTE      |     | 0 ... 200         | min               |
| V4     | V4-H21 | 50812              | 50937             | RW  | Configurability of digital output 1                   | BYTE      | Y   | -14 ... 14        | num               |
| V4     | V4-H22 | 50813              | 50938             | RW  | Configurability of digital output 2                   | BYTE      | Y   | -14 ... 14        | num               |
| V4     | V4-H23 | 50814              | 50939             | RW  | Configurability of digital output 3                   | BYTE      | Y   | -14 ... 14        | num               |
| V4     | V4-H24 | 50815              | 50940             | RW  | Configurability of digital output 4                   | BYTE      | Y   | -14 ... 14        | num               |
| V4     | V4-H25 | 50816              | 50941             | RW  | Configurability of digital output 5                   | BYTE      | Y   | -14 ... 14        | num               |
| V4     | V4-H26 | 50817              | 50942             | RW  | Configurability of digital output 6                   | BYTE      | Y   | -14 ... 14        | num               |
| V4     | V4-Od0 | 50847              | 50943             | RW  | Delay output enabling from power-on                   | BYTE      |     | 0 ... 250         | min               |
| V4     | V4-o1i | 50818              | 50944             | RW  | Pulse length for telephone dialler, output 1          | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o1d | 50824              | 50945             | RW  | Pulse repeat interval for telephone dialler, output 1 | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o2i | 50819              | 50946             | RW  | Pulse length for telephone dialler, output 2          | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o2d | 50825              | 50947             | RW  | Pulse repeat interval for telephone dialler, output 2 | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o3i | 50820              | 50948             | RW  | Pulse length for telephone dialler, output 3          | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o3d | 50826              | 50949             | RW  | Pulse repeat interval for telephone dialler, output 3 | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o4i | 50821              | 50950             | RW  | Pulse length for telephone dialler, output 4          | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o4d | 50827              | 50951             | RW  | Pulse repeat interval for telephone dialler, output 4 | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o5i | 50822              | 50952             | RW  | Pulse length for telephone dialler, output 5          | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o5d | 50828              | 50953             | RW  | Pulse repeat interval for telephone dialler, output 5 | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o6i | 50823              | 50954             | RW  | Pulse length for telephone dialler, output 6          | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-o6d | 50829              | 50955             | RW  | Pulse repeat interval for telephone dialler, output 6 | BYTE      |     | 0 ... 250         | sec               |
| V4     | V4-ooF | 50848              | 50956             | RW  | To disable outputs with device OFF                    | BYTE      |     | 0 ... 1           | flag              |
| V4     | V4-AFd | 50849              | 50957             | RW  | Alarm activation differential                         | BYTE      |     | 0.1 ... 15.0      | num/°C/°F/%RH/bar |
| V4     | V4-At1 | 50830              | 50958             | RW  | Alarm mode (absolute and relative) probe 1            | BYTE      |     | 0 ... 1           | flag              |
| V4     | V4-SE1 | 17928              | 50959             | RW  | Alarm setpoint for probe 1                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4     | V4-LA1 | 17938              | 50960             | RW  | Minimum alarm threshold 1                             | WORD      | Y   | -999.0 ... V4-HA1 | num/°C/°F/%RH/bar |
| V4     | V4-HA1 | 17948              | 50961             | RW  | Maximum alarm threshold 1                             | WORD      | Y   | V4-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V4     | V4-tA1 | 50835              | 50962             | RW  | Delay for high/low alarm on probe 1                   | BYTE      |     | 0 ... 250         | min               |
| V4     | V4-At2 | 50831              | 50963             | RW  | Alarm mode (absolute and relative) probe 2            | BYTE      |     | 0 ... 1           | flag              |
| V4     | V4-SE2 | 17930              | 50964             | RW  | Alarm setpoint for probe 2                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4     | V4-LA2 | 17940              | 50965             | RW  | Minimum alarm threshold 2                             | WORD      | Y   | -999.0 ... V4-HA2 | num/°C/°F/%RH/bar |
| V4     | V4-HA2 | 17950              | 50966             | RW  | Maximum alarm threshold 2                             | WORD      | Y   | V4-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V4     | V4-tA2 | 50836              | 50967             | RW  | Delay for high/low alarm on probe 2                   | BYTE      |     | 0 ... 250         | min               |
| V4     | V4-At3 | 50832              | 50968             | RW  | Alarm mode (absolute and relative) probe 3            | BYTE      |     | 0 ... 1           | flag              |
| V4     | V4-SE3 | 17932              | 50969             | RW  | Alarm setpoint for probe 3                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4     | V4-LA3 | 17942              | 50970             | RW  | Minimum alarm threshold 3                             | WORD      | Y   | -999.0 ... V4-HA3 | num/°C/°F/%RH/bar |
| V4     | V4-HA3 | 17952              | 50971             | RW  | Maximum alarm threshold 3                             | WORD      | Y   | V4-LA3 ... 999.0  | num/°C/°F/%RH/bar |
| V4     | V4-tA3 | 50837              | 50972             | RW  | Delay for high/low alarm on probe 3                   | BYTE      |     | 0 ... 250         | min               |
| V4     | V4-At4 | 50833              | 50973             | RW  | Alarm mode (absolute and relative) probe 4            | BYTE      |     | 0 ... 1           | flag              |
| V4     | V4-SE4 | 17934              | 50974             | RW  | Alarm setpoint for probe 4                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4     | V4-LA4 | 17944              | 50975             | RW  | Minimum alarm threshold 4                             | WORD      | Y   | -999.0 ... V4-HA4 | num/°C/°F/%RH/bar |

| Folder                          | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|---------------------------------|-----------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V4                              | V4-HA4    | 17954              | 50976             | RW  | Maximum alarm threshold 4   | WORD      | Y   | V4-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-tA4    | 50838              | 50977             | RW  | Delay for high/low alarm on probe 4   | BYTE      |     | 0 ... 250         | min               |
| V4                              | V4-At5    | 50834              | 50978             | RW  | Alarm mode (absolute and relative) probe 5  | BYTE      |     | 0 ... 1           | flag              |
| V4                              | V4-SE5    | 17936              | 50979             | RW  | Alarm setpoint for probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-LA5    | 17946              | 50980             | RW  | Minimum alarm threshold 5   | WORD      | Y   | -999.0 ... V4-HA5 | num/°C/°F/%RH/bar |
| V4                              | V4-HA5    | 17956              | 50981             | RW  | Maximum alarm threshold 5   | WORD      | Y   | V4-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-tA5    | 50839              | 50982             | RW  | Delay for high/low alarm on probe 5   | BYTE      |     | 0 ... 250         | min               |
| V4                              | V4-PA0    | 17968              | 50983             | RW  | Temperature alarms disabling time from power-on   | WORD      |     | 0 ... 999         | min               |
| V4                              | V4-Atd    | 50850              | 50984             | RW  | Regular watchdog alarm activation duration  | BYTE      |     | 0 ... 250         | min               |
| V4                              | V4-Art    | 50851              | 50985             | RW  | Regular watchdog alarm activation period  | BYTE      |     | 0 ... 250         | min               |
| V4                              | V4-dtA    | 50852              | 50986             | RW  | Alarm acknowledgement time  | BYTE      |     | 0 ... 250         | sec               |
| V4                              | V4-CLC    | 50853              | 50987             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled                        | BYTE      |     | 0 ... 250         | min               |
| V4                              | V4-PS1    | 50854              | 50988             | RW  | Password 1 value  | BYTE      |     | 0 ... 250         | num               |
| V4                              | V4-PS2    | 50855              | 50989             | RW  | Password 2 value  | BYTE      |     | 0 ... 250         | num               |
| V4                              | V4-ndt    | 50856              | 50990             | RW  | Display with decimal point  | BYTE      |     | 0 ... 1           | flag              |
| V4                              | V4-CA1    | 17958              | 50991             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-CA2    | 17960              | 50992             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-CA3    | 17962              | 50993             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-CA4    | 17964              | 50994             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-CA5    | 17966              | 50995             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V4                              | V4-Ldd    | 50857              | 50996             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250         | min               |
| V4                              | V4-dr1    | 50840              | 50997             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4           | num               |
| V4                              | V4-dr2    | 50841              | 50998             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4           | num               |
| V4                              | V4-dr3    | 50842              | 50999             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4           | num               |
| V4                              | V4-dr4    | 50843              | 51000             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4           | num               |
| V4                              | V4-dr5    | 50844              | 51001             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4           | num               |
| V4                              | V4-ddd    | 50858              | 51002             | RW  | To select of main display value   | BYTE      |     | 0 ... 19          | num               |
| V4                              | V4-vis_UL | ---                | 51003             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3           | num               |
| V4                              | V4-vis_dL | ---                | 51004             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3           | num               |
| V4                              | V4-vis_Fr | ---                | 51005             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3           | num               |
| <b>APPLICATION 5 PARAMETERS</b> |           |                    |                   |     |   |           |     |                   |                   |
| V5                              | V5-H41    | 51142              | 51258             | RW  | Probe 1 present   | BYTE      |     | 0 ... 2           | num               |
| V5                              | V5-H42    | 51143              | 51259             | RW  | Probe 2 present   | BYTE      |     | 0 ... 2           | num               |
| V5                              | V5-H43    | 51144              | 51260             | RW  | Probe 3 present   | BYTE      |     | 0 ... 2           | num               |
| V5                              | V5-H44    | 51145              | 51261             | RW  | Probe 4 present   | BYTE      |     | 0 ... 2           | num               |
| V5                              | V5-H45    | 51146              | 51262             | RW  | Probe 5 present   | BYTE      |     | 0 ... 2           | num               |
| V5                              | V5-H00    | 51243              | 51263             | RW  | To select analogue input type 1-2-5   | BYTE      |     | 0 ... 2           | num               |
| V5                              | V5-H01    | 51244              | 51264             | RW  | To select analogue input type 3   | BYTE      |     | 0 ... 5           | num               |
| V5                              | V5-H02    | 51245              | 51265             | RW  | To select analogue input type 4   | BYTE      |     | 0 ... 5           | num               |
| V5                              | V5-H03    | 18304              | 51266             | RW  | Bottom limit for current input 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5                              | V5-H04    | 18306              | 51267             | RW  | Upper limit for current input 1   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5                              | V5-H05    | 18308              | 51268             | RW  | Bottom limit for current input 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5                              | V5-H06    | 18310              | 51269             | RW  | Upper limit for current input 2   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5                              | V5-rUP    | 51229              | 51270             | RW  | Humidity input for dewpoint calculation   | BYTE      |     | 0 ... 2           | num               |
| V5                              | V5-rtP    | 51230              | 51271             | RW  | Temperature input for dewpoint calculation  | BYTE      |     | 0 ... 5           | num               |
| V5                              | V5-H11    | 51147              | 51272             | RW  | Configurability and polarity of digital input 1   | BYTE      | Y   | -8 ... 8          | num               |
| V5                              | V5-H12    | 51148              | 51273             | RW  | Configurability and polarity of digital input 2   | BYTE      | Y   | -8 ... 8          | num               |
| V5                              | V5-H13    | 51149              | 51274             | RW  | Configurability and polarity of digital input 3   | BYTE      | Y   | -8 ... 8          | num               |
| V5                              | V5-H14    | 51150              | 51275             | RW  | Configurability and polarity of digital input 4   | BYTE      | Y   | -8 ... 8          | num               |
| V5                              | V5-H15    | 51151              | 51276             | RW  | Configurability and polarity of digital input 5   | BYTE      | Y   | -8 ... 8          | num               |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE      | M.U.    |
|--------|--------|--------------------|-------------------|-----|--|-----------|-----|------------|---------|
| V5     | V5-H16 | 51152              | 51277             | RW  | Configurability and polarity of digital input 6            | BYTE      | Y   | -8 ... 8   | num     |
| V5     | V5-H17 | 51153              | 51278             | RW  | Configurability and polarity of digital input 7            | BYTE      | Y   | -8 ... 8   | num     |
| V5     | V5-i1L | 51154              | 51279             | RW  | To enable block on temperature update from digital input 1 | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i2L | 51155              | 51280             | RW  | To enable block on temperature update from digital input 2 | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i3L | 51156              | 51281             | RW  | To enable block on temperature update from digital input 3 | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i4L | 51157              | 51282             | RW  | To enable block on temperature update from digital input 4 | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i5L | 51158              | 51283             | RW  | To enable block on temperature update from digital input 5 | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i6L | 51159              | 51284             | RW  | To enable block on temperature update from digital input 6 | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i7L | 51160              | 51285             | RW  | To enable block on temperature update from digital input 7 | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i1d | 51161              | 51286             | RW  | Acquisition mode (edge or level) digital input 1           | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i2d | 51162              | 51287             | RW  | Acquisition mode (edge or level) digital input 2           | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i3d | 51163              | 51288             | RW  | Acquisition mode (edge or level) digital input 3           | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i4d | 51164              | 51289             | RW  | Acquisition mode (edge or level) digital input 4           | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i5d | 51165              | 51290             | RW  | Acquisition mode (edge or level) digital input 5           | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i6d | 51166              | 51291             | RW  | Acquisition mode (edge or level) digital input 6           | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-i7d | 51167              | 51292             | RW  | Acquisition mode (edge or level) digital input 7           | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-dt1 | 51168              | 51293             | RW  | Unit of measure for delay signalling alarm 1               | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-d11 | 51175              | 51294             | RW  | Delay time signalling alarm from DI1                       | BYTE      |     | 0 ... 250  | sec/min |
| V5     | V5-dt2 | 51169              | 51295             | RW  | Unit of measure for delay signalling alarm 2               | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-d12 | 51176              | 51296             | RW  | Delay time signalling alarm from DI2                       | BYTE      |     | 0 ... 250  | sec/min |
| V5     | V5-dt3 | 51170              | 51297             | RW  | Unit of measure for delay signalling alarm 3               | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-d13 | 51177              | 51298             | RW  | Delay time signalling alarm from DI3                       | BYTE      |     | 0 ... 250  | sec/min |
| V5     | V5-dt4 | 51171              | 51299             | RW  | Unit of measure for delay signalling alarm 4               | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-d14 | 51178              | 51300             | RW  | Delay time signalling alarm from DI4                       | BYTE      |     | 0 ... 250  | sec/min |
| V5     | V5-dt5 | 51172              | 51301             | RW  | Unit of measure for delay signalling alarm 5               | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-d15 | 51179              | 51302             | RW  | Delay time signalling alarm from DI5                       | BYTE      |     | 0 ... 250  | sec/min |
| V5     | V5-dt6 | 51173              | 51303             | RW  | Unit of measure for delay signalling alarm 6               | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-d16 | 51180              | 51304             | RW  | Delay time signalling alarm from DI6                       | BYTE      |     | 0 ... 250  | sec/min |
| V5     | V5-dt7 | 51174              | 51305             | RW  | Unit of measure for delay signalling alarm 7               | BYTE      |     | 0 ... 1    | flag    |
| V5     | V5-d17 | 51181              | 51306             | RW  | Delay time signalling alarm from DI7                       | BYTE      |     | 0 ... 250  | sec/min |
| V5     | V5-En1 | 51182              | 51307             | RW  | Number of activations of digital input 1                   | BYTE      |     | 0 ... 15   | num     |
| V5     | V5-Ei1 | 51189              | 51308             | RW  | Count interval for activation of digital input 1           | BYTE      |     | 0 ... 200  | min     |
| V5     | V5-En2 | 51183              | 51309             | RW  | Number of activations of digital input 2                   | BYTE      |     | 0 ... 15   | num     |
| V5     | V5-Ei2 | 51190              | 51310             | RW  | Count interval for activation of digital input 2           | BYTE      |     | 0 ... 200  | min     |
| V5     | V5-En3 | 51184              | 51311             | RW  | Number of activations of digital input 3                   | BYTE      |     | 0 ... 15   | num     |
| V5     | V5-Ei3 | 51191              | 51312             | RW  | Count interval for activation of digital input 3           | BYTE      |     | 0 ... 200  | min     |
| V5     | V5-En4 | 51185              | 51313             | RW  | Number of activations of digital input 4                   | BYTE      |     | 0 ... 15   | num     |
| V5     | V5-Ei4 | 51192              | 51314             | RW  | Count interval for activation of digital input 4           | BYTE      |     | 0 ... 200  | min     |
| V5     | V5-En5 | 51186              | 51315             | RW  | Number of activations of digital input 5                   | BYTE      |     | 0 ... 15   | num     |
| V5     | V5-Ei5 | 51193              | 51316             | RW  | Count interval for activation of digital input 5           | BYTE      |     | 0 ... 200  | min     |
| V5     | V5-En6 | 51187              | 51317             | RW  | Number of activations of digital input 6                   | BYTE      |     | 0 ... 15   | num     |
| V5     | V5-Ei6 | 51194              | 51318             | RW  | Count interval for activation of digital input 6           | BYTE      |     | 0 ... 200  | min     |
| V5     | V5-En7 | 51188              | 51319             | RW  | Number of activations of digital input 7                   | BYTE      |     | 0 ... 15   | num     |
| V5     | V5-Ei7 | 51195              | 51320             | RW  | Count interval for activation of digital input 7           | BYTE      |     | 0 ... 200  | min     |
| V5     | V5-H21 | 51196              | 51321             | RW  | Configurability of digital output 1                        | BYTE      | Y   | -14 ... 14 | num     |
| V5     | V5-H22 | 51197              | 51322             | RW  | Configurability of digital output 2                        | BYTE      | Y   | -14 ... 14 | num     |
| V5     | V5-H23 | 51198              | 51323             | RW  | Configurability of digital output 3                        | BYTE      | Y   | -14 ... 14 | num     |
| V5     | V5-H24 | 51199              | 51324             | RW  | Configurability of digital output 4                        | BYTE      | Y   | -14 ... 14 | num     |
| V5     | V5-H25 | 51200              | 51325             | RW  | Configurability of digital output 5                        | BYTE      | Y   | -14 ... 14 | num     |
| V5     | V5-H26 | 51201              | 51326             | RW  | Configurability of digital output 6                        | BYTE      | Y   | -14 ... 14 | num     |
| V5     | V5-Od0 | 51231              | 51327             | RW  | Delay output enabling from power-on                        | BYTE      |     | 0 ... 250  | min     |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE             | M.U.              |
|--------|--------|--------------------|-------------------|-----|--|-----------|-----|-------------------|-------------------|
| V5     | V5-o1i | 51202              | 51328             | RW  | Pulse length for telephone dialler, output 1                         | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o1d | 51208              | 51329             | RW  | Pulse repeat interval for telephone dialler, output 1                | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o2i | 51203              | 51330             | RW  | Pulse length for telephone dialler, output 2                         | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o2d | 51209              | 51331             | RW  | Pulse repeat interval for telephone dialler, output 2                | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o3i | 51204              | 51332             | RW  | Pulse length for telephone dialler, output 3                         | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o3d | 51210              | 51333             | RW  | Pulse repeat interval for telephone dialler, output 3                | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o4i | 51205              | 51334             | RW  | Pulse length for telephone dialler, output 4                         | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o4d | 51211              | 51335             | RW  | Pulse repeat interval for telephone dialler, output 4                | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o5i | 51206              | 51336             | RW  | Pulse length for telephone dialler, output 5                         | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o5d | 51212              | 51337             | RW  | Pulse repeat interval for telephone dialler, output 5                | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o6i | 51207              | 51338             | RW  | Pulse length for telephone dialler, output 6                         | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-o6d | 51213              | 51339             | RW  | Pulse repeat interval for telephone dialler, output 6                | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-ooF | 51232              | 51340             | RW  | To disable outputs with device OFF                                   | BYTE      |     | 0 ... 1           | flag              |
| V5     | V5-AFd | 51233              | 51341             | RW  | Alarm activation differential  | BYTE      |     | 0.1 ... 15.0      | num/°C/°F/%RH/bar |
| V5     | V5-At1 | 51214              | 51342             | RW  | Alarm mode (absolute and relative) probe 1                           | BYTE      |     | 0 ... 1           | flag              |
| V5     | V5-SE1 | 18312              | 51343             | RW  | Alarm setpoint for probe 1   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-LA1 | 18322              | 51344             | RW  | Minimum alarm threshold 1  | WORD      | Y   | -999.0 ... V5-HA1 | num/°C/°F/%RH/bar |
| V5     | V5-HA1 | 18332              | 51345             | RW  | Maximum alarm threshold 1  | WORD      | Y   | V5-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-tA1 | 51219              | 51346             | RW  | Delay for high/low alarm on probe 1                                  | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-At2 | 51215              | 51347             | RW  | Alarm mode (absolute and relative) probe 2                           | BYTE      |     | 0 ... 1           | flag              |
| V5     | V5-SE2 | 18314              | 51348             | RW  | Alarm setpoint for probe 2   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-LA2 | 18324              | 51349             | RW  | Minimum alarm threshold 2  | WORD      | Y   | -999.0 ... V5-HA2 | num/°C/°F/%RH/bar |
| V5     | V5-HA2 | 18334              | 51350             | RW  | Maximum alarm threshold 2  | WORD      | Y   | V5-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-tA2 | 51220              | 51351             | RW  | Delay for high/low alarm on probe 2                                  | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-At3 | 51216              | 51352             | RW  | Alarm mode (absolute and relative) probe 3                           | BYTE      |     | 0 ... 1           | flag              |
| V5     | V5-SE3 | 18316              | 51353             | RW  | Alarm setpoint for probe 3   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-LA3 | 18326              | 51354             | RW  | Minimum alarm threshold 3  | WORD      | Y   | -999.0 ... V5-HA3 | num/°C/°F/%RH/bar |
| V5     | V5-HA3 | 18336              | 51355             | RW  | Maximum alarm threshold 3  | WORD      | Y   | V5-LA3 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-tA3 | 51221              | 51356             | RW  | Delay for high/low alarm on probe 3                                  | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-At4 | 51217              | 51357             | RW  | Alarm mode (absolute and relative) probe 4                           | BYTE      |     | 0 ... 1           | flag              |
| V5     | V5-SE4 | 18318              | 51358             | RW  | Alarm setpoint for probe 4   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-LA4 | 18328              | 51359             | RW  | Minimum alarm threshold 4  | WORD      | Y   | -999.0 ... V5-HA4 | num/°C/°F/%RH/bar |
| V5     | V5-HA4 | 18338              | 51360             | RW  | Maximum alarm threshold 4  | WORD      | Y   | V5-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-tA4 | 51222              | 51361             | RW  | Delay for high/low alarm on probe 4                                  | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-At5 | 51218              | 51362             | RW  | Alarm mode (absolute and relative) probe 5                           | BYTE      |     | 0 ... 1           | flag              |
| V5     | V5-SE5 | 18320              | 51363             | RW  | Alarm setpoint for probe 5   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-LA5 | 18330              | 51364             | RW  | Minimum alarm threshold 5  | WORD      | Y   | -999.0 ... V5-HA5 | num/°C/°F/%RH/bar |
| V5     | V5-HA5 | 18340              | 51365             | RW  | Maximum alarm threshold 5  | WORD      | Y   | V5-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V5     | V5-tA5 | 51223              | 51366             | RW  | Delay for high/low alarm on probe 5                                  | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-PAO | 18352              | 51367             | RW  | Temperature alarms disabling time from power-on                      | WORD      |     | 0 ... 999         | min               |
| V5     | V5-Atd | 51234              | 51368             | RW  | Regular watchdog alarm activation duration                           | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-Art | 51235              | 51369             | RW  | Regular watchdog alarm activation period                             | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-dtA | 51236              | 51370             | RW  | Alarm acknowledgement time   | BYTE      |     | 0 ... 250         | sec               |
| V5     | V5-CLC | 51237              | 51371             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled | BYTE      |     | 0 ... 250         | min               |
| V5     | V5-PS1 | 51238              | 51372             | RW  | Password 1 value   | BYTE      |     | 0 ... 250         | num               |
| V5     | V5-PS2 | 51239              | 51373             | RW  | Password 2 value   | BYTE      |     | 0 ... 250         | num               |
| V5     | V5-ndt | 51240              | 51374             | RW  | Display with decimal point   | BYTE      |     | 0 ... 1           | flag              |

| Folder                          | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE            | M.U.              |
|---------------------------------|-----------|--------------------|-------------------|-----|---|-----------|-----|------------------|-------------------|
| V5                              | V5-CA1    | 18342              | 51375             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V5                              | V5-CA2    | 18344              | 51376             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V5                              | V5-CA3    | 18346              | 51377             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V5                              | V5-CA4    | 18348              | 51378             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V5                              | V5-CA5    | 18350              | 51379             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V5                              | V5-Ldd    | 51241              | 51380             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250        | min               |
| V5                              | V5-dr1    | 51224              | 51381             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4          | num               |
| V5                              | V5-dr2    | 51225              | 51382             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4          | num               |
| V5                              | V5-dr3    | 51226              | 51383             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4          | num               |
| V5                              | V5-dr4    | 51227              | 51384             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4          | num               |
| V5                              | V5-dr5    | 51228              | 51385             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4          | num               |
| V5                              | V5-ddd    | 51242              | 51386             | RW  | To select of main display value   | BYTE      |     | 0 ... 19         | num               |
| V5                              | V5-vis_UL | ---                | 51387             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3          | num               |
| V5                              | V5-vis_dL | ---                | 51388             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3          | num               |
| V5                              | V5-vis_Fr | ---                | 51389             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3          | num               |
| <b>APPLICATION 6 PARAMETERS</b> |           |                    |                   |     |   |           |     |                  |                   |
| V6                              | V6-H41    | 51526              | 51642             | RW  | Probe 1 present   | BYTE      |     | 0 ... 2          | num               |
| V6                              | V6-H42    | 51527              | 51643             | RW  | Probe 2 present   | BYTE      |     | 0 ... 2          | num               |
| V6                              | V6-H43    | 51528              | 51644             | RW  | Probe 3 present   | BYTE      |     | 0 ... 2          | num               |
| V6                              | V6-H44    | 51529              | 51645             | RW  | Probe 4 present   | BYTE      |     | 0 ... 2          | num               |
| V6                              | V6-H45    | 51530              | 51646             | RW  | Probe 5 present   | BYTE      |     | 0 ... 2          | num               |
| V6                              | V6-H00    | 51627              | 51647             | RW  | To select analogue input type 1-2-5   | BYTE      |     | 0 ... 2          | num               |
| V6                              | V6-H01    | 51628              | 51648             | RW  | To select analogue input type 3   | BYTE      |     | 0 ... 5          | num               |
| V6                              | V6-H02    | 51629              | 51649             | RW  | To select analogue input type 4   | BYTE      |     | 0 ... 5          | num               |
| V6                              | V6-H03    | 18688              | 51650             | RW  | Bottom limit for current input 1  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V6                              | V6-H04    | 18690              | 51651             | RW  | Upper limit for current input 1   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V6                              | V6-H05    | 18692              | 51652             | RW  | Bottom limit for current input 2  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V6                              | V6-H06    | 18694              | 51653             | RW  | Upper limit for current input 2   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V6                              | V6-rUP    | 51613              | 51654             | RW  | Humidity input for dewpoint calculation   | BYTE      |     | 0 ... 2          | num               |
| V6                              | V6-rtP    | 51614              | 51655             | RW  | Temperature input for dewpoint calculation  | BYTE      |     | 0 ... 5          | num               |
| V6                              | V6-H11    | 51531              | 51656             | RW  | Configurability and polarity of digital input 1   | BYTE      | Y   | -8 ... 8         | num               |
| V6                              | V6-H12    | 51532              | 51657             | RW  | Configurability and polarity of digital input 2   | BYTE      | Y   | -8 ... 8         | num               |
| V6                              | V6-H13    | 51533              | 51658             | RW  | Configurability and polarity of digital input 3   | BYTE      | Y   | -8 ... 8         | num               |
| V6                              | V6-H14    | 51534              | 51659             | RW  | Configurability and polarity of digital input 4   | BYTE      | Y   | -8 ... 8         | num               |
| V6                              | V6-H15    | 51535              | 51660             | RW  | Configurability and polarity of digital input 5   | BYTE      | Y   | -8 ... 8         | num               |
| V6                              | V6-H16    | 51536              | 51661             | RW  | Configurability and polarity of digital input 6   | BYTE      | Y   | -8 ... 8         | num               |
| V6                              | V6-H17    | 51537              | 51662             | RW  | Configurability and polarity of digital input 7   | BYTE      | Y   | -8 ... 8         | num               |
| V6                              | V6-i1L    | 51538              | 51663             | RW  | To enable block on temperature update from digital input 1                                  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i2L    | 51539              | 51664             | RW  | To enable block on temperature update from digital input 2                                  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i3L    | 51540              | 51665             | RW  | To enable block on temperature update from digital input 3                                  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i4L    | 51541              | 51666             | RW  | To enable block on temperature update from digital input 4                                  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i5L    | 51542              | 51667             | RW  | To enable block on temperature update from digital input 5                                  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i6L    | 51543              | 51668             | RW  | To enable block on temperature update from digital input 6                                  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i7L    | 51544              | 51669             | RW  | To enable block on temperature update from digital input 7                                  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i1d    | 51545              | 51670             | RW  | Acquisition mode (edge or level) digital input 1  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i2d    | 51546              | 51671             | RW  | Acquisition mode (edge or level) digital input 2  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i3d    | 51547              | 51672             | RW  | Acquisition mode (edge or level) digital input 3  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i4d    | 51548              | 51673             | RW  | Acquisition mode (edge or level) digital input 4  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i5d    | 51549              | 51674             | RW  | Acquisition mode (edge or level) digital input 5  | BYTE      |     | 0 ... 1          | flag              |
| V6                              | V6-i6d    | 51550              | 51675             | RW  | Acquisition mode (edge or level) digital input 6  | BYTE      |     | 0 ... 1          | flag              |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE      | M.U.    |
|--------|--------|--------------------|-------------------|-----|---|-----------|-----|------------|---------|
| V6     | V6-i7d | 51551              | 51676             | RW  | Acquisition mode (edge or level) digital input 7      | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-dt1 | 51552              | 51677             | RW  | Unit of measure for delay signalling alarm 1          | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-d11 | 51559              | 51678             | RW  | Delay time signalling alarm from DI1                  | BYTE      |     | 0 ... 250  | sec/min |
| V6     | V6-dt2 | 51553              | 51679             | RW  | Unit of measure for delay signalling alarm 2          | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-d12 | 51560              | 51680             | RW  | Delay time signalling alarm from DI2                  | BYTE      |     | 0 ... 250  | sec/min |
| V6     | V6-dt3 | 51554              | 51681             | RW  | Unit of measure for delay signalling alarm 3          | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-d13 | 51561              | 51682             | RW  | Delay time signalling alarm from DI3                  | BYTE      |     | 0 ... 250  | sec/min |
| V6     | V6-dt4 | 51555              | 51683             | RW  | Unit of measure for delay signalling alarm 4          | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-d14 | 51562              | 51684             | RW  | Delay time signalling alarm from DI4                  | BYTE      |     | 0 ... 250  | sec/min |
| V6     | V6-dt5 | 51556              | 51685             | RW  | Unit of measure for delay signalling alarm 5          | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-d15 | 51563              | 51686             | RW  | Delay time signalling alarm from DI5                  | BYTE      |     | 0 ... 250  | sec/min |
| V6     | V6-dt6 | 51557              | 51687             | RW  | Unit of measure for delay signalling alarm 6          | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-d16 | 51564              | 51688             | RW  | Delay time signalling alarm from DI6                  | BYTE      |     | 0 ... 250  | sec/min |
| V6     | V6-dt7 | 51558              | 51689             | RW  | Unit of measure for delay signalling alarm 7          | BYTE      |     | 0 ... 1    | flag    |
| V6     | V6-d17 | 51565              | 51690             | RW  | Delay time signalling alarm from DI7                  | BYTE      |     | 0 ... 250  | sec/min |
| V6     | V6-En1 | 51566              | 51691             | RW  | Number of activations of digital input 1              | BYTE      |     | 0 ... 15   | num     |
| V6     | V6-Ei1 | 51573              | 51692             | RW  | Count interval for activation of digital input 1      | BYTE      |     | 0 ... 200  | min     |
| V6     | V6-En2 | 51567              | 51693             | RW  | Number of activations of digital input 2              | BYTE      |     | 0 ... 15   | num     |
| V6     | V6-Ei2 | 51574              | 51694             | RW  | Count interval for activation of digital input 2      | BYTE      |     | 0 ... 200  | min     |
| V6     | V6-En3 | 51568              | 51695             | RW  | Number of activations of digital input 3              | BYTE      |     | 0 ... 15   | num     |
| V6     | V6-Ei3 | 51575              | 51696             | RW  | Count interval for activation of digital input 3      | BYTE      |     | 0 ... 200  | min     |
| V6     | V6-En4 | 51569              | 51697             | RW  | Number of activations of digital input 4              | BYTE      |     | 0 ... 15   | num     |
| V6     | V6-Ei4 | 51576              | 51698             | RW  | Count interval for activation of digital input 4      | BYTE      |     | 0 ... 200  | min     |
| V6     | V6-En5 | 51570              | 51699             | RW  | Number of activations of digital input 5              | BYTE      |     | 0 ... 15   | num     |
| V6     | V6-Ei5 | 51577              | 51700             | RW  | Count interval for activation of digital input 5      | BYTE      |     | 0 ... 200  | min     |
| V6     | V6-En6 | 51571              | 51701             | RW  | Number of activations of digital input 6              | BYTE      |     | 0 ... 15   | num     |
| V6     | V6-Ei6 | 51578              | 51702             | RW  | Count interval for activation of digital input 6      | BYTE      |     | 0 ... 200  | min     |
| V6     | V6-En7 | 51572              | 51703             | RW  | Number of activations of digital input 7              | BYTE      |     | 0 ... 15   | num     |
| V6     | V6-Ei7 | 51579              | 51704             | RW  | Count interval for activation of digital input 7      | BYTE      |     | 0 ... 200  | min     |
| V6     | V6-H21 | 51580              | 51705             | RW  | Configurability of digital output 1                   | BYTE      | Y   | -14 ... 14 | num     |
| V6     | V6-H22 | 51581              | 51706             | RW  | Configurability of digital output 2                   | BYTE      | Y   | -14 ... 14 | num     |
| V6     | V6-H23 | 51582              | 51707             | RW  | Configurability of digital output 3                   | BYTE      | Y   | -14 ... 14 | num     |
| V6     | V6-H24 | 51583              | 51708             | RW  | Configurability of digital output 4                   | BYTE      | Y   | -14 ... 14 | num     |
| V6     | V6-H25 | 51584              | 51709             | RW  | Configurability of digital output 5                   | BYTE      | Y   | -14 ... 14 | num     |
| V6     | V6-H26 | 51585              | 51710             | RW  | Configurability of digital output 6                   | BYTE      | Y   | -14 ... 14 | num     |
| V6     | V6-Od0 | 51615              | 51711             | RW  | Delay output enabling from power-on                   | BYTE      |     | 0 ... 250  | min     |
| V6     | V6-o1i | 51586              | 51712             | RW  | Pulse length for telephone dialler, output 1          | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o1d | 51592              | 51713             | RW  | Pulse repeat interval for telephone dialler, output 1 | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o2i | 51587              | 51714             | RW  | Pulse length for telephone dialler, output 2          | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o2d | 51593              | 51715             | RW  | Pulse repeat interval for telephone dialler, output 2 | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o3i | 51588              | 51716             | RW  | Pulse length for telephone dialler, output 3          | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o3d | 51594              | 51717             | RW  | Pulse repeat interval for telephone dialler, output 3 | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o4i | 51589              | 51718             | RW  | Pulse length for telephone dialler, output 4          | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o4d | 51595              | 51719             | RW  | Pulse repeat interval for telephone dialler, output 4 | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o5i | 51590              | 51720             | RW  | Pulse length for telephone dialler, output 5          | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o5d | 51596              | 51721             | RW  | Pulse repeat interval for telephone dialler, output 5 | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o6i | 51591              | 51722             | RW  | Pulse length for telephone dialler, output 6          | BYTE      |     | 0 ... 250  | sec     |
| V6     | V6-o6d | 51597              | 51723             | RW  | Pulse repeat interval for telephone dialler, output 6 | BYTE      |     | 0 ... 250  | sec     |

| Folder | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|--------|-----------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V6     | V6-ooF    | 51616              | 51724             | RW  | To disable outputs with device OFF  | BYTE      |     | 0 ... 1           | flag              |
| V6     | V6-AFd    | 51617              | 51725             | RW  | Alarm activation differential   | BYTE      |     | 0.1 ... 15.0      | num/°C/°F/%RH/bar |
| V6     | V6-At1    | 51598              | 51726             | RW  | Alarm mode (absolute and relative) probe 1  | BYTE      |     | 0 ... 1           | flag              |
| V6     | V6-SE1    | 18696              | 51727             | RW  | Alarm setpoint for probe 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-LA1    | 18706              | 51728             | RW  | Minimum alarm threshold 1   | WORD      | Y   | -999.0 ... V6-HA1 | num/°C/°F/%RH/bar |
| V6     | V6-HA1    | 18716              | 51729             | RW  | Maximum alarm threshold 1   | WORD      | Y   | V6-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-tA1    | 51603              | 51730             | RW  | Delay for high/low alarm on probe 1   | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-At2    | 51599              | 51731             | RW  | Alarm mode (absolute and relative) probe 2  | BYTE      |     | 0 ... 1           | flag              |
| V6     | V6-SE2    | 18698              | 51732             | RW  | Alarm setpoint for probe 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-LA2    | 18708              | 51733             | RW  | Minimum alarm threshold 2   | WORD      | Y   | -999.0 ... V6-HA2 | num/°C/°F/%RH/bar |
| V6     | V6-HA2    | 18718              | 51734             | RW  | Maximum alarm threshold 2   | WORD      | Y   | V6-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-tA2    | 51604              | 51735             | RW  | Delay for high/low alarm on probe 2   | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-At3    | 51600              | 51736             | RW  | Alarm mode (absolute and relative) probe 3  | BYTE      |     | 0 ... 1           | flag              |
| V6     | V6-SE3    | 18700              | 51737             | RW  | Alarm setpoint for probe 3  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-LA3    | 18710              | 51738             | RW  | Minimum alarm threshold 3   | WORD      | Y   | -999.0 ... V6-HA3 | num/°C/°F/%RH/bar |
| V6     | V6-HA3    | 18720              | 51739             | RW  | Maximum alarm threshold 3   | WORD      | Y   | V6-LA3 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-tA3    | 51605              | 51740             | RW  | Delay for high/low alarm on probe 3   | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-At4    | 51601              | 51741             | RW  | Alarm mode (absolute and relative) probe 4  | BYTE      |     | 0 ... 1           | flag              |
| V6     | V6-SE4    | 18702              | 51742             | RW  | Alarm setpoint for probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-LA4    | 18712              | 51743             | RW  | Minimum alarm threshold 4   | WORD      | Y   | -999.0 ... V6-HA4 | num/°C/°F/%RH/bar |
| V6     | V6-HA4    | 18722              | 51744             | RW  | Maximum alarm threshold 4   | WORD      | Y   | V6-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-tA4    | 51606              | 51745             | RW  | Delay for high/low alarm on probe 4   | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-At5    | 51602              | 51746             | RW  | Alarm mode (absolute and relative) probe 5  | BYTE      |     | 0 ... 1           | flag              |
| V6     | V6-SE5    | 18704              | 51747             | RW  | Alarm setpoint for probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-LA5    | 18714              | 51748             | RW  | Minimum alarm threshold 5   | WORD      | Y   | -999.0 ... V6-HA5 | num/°C/°F/%RH/bar |
| V6     | V6-HA5    | 18724              | 51749             | RW  | Maximum alarm threshold 5   | WORD      | Y   | V6-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-tA5    | 51607              | 51750             | RW  | Delay for high/low alarm on probe 5   | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-PA0    | 18736              | 51751             | RW  | Temperature alarms disabling time from power-on   | WORD      |     | 0 ... 999         | min               |
| V6     | V6-Atd    | 51618              | 51752             | RW  | Regular watchdog alarm activation duration  | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-Art    | 51619              | 51753             | RW  | Regular watchdog alarm activation period  | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-dtA    | 51620              | 51754             | RW  | Alarm acknowledgement time  | BYTE      |     | 0 ... 250         | sec               |
| V6     | V6-CLC    | 51621              | 51755             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled                        | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-PS1    | 51622              | 51756             | RW  | Password 1 value  | BYTE      |     | 0 ... 250         | num               |
| V6     | V6-PS2    | 51623              | 51757             | RW  | Password 2 value  | BYTE      |     | 0 ... 250         | num               |
| V6     | V6-ndt    | 51624              | 51758             | RW  | Display with decimal point  | BYTE      |     | 0 ... 1           | flag              |
| V6     | V6-CA1    | 18726              | 51759             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-CA2    | 18728              | 51760             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-CA3    | 18730              | 51761             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-CA4    | 18732              | 51762             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-CA5    | 18734              | 51763             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V6     | V6-Ldd    | 51625              | 51764             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250         | min               |
| V6     | V6-dr1    | 51608              | 51765             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4           | num               |
| V6     | V6-dr2    | 51609              | 51766             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4           | num               |
| V6     | V6-dr3    | 51610              | 51767             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4           | num               |
| V6     | V6-dr4    | 51611              | 51768             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4           | num               |
| V6     | V6-dr5    | 51612              | 51769             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4           | num               |
| V6     | V6-ddd    | 51626              | 51770             | RW  | To select of main display value   | BYTE      |     | 0 ... 19          | num               |
| V6     | V6-vis_UL | ---                | 51771             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3           | num               |
| V6     | V6-vis_dL | ---                | 51772             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3           | num               |
| V6     | V6-vis_Fr | ---                | 51773             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3           | num               |

| Folder                          | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE            | M.U.              |
|---------------------------------|--------|--------------------|-------------------|-----|--|-----------|-----|------------------|-------------------|
| <b>APPLICATION 7 PARAMETERS</b> |        |                    |                   |     |  |           |     |                  |                   |
| V7                              | V7-H41 | 51910              | 52026             | RW  | Probe 1 present  | BYTE      |     | 0 ... 2          | num               |
| V7                              | V7-H42 | 51911              | 52027             | RW  | Probe 2 present  | BYTE      |     | 0 ... 2          | num               |
| V7                              | V7-H43 | 51912              | 52028             | RW  | Probe 3 present  | BYTE      |     | 0 ... 2          | num               |
| V7                              | V7-H44 | 51913              | 52029             | RW  | Probe 4 present  | BYTE      |     | 0 ... 2          | num               |
| V7                              | V7-H45 | 51914              | 52030             | RW  | Probe 5 present  | BYTE      |     | 0 ... 2          | num               |
| V7                              | V7-H00 | 52011              | 52031             | RW  | To select analogue input type 1-2-5                        | BYTE      |     | 0 ... 2          | num               |
| V7                              | V7-H01 | 52012              | 52032             | RW  | To select analogue input type 3                            | BYTE      |     | 0 ... 5          | num               |
| V7                              | V7-H02 | 52013              | 52033             | RW  | To select analogue input type 4                            | BYTE      |     | 0 ... 5          | num               |
| V7                              | V7-H03 | 19072              | 52034             | RW  | Bottom limit for current input 1                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V7                              | V7-H04 | 19074              | 52035             | RW  | Upper limit for current input 1                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V7                              | V7-H05 | 19076              | 52036             | RW  | Bottom limit for current input 2                           | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V7                              | V7-H06 | 19078              | 52037             | RW  | Upper limit for current input 2                            | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V7                              | V7-rUP | 51997              | 52038             | RW  | Humidity input for dewpoint calculation                    | BYTE      |     | 0 ... 2          | num               |
| V7                              | V7-rtP | 51998              | 52039             | RW  | Temperature input for dewpoint calculation                 | BYTE      |     | 0 ... 5          | num               |
| V7                              | V7-H11 | 51915              | 52040             | RW  | Configurability and polarity of digital input 1            | BYTE      | Y   | -8 ... 8         | num               |
| V7                              | V7-H12 | 51916              | 52041             | RW  | Configurability and polarity of digital input 2            | BYTE      | Y   | -8 ... 8         | num               |
| V7                              | V7-H13 | 51917              | 52042             | RW  | Configurability and polarity of digital input 3            | BYTE      | Y   | -8 ... 8         | num               |
| V7                              | V7-H14 | 51918              | 52043             | RW  | Configurability and polarity of digital input 4            | BYTE      | Y   | -8 ... 8         | num               |
| V7                              | V7-H15 | 51919              | 52044             | RW  | Configurability and polarity of digital input 5            | BYTE      | Y   | -8 ... 8         | num               |
| V7                              | V7-H16 | 51920              | 52045             | RW  | Configurability and polarity of digital input 6            | BYTE      | Y   | -8 ... 8         | num               |
| V7                              | V7-H17 | 51921              | 52046             | RW  | Configurability and polarity of digital input 7            | BYTE      | Y   | -8 ... 8         | num               |
| V7                              | V7-i1L | 51922              | 52047             | RW  | To enable block on temperature update from digital input 1 | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i2L | 51923              | 52048             | RW  | To enable block on temperature update from digital input 2 | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i3L | 51924              | 52049             | RW  | To enable block on temperature update from digital input 3 | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i4L | 51925              | 52050             | RW  | To enable block on temperature update from digital input 4 | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i5L | 51926              | 52051             | RW  | To enable block on temperature update from digital input 5 | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i6L | 51927              | 52052             | RW  | To enable block on temperature update from digital input 6 | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i7L | 51928              | 52053             | RW  | To enable block on temperature update from digital input 7 | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i1d | 51929              | 52054             | RW  | Acquisition mode (edge or level) digital input 1           | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i2d | 51930              | 52055             | RW  | Acquisition mode (edge or level) digital input 2           | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i3d | 51931              | 52056             | RW  | Acquisition mode (edge or level) digital input 3           | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i4d | 51932              | 52057             | RW  | Acquisition mode (edge or level) digital input 4           | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i5d | 51933              | 52058             | RW  | Acquisition mode (edge or level) digital input 5           | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i6d | 51934              | 52059             | RW  | Acquisition mode (edge or level) digital input 6           | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-i7d | 51935              | 52060             | RW  | Acquisition mode (edge or level) digital input 7           | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-dt1 | 51936              | 52061             | RW  | Unit of measure for delay signalling alarm 1               | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-d11 | 51943              | 52062             | RW  | Delay time signalling alarm from DI1                       | BYTE      |     | 0 ... 250        | sec/min           |
| V7                              | V7-dt2 | 51937              | 52063             | RW  | Unit of measure for delay signalling alarm 2               | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-d12 | 51944              | 52064             | RW  | Delay time signalling alarm from DI2                       | BYTE      |     | 0 ... 250        | sec/min           |
| V7                              | V7-dt3 | 51938              | 52065             | RW  | Unit of measure for delay signalling alarm 3               | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-d13 | 51945              | 52066             | RW  | Delay time signalling alarm from DI3                       | BYTE      |     | 0 ... 250        | sec/min           |
| V7                              | V7-dt4 | 51939              | 52067             | RW  | Unit of measure for delay signalling alarm 4               | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-d14 | 51946              | 52068             | RW  | Delay time signalling alarm from DI4                       | BYTE      |     | 0 ... 250        | sec/min           |
| V7                              | V7-dt5 | 51940              | 52069             | RW  | Unit of measure for delay signalling alarm 5               | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-d15 | 51947              | 52070             | RW  | Delay time signalling alarm from DI5                       | BYTE      |     | 0 ... 250        | sec/min           |
| V7                              | V7-dt6 | 51941              | 52071             | RW  | Unit of measure for delay signalling alarm 6               | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-d16 | 51948              | 52072             | RW  | Delay time signalling alarm from DI6                       | BYTE      |     | 0 ... 250        | sec/min           |
| V7                              | V7-dt7 | 51942              | 52073             | RW  | Unit of measure for delay signalling alarm 7               | BYTE      |     | 0 ... 1          | flag              |
| V7                              | V7-d17 | 51949              | 52074             | RW  | Delay time signalling alarm from DI7                       | BYTE      |     | 0 ... 250        | sec/min           |
| V7                              | V7-En1 | 51950              | 52075             | RW  | Number of activations of digital input 1                   | BYTE      |     | 0 ... 15         | num               |



| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|--------|--------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V7     | V7-Ei1 | 51957              | 52076             | RW  | Count interval for activation of digital input 1      | BYTE      |     | 0 ... 200         | min               |
| V7     | V7-En2 | 51951              | 52077             | RW  | Number of activations of digital input 2              | BYTE      |     | 0 ... 15          | num               |
| V7     | V7-Ei2 | 51958              | 52078             | RW  | Count interval for activation of digital input 2      | BYTE      |     | 0 ... 200         | min               |
| V7     | V7-En3 | 51952              | 52079             | RW  | Number of activations of digital input 3              | BYTE      |     | 0 ... 15          | num               |
| V7     | V7-Ei3 | 51959              | 52080             | RW  | Count interval for activation of digital input 3      | BYTE      |     | 0 ... 200         | min               |
| V7     | V7-En4 | 51953              | 52081             | RW  | Number of activations of digital input 4              | BYTE      |     | 0 ... 15          | num               |
| V7     | V7-Ei4 | 51960              | 52082             | RW  | Count interval for activation of digital input 4      | BYTE      |     | 0 ... 200         | min               |
| V7     | V7-En5 | 51954              | 52083             | RW  | Number of activations of digital input 5              | BYTE      |     | 0 ... 15          | num               |
| V7     | V7-Ei5 | 51961              | 52084             | RW  | Count interval for activation of digital input 5      | BYTE      |     | 0 ... 200         | min               |
| V7     | V7-En6 | 51955              | 52085             | RW  | Number of activations of digital input 6              | BYTE      |     | 0 ... 15          | num               |
| V7     | V7-Ei6 | 51962              | 52086             | RW  | Count interval for activation of digital input 6      | BYTE      |     | 0 ... 200         | min               |
| V7     | V7-En7 | 51956              | 52087             | RW  | Number of activations of digital input 7              | BYTE      |     | 0 ... 15          | num               |
| V7     | V7-Ei7 | 51963              | 52088             | RW  | Count interval for activation of digital input 7      | BYTE      |     | 0 ... 200         | min               |
| V7     | V7-H21 | 51964              | 52089             | RW  | Configurability of digital output 1                   | BYTE      | Y   | -14 ... 14        | num               |
| V7     | V7-H22 | 51965              | 52090             | RW  | Configurability of digital output 2                   | BYTE      | Y   | -14 ... 14        | num               |
| V7     | V7-H23 | 51966              | 52091             | RW  | Configurability of digital output 3                   | BYTE      | Y   | -14 ... 14        | num               |
| V7     | V7-H24 | 51967              | 52092             | RW  | Configurability of digital output 4                   | BYTE      | Y   | -14 ... 14        | num               |
| V7     | V7-H25 | 51968              | 52093             | RW  | Configurability of digital output 5                   | BYTE      | Y   | -14 ... 14        | num               |
| V7     | V7-H26 | 51969              | 52094             | RW  | Configurability of digital output 6                   | BYTE      | Y   | -14 ... 14        | num               |
| V7     | V7-Od0 | 51999              | 52095             | RW  | Delay output enabling from power-on                   | BYTE      |     | 0 ... 250         | min               |
| V7     | V7-o1i | 51970              | 52096             | RW  | Pulse length for telephone dialler, output 1          | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o1d | 51976              | 52097             | RW  | Pulse repeat interval for telephone dialler, output 1 | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o2i | 51971              | 52098             | RW  | Pulse length for telephone dialler, output 2          | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o2d | 51977              | 52099             | RW  | Pulse repeat interval for telephone dialler, output 2 | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o3i | 51972              | 52100             | RW  | Pulse length for telephone dialler, output 3          | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o3d | 51978              | 52101             | RW  | Pulse repeat interval for telephone dialler, output 3 | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o4i | 51973              | 52102             | RW  | Pulse length for telephone dialler, output 4          | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o4d | 51979              | 52103             | RW  | Pulse repeat interval for telephone dialler, output 4 | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o5i | 51974              | 52104             | RW  | Pulse length for telephone dialler, output 5          | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o5d | 51980              | 52105             | RW  | Pulse repeat interval for telephone dialler, output 5 | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o6i | 51975              | 52106             | RW  | Pulse length for telephone dialler, output 6          | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-o6d | 51981              | 52107             | RW  | Pulse repeat interval for telephone dialler, output 6 | BYTE      |     | 0 ... 250         | sec               |
| V7     | V7-ooF | 52000              | 52108             | RW  | To disable outputs with device OFF                    | BYTE      |     | 0 ... 1           | flag              |
| V7     | V7-AFd | 52001              | 52109             | RW  | Alarm activation differential                         | BYTE      |     | 0.1 ... 15.0      | num/°C/°F/%RH/bar |
| V7     | V7-At1 | 51982              | 52110             | RW  | Alarm mode (absolute and relative) probe 1            | BYTE      |     | 0 ... 1           | flag              |
| V7     | V7-SE1 | 19080              | 52111             | RW  | Alarm setpoint for probe 1                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7     | V7-LA1 | 19090              | 52112             | RW  | Minimum alarm threshold 1                             | WORD      | Y   | -999.0 ... V7-HA1 | num/°C/°F/%RH/bar |
| V7     | V7-HA1 | 19100              | 52113             | RW  | Maximum alarm threshold 1                             | WORD      | Y   | V7-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V7     | V7-tA1 | 51987              | 52114             | RW  | Delay for high/low alarm on probe 1                   | BYTE      |     | 0 ... 250         | min               |
| V7     | V7-At2 | 51983              | 52115             | RW  | Alarm mode (absolute and relative) probe 2            | BYTE      |     | 0 ... 1           | flag              |
| V7     | V7-SE2 | 19082              | 52116             | RW  | Alarm setpoint for probe 2                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7     | V7-LA2 | 19092              | 52117             | RW  | Minimum alarm threshold 2                             | WORD      | Y   | -999.0 ... V7-HA2 | num/°C/°F/%RH/bar |
| V7     | V7-HA2 | 19102              | 52118             | RW  | Maximum alarm threshold 2                             | WORD      | Y   | V7-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V7     | V7-tA2 | 51988              | 52119             | RW  | Delay for high/low alarm on probe 2                   | BYTE      |     | 0 ... 250         | min               |
| V7     | V7-At3 | 51984              | 52120             | RW  | Alarm mode (absolute and relative) probe 3            | BYTE      |     | 0 ... 1           | flag              |
| V7     | V7-SE3 | 19084              | 52121             | RW  | Alarm setpoint for probe 3                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7     | V7-LA3 | 19094              | 52122             | RW  | Minimum alarm threshold 3                             | WORD      | Y   | -999.0 ... V7-HA3 | num/°C/°F/%RH/bar |
| V7     | V7-HA3 | 19104              | 52123             | RW  | Maximum alarm threshold 3                             | WORD      | Y   | V7-LA3 ... 999.0  | num/°C/°F/%RH/bar |

| Folder                          | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE             | M.U.              |
|---------------------------------|-----------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V7                              | V7-tA3    | 51989              | 52124             | RW  | Delay for high/low alarm on probe 3   | BYTE      |     | 0 ... 250         | min               |
| V7                              | V7-At4    | 51985              | 52125             | RW  | Alarm mode (absolute and relative) probe 4  | BYTE      |     | 0 ... 1           | flag              |
| V7                              | V7-SE4    | 19086              | 52126             | RW  | Alarm setpoint for probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-LA4    | 19096              | 52127             | RW  | Minimum alarm threshold 4   | WORD      | Y   | -999.0 ... V7-HA4 | num/°C/°F/%RH/bar |
| V7                              | V7-HA4    | 19106              | 52128             | RW  | Maximum alarm threshold 4   | WORD      | Y   | V7-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-tA4    | 51990              | 52129             | RW  | Delay for high/low alarm on probe 4   | BYTE      |     | 0 ... 250         | min               |
| V7                              | V7-At5    | 51986              | 52130             | RW  | Alarm mode (absolute and relative) probe 5  | BYTE      |     | 0 ... 1           | flag              |
| V7                              | V7-SE5    | 19088              | 52131             | RW  | Alarm setpoint for probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-LA5    | 19098              | 52132             | RW  | Minimum alarm threshold 5   | WORD      | Y   | -999.0 ... V7-HA5 | num/°C/°F/%RH/bar |
| V7                              | V7-HA5    | 19108              | 52133             | RW  | Maximum alarm threshold 5   | WORD      | Y   | V7-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-tA5    | 51991              | 52134             | RW  | Delay for high/low alarm on probe 5   | BYTE      |     | 0 ... 250         | min               |
| V7                              | V7-PA0    | 19120              | 52135             | RW  | Temperature alarms disabling time from power-on   | WORD      |     | 0 ... 999         | min               |
| V7                              | V7-Atd    | 52002              | 52136             | RW  | Regular watchdog alarm activation duration  | BYTE      |     | 0 ... 250         | min               |
| V7                              | V7-Art    | 52003              | 52137             | RW  | Regular watchdog alarm activation period  | BYTE      |     | 0 ... 250         | min               |
| V7                              | V7-dtA    | 52004              | 52138             | RW  | Alarm acknowledgement time  | BYTE      |     | 0 ... 250         | sec               |
| V7                              | V7-CLC    | 52005              | 52139             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled                        | BYTE      |     | 0 ... 250         | min               |
| V7                              | V7-PS1    | 52006              | 52140             | RW  | Password 1 value  | BYTE      |     | 0 ... 250         | num               |
| V7                              | V7-PS2    | 52007              | 52141             | RW  | Password 2 value  | BYTE      |     | 0 ... 250         | num               |
| V7                              | V7-ndt    | 52008              | 52142             | RW  | Display with decimal point  | BYTE      |     | 0 ... 1           | flag              |
| V7                              | V7-CA1    | 19110              | 52143             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-CA2    | 19112              | 52144             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-CA3    | 19114              | 52145             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-CA4    | 19116              | 52146             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-CA5    | 19118              | 52147             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V7                              | V7-Ldd    | 52009              | 52148             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250         | min               |
| V7                              | V7-dr1    | 51992              | 52149             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4           | num               |
| V7                              | V7-dr2    | 51993              | 52150             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4           | num               |
| V7                              | V7-dr3    | 51994              | 52151             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4           | num               |
| V7                              | V7-dr4    | 51995              | 52152             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4           | num               |
| V7                              | V7-dr5    | 51996              | 52153             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4           | num               |
| V7                              | V7-ddd    | 52010              | 52154             | RW  | To select of main display value   | BYTE      |     | 0 ... 19          | num               |
| V7                              | V7-vis_UL | ---                | 52155             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3           | num               |
| V7                              | V7-vis_dL | ---                | 52156             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3           | num               |
| V7                              | V7-vis_Fr | ---                | 52157             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3           | num               |
| <b>APPLICATION 8 PARAMETERS</b> |           |                    |                   |     |   |           |     |                   |                   |
| V8                              | V8-H41    | 52294              | 52410             | RW  | Probe 1 present   | BYTE      |     | 0 ... 2           | num               |
| V8                              | V8-H42    | 52295              | 52411             | RW  | Probe 2 present   | BYTE      |     | 0 ... 2           | num               |
| V8                              | V8-H43    | 52296              | 52412             | RW  | Probe 3 present   | BYTE      |     | 0 ... 2           | num               |
| V8                              | V8-H44    | 52297              | 52413             | RW  | Probe 4 present   | BYTE      |     | 0 ... 2           | num               |
| V8                              | V8-H45    | 52298              | 52414             | RW  | Probe 5 present   | BYTE      |     | 0 ... 2           | num               |
| V8                              | V8-H00    | 52395              | 52415             | RW  | To select analogue input type 1-2-5   | BYTE      |     | 0 ... 2           | num               |
| V8                              | V8-H01    | 52396              | 52416             | RW  | To select analogue input type 3   | BYTE      |     | 0 ... 5           | num               |
| V8                              | V8-H02    | 52397              | 52417             | RW  | To select analogue input type 4   | BYTE      |     | 0 ... 5           | num               |
| V8                              | V8-H03    | 19456              | 52418             | RW  | Bottom limit for current input 1  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8                              | V8-H04    | 19458              | 52419             | RW  | Upper limit for current input 1   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8                              | V8-H05    | 19460              | 52420             | RW  | Bottom limit for current input 2  | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8                              | V8-H06    | 19462              | 52421             | RW  | Upper limit for current input 2   | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8                              | V8-rUP    | 52381              | 52422             | RW  | Humidity input for dewpoint calculation   | BYTE      |     | 0 ... 2           | num               |
| V8                              | V8-rtP    | 52382              | 52423             | RW  | Temperature input for dewpoint calculation  | BYTE      |     | 0 ... 5           | num               |
| V8                              | V8-H11    | 52299              | 52424             | RW  | Configurability and polarity of digital input 1   | BYTE      | Y   | -8 ... 8          | num               |

| Folder | Label  | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION  | DATE SIZE | CPL | RANGE      | M.U.    |
|--------|--------|--------------------|-------------------|-----|--|-----------|-----|------------|---------|
| V8     | V8-H12 | 52300              | 52425             | RW  | Configurability and polarity of digital input 2            | BYTE      | Y   | -8 ... 8   | num     |
| V8     | V8-H13 | 52301              | 52426             | RW  | Configurability and polarity of digital input 3            | BYTE      | Y   | -8 ... 8   | num     |
| V8     | V8-H14 | 52302              | 52427             | RW  | Configurability and polarity of digital input 4            | BYTE      | Y   | -8 ... 8   | num     |
| V8     | V8-H15 | 52303              | 52428             | RW  | Configurability and polarity of digital input 5            | BYTE      | Y   | -8 ... 8   | num     |
| V8     | V8-H16 | 52304              | 52429             | RW  | Configurability and polarity of digital input 6            | BYTE      | Y   | -8 ... 8   | num     |
| V8     | V8-H17 | 52305              | 52430             | RW  | Configurability and polarity of digital input 7            | BYTE      | Y   | -8 ... 8   | num     |
| V8     | V8-i1L | 52306              | 52431             | RW  | To enable block on temperature update from digital input 1 | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i2L | 52307              | 52432             | RW  | To enable block on temperature update from digital input 2 | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i3L | 52308              | 52433             | RW  | To enable block on temperature update from digital input 3 | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i4L | 52309              | 52434             | RW  | To enable block on temperature update from digital input 4 | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i5L | 52310              | 52435             | RW  | To enable block on temperature update from digital input 5 | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i6L | 52311              | 52436             | RW  | To enable block on temperature update from digital input 6 | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i7L | 52312              | 52437             | RW  | To enable block on temperature update from digital input 7 | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i1d | 52313              | 52438             | RW  | Acquisition mode (edge or level) digital input 1           | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i2d | 52314              | 52439             | RW  | Acquisition mode (edge or level) digital input 2           | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i3d | 52315              | 52440             | RW  | Acquisition mode (edge or level) digital input 3           | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i4d | 52316              | 52441             | RW  | Acquisition mode (edge or level) digital input 4           | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i5d | 52317              | 52442             | RW  | Acquisition mode (edge or level) digital input 5           | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i6d | 52318              | 52443             | RW  | Acquisition mode (edge or level) digital input 6           | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-i7d | 52319              | 52444             | RW  | Acquisition mode (edge or level) digital input 7           | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-dt1 | 52320              | 52445             | RW  | Unit of measure for delay signalling alarm 1               | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-d11 | 52327              | 52446             | RW  | Delay time signalling alarm from DI1                       | BYTE      |     | 0 ... 250  | sec/min |
| V8     | V8-dt2 | 52321              | 52447             | RW  | Unit of measure for delay signalling alarm 2               | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-d12 | 52328              | 52448             | RW  | Delay time signalling alarm from DI2                       | BYTE      |     | 0 ... 250  | sec/min |
| V8     | V8-dt3 | 52322              | 52449             | RW  | Unit of measure for delay signalling alarm 3               | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-d13 | 52329              | 52450             | RW  | Delay time signalling alarm from DI3                       | BYTE      |     | 0 ... 250  | sec/min |
| V8     | V8-dt4 | 52323              | 52451             | RW  | Unit of measure for delay signalling alarm 4               | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-d14 | 52330              | 52452             | RW  | Delay time signalling alarm from DI4                       | BYTE      |     | 0 ... 250  | sec/min |
| V8     | V8-dt5 | 52324              | 52453             | RW  | Unit of measure for delay signalling alarm 5               | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-d15 | 52331              | 52454             | RW  | Delay time signalling alarm from DI5                       | BYTE      |     | 0 ... 250  | sec/min |
| V8     | V8-dt6 | 52325              | 52455             | RW  | Unit of measure for delay signalling alarm 6               | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-d16 | 52332              | 52456             | RW  | Delay time signalling alarm from DI6                       | BYTE      |     | 0 ... 250  | sec/min |
| V8     | V8-dt7 | 52326              | 52457             | RW  | Unit of measure for delay signalling alarm 7               | BYTE      |     | 0 ... 1    | flag    |
| V8     | V8-d17 | 52333              | 52458             | RW  | Delay time signalling alarm from DI7                       | BYTE      |     | 0 ... 250  | sec/min |
| V8     | V8-En1 | 52334              | 52459             | RW  | Number of activations of digital input 1                   | BYTE      |     | 0 ... 15   | num     |
| V8     | V8-Ei1 | 52341              | 52460             | RW  | Count interval for activation of digital input 1           | BYTE      |     | 0 ... 200  | min     |
| V8     | V8-En2 | 52335              | 52461             | RW  | Number of activations of digital input 2                   | BYTE      |     | 0 ... 15   | num     |
| V8     | V8-Ei2 | 52342              | 52462             | RW  | Count interval for activation of digital input 2           | BYTE      |     | 0 ... 200  | min     |
| V8     | V8-En3 | 52336              | 52463             | RW  | Number of activations of digital input 3                   | BYTE      |     | 0 ... 15   | num     |
| V8     | V8-Ei3 | 52343              | 52464             | RW  | Count interval for activation of digital input 3           | BYTE      |     | 0 ... 200  | min     |
| V8     | V8-En4 | 52337              | 52465             | RW  | Number of activations of digital input 4                   | BYTE      |     | 0 ... 15   | num     |
| V8     | V8-Ei4 | 52344              | 52466             | RW  | Count interval for activation of digital input 4           | BYTE      |     | 0 ... 200  | min     |
| V8     | V8-En5 | 52338              | 52467             | RW  | Number of activations of digital input 5                   | BYTE      |     | 0 ... 15   | num     |
| V8     | V8-Ei5 | 52345              | 52468             | RW  | Count interval for activation of digital input 5           | BYTE      |     | 0 ... 200  | min     |
| V8     | V8-En6 | 52339              | 52469             | RW  | Number of activations of digital input 6                   | BYTE      |     | 0 ... 15   | num     |
| V8     | V8-Ei6 | 52346              | 52470             | RW  | Count interval for activation of digital input 6           | BYTE      |     | 0 ... 200  | min     |
| V8     | V8-En7 | 52340              | 52471             | RW  | Number of activations of digital input 7                   | BYTE      |     | 0 ... 15   | num     |
| V8     | V8-Ei7 | 52347              | 52472             | RW  | Count interval for activation of digital input 7           | BYTE      |     | 0 ... 200  | min     |
| V8     | V8-H21 | 52348              | 52473             | RW  | Configurability of digital output 1                        | BYTE      | Y   | -14 ... 14 | num     |
| V8     | V8-H22 | 52349              | 52474             | RW  | Configurability of digital output 2                        | BYTE      | Y   | -14 ... 14 | num     |
| V8     | V8-H23 | 52350              | 52475             | RW  | Configurability of digital output 3                        | BYTE      | Y   | -14 ... 14 | num     |

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|--------|--------|--------------------|-------------------|-----|---|-----------|-----|-------------------|-------------------|
| V8     | V8-H24 | 52351              | 52476             | RW  | Configurability of digital output 4                   | BYTE      | Y   | -14 ... 14        | num               |
| V8     | V8-H25 | 52352              | 52477             | RW  | Configurability of digital output 5                   | BYTE      | Y   | -14 ... 14        | num               |
| V8     | V8-H26 | 52353              | 52478             | RW  | Configurability of digital output 6                   | BYTE      | Y   | -14 ... 14        | num               |
| V8     | V8-Od0 | 52383              | 52479             | RW  | Delay output enabling from power-on                   | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-o1i | 52354              | 52480             | RW  | Pulse length for telephone dialler, output 1          | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o1d | 52360              | 52481             | RW  | Pulse repeat interval for telephone dialler, output 1 | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o2i | 52355              | 52482             | RW  | Pulse length for telephone dialler, output 2          | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o2d | 52361              | 52483             | RW  | Pulse repeat interval for telephone dialler, output 2 | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o3i | 52356              | 52484             | RW  | Pulse length for telephone dialler, output 3          | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o3d | 52362              | 52485             | RW  | Pulse repeat interval for telephone dialler, output 3 | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o4i | 52357              | 52486             | RW  | Pulse length for telephone dialler, output 4          | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o4d | 52363              | 52487             | RW  | Pulse repeat interval for telephone dialler, output 4 | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o5i | 52358              | 52488             | RW  | Pulse length for telephone dialler, output 5          | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o5d | 52364              | 52489             | RW  | Pulse repeat interval for telephone dialler, output 5 | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o6i | 52359              | 52490             | RW  | Pulse length for telephone dialler, output 6          | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-o6d | 52365              | 52491             | RW  | Pulse repeat interval for telephone dialler, output 6 | BYTE      |     | 0 ... 250         | sec               |
| V8     | V8-ooF | 52384              | 52492             | RW  | To disable outputs with device OFF                    | BYTE      |     | 0 ... 1           | flag              |
| V8     | V8-AFd | 52385              | 52493             | RW  | Alarm activation differential                         | BYTE      |     | 0.1 ... 15.0      | num/°C/°F/%RH/bar |
| V8     | V8-At1 | 52366              | 52494             | RW  | Alarm mode (absolute and relative) probe 1            | BYTE      |     | 0 ... 1           | flag              |
| V8     | V8-SE1 | 19464              | 52495             | RW  | Alarm setpoint for probe 1                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-LA1 | 19474              | 52496             | RW  | Minimum alarm threshold 1                             | WORD      | Y   | -999.0 ... V8-HA1 | num/°C/°F/%RH/bar |
| V8     | V8-HA1 | 19484              | 52497             | RW  | Maximum alarm threshold 1                             | WORD      | Y   | V8-LA1 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-tA1 | 52371              | 52498             | RW  | Delay for high/low alarm on probe 1                   | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-At2 | 52367              | 52499             | RW  | Alarm mode (absolute and relative) probe 2            | BYTE      |     | 0 ... 1           | flag              |
| V8     | V8-SE2 | 19466              | 52500             | RW  | Alarm setpoint for probe 2                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-LA2 | 19476              | 52501             | RW  | Minimum alarm threshold 2                             | WORD      | Y   | -999.0 ... V8-HA2 | num/°C/°F/%RH/bar |
| V8     | V8-HA2 | 19486              | 52502             | RW  | Maximum alarm threshold 2                             | WORD      | Y   | V8-LA2 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-tA2 | 52372              | 52503             | RW  | Delay for high/low alarm on probe 2                   | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-At3 | 52368              | 52504             | RW  | Alarm mode (absolute and relative) probe 3            | BYTE      |     | 0 ... 1           | flag              |
| V8     | V8-SE3 | 19468              | 52505             | RW  | Alarm setpoint for probe 3                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-LA3 | 19478              | 52506             | RW  | Minimum alarm threshold 3                             | WORD      | Y   | -999.0 ... V8-HA3 | num/°C/°F/%RH/bar |
| V8     | V8-HA3 | 19488              | 52507             | RW  | Maximum alarm threshold 3                             | WORD      | Y   | V8-LA3 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-tA3 | 52373              | 52508             | RW  | Delay for high/low alarm on probe 3                   | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-At4 | 52369              | 52509             | RW  | Alarm mode (absolute and relative) probe 4            | BYTE      |     | 0 ... 1           | flag              |
| V8     | V8-SE4 | 19470              | 52510             | RW  | Alarm setpoint for probe 4                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-LA4 | 19480              | 52511             | RW  | Minimum alarm threshold 4                             | WORD      | Y   | -999.0 ... V8-HA4 | num/°C/°F/%RH/bar |
| V8     | V8-HA4 | 19490              | 52512             | RW  | Maximum alarm threshold 4                             | WORD      | Y   | V8-LA4 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-tA4 | 52374              | 52513             | RW  | Delay for high/low alarm on probe 4                   | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-At5 | 52370              | 52514             | RW  | Alarm mode (absolute and relative) probe 5            | BYTE      |     | 0 ... 1           | flag              |
| V8     | V8-SE5 | 19472              | 52515             | RW  | Alarm setpoint for probe 5                            | WORD      | Y   | -999.0 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-LA5 | 19482              | 52516             | RW  | Minimum alarm threshold 5                             | WORD      | Y   | -999.0 ... V8-HA5 | num/°C/°F/%RH/bar |
| V8     | V8-HA5 | 19492              | 52517             | RW  | Maximum alarm threshold 5                             | WORD      | Y   | V8-LA5 ... 999.0  | num/°C/°F/%RH/bar |
| V8     | V8-tA5 | 52375              | 52518             | RW  | Delay for high/low alarm on probe 5                   | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-PA0 | 19504              | 52519             | RW  | Temperature alarms disabling time from power-on       | WORD      |     | 0 ... 999         | min               |
| V8     | V8-Atd | 52386              | 52520             | RW  | Regular watchdog alarm activation duration            | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-Art | 52387              | 52521             | RW  | Regular watchdog alarm activation period              | BYTE      |     | 0 ... 250         | min               |
| V8     | V8-dtA | 52388              | 52522             | RW  | Alarm acknowledgement time                            | BYTE      |     | 0 ... 250         | sec               |

| Folder | Label     | Par. value ADDRESS | VIS. PAR. ADDRESS | R/W | DESCRIPTION   | DATE SIZE | CPL | RANGE            | M.U.              |
|--------|-----------|--------------------|-------------------|-----|---|-----------|-----|------------------|-------------------|
| V8     | V8-CLC    | 52389              | 52523             | RW  | Minimum time NOLINK condition must persist for alarm to be signalled                        | BYTE      |     | 0 ... 250        | min               |
| V8     | V8-PS1    | 52390              | 52524             | RW  | Password 1 value  | BYTE      |     | 0 ... 250        | num               |
| V8     | V8-PS2    | 52391              | 52525             | RW  | Password 2 value  | BYTE      |     | 0 ... 250        | num               |
| V8     | V8-ndt    | 52392              | 52526             | RW  | Display with decimal point  | BYTE      |     | 0 ... 1          | flag              |
| V8     | V8-CA1    | 19494              | 52527             | RW  | To calibrate probe 1  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V8     | V8-CA2    | 19496              | 52528             | RW  | To calibrate probe 2  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V8     | V8-CA3    | 19498              | 52529             | RW  | To calibrate probe 3  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V8     | V8-CA4    | 19500              | 52530             | RW  | To calibrate probe 4  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V8     | V8-CA5    | 19502              | 52531             | RW  | To calibrate probe 5  | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| V8     | V8-Ldd    | 52393              | 52532             | RW  | Display lock time-out from defrost end  | BYTE      |     | 0 ... 250        | min               |
| V8     | V8-dr1    | 52376              | 52533             | RW  | To select unit of measure probe 1.  | BYTE      |     | 0 ... 4          | num               |
| V8     | V8-dr2    | 52377              | 52534             | RW  | To select unit of measure probe 2.  | BYTE      |     | 0 ... 4          | num               |
| V8     | V8-dr3    | 52378              | 52535             | RW  | To select unit of measure probe 3.  | BYTE      |     | 0 ... 4          | num               |
| V8     | V8-dr4    | 52379              | 52536             | RW  | To select unit of measure probe 4.  | BYTE      |     | 0 ... 4          | num               |
| V8     | V8-dr5    | 52380              | 52537             | RW  | To select unit of measure probe 5.  | BYTE      |     | 0 ... 4          | num               |
| V8     | V8-ddd    | 52394              | 52538             | RW  | To select of main display value   | BYTE      |     | 0 ... 19         | num               |
| V8     | V8-vis_UL | ---                | 52539             | RW  | Visibility of function for transferring programming parameters from instrument to Copy Card | BYTE      |     | 0 ... 3          | num               |
| V8     | V8-vis_dL | ---                | 52540             | RW  | Visibility of function to transfer programming parameters from Copy Card to instrument      | BYTE      |     | 0 ... 3          | num               |
| V8     | V8-vis_Fr | ---                | 52541             | RW  | Visibility of Copy Card formatting function   | BYTE      |     | 0 ... 3          | num               |

## FOLDER VISIBILITY TABLE

| LABEL   | MODBUS ADDRESS | R/W | DESCRIPTION                             | DATE SIZE | RANGE   | Address by Application |       |       |       |       |       |       |       | M.U. |
|---------|----------------|-----|---|-----------|---------|------------------------|-------|-------|-------|-------|-------|-------|-------|------|
|         |                |     |   |           |         | AP1                    | AP2   | AP3   | AP4   | AP5   | AP6   | AP7   | AP8   |      |
| vis_Ai  | 49360          | RW  | Ai (Analogue Inputs) folder visibility  | BYTE      | 0 ... 3 | 49714                  | 50098 | 50482 | 50866 | 51250 | 51634 | 52018 | 52402 | num  |
| vis_di  | 49361          | RW  | di (Digital Inputs) folder visibility   | BYTE      | 0 ... 3 | 49715                  | 50099 | 50483 | 50867 | 51251 | 51635 | 52019 | 52403 | num  |
| vis_Out | 49362          | RW  | Out (Digital Outputs) folder visibility | BYTE      | 0 ... 3 | 49716                  | 50100 | 50484 | 50868 | 51252 | 51636 | 52020 | 52404 | num  |
| vis_AL  | 49363          | RW  | AL (Alarms) folder visibility           | BYTE      | 0 ... 3 | 49717                  | 50101 | 50485 | 50869 | 51253 | 51637 | 52021 | 52405 | num  |
| vis_Add | 49364          | RW  | Add (Communication) folder visibility   | BYTE      | 0 ... 3 | 49718                  | 50102 | 50486 | 50870 | 51254 | 51638 | 52022 | 52406 | num  |
| vis_diS | 49365          | RW  | diS (Display) folder visibility         | BYTE      | 0 ... 3 | 49719                  | 50103 | 50487 | 50871 | 51255 | 51639 | 52023 | 52407 | num  |
| vis_FPr | 49366          | RW  | FPr (Copy Card) folder visibility       | BYTE      | 0 ... 3 | 49720                  | 50104 | 50488 | 50872 | 51256 | 51640 | 52024 | 52408 | num  |
| vis_FnC | 49367          | RW  | FnC (Functions) folder visibility       | BYTE      | 0 ... 3 | 49721                  | 50105 | 50489 | 50873 | 51257 | 51641 | 52025 | 52409 | num  |

## CLIENT TABLE

| LABEL | ADDRESS | R/W | DESCRIPTION                               | DATE SIZE | CPL | RANGE            | M.U.              |
|-------|---------|-----|---|-----------|-----|------------------|-------------------|
| AI1   | 260     | R   | Analogue input (view) 1                   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AI2   | 262     | R   | Analogue input (view) 2                   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AI3   | 264     | R   | Analogue input (view) 3                   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AI4   | 266     | R   | Analogue input (view) 4                   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AI5   | 268     | R   | Analogue input (view) 5                   | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| AI6   | 270     | R   | Dewpoint temperature                      | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_LA1 | 272     | R   | Minimum alarm threshold, analogue input 1 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_HA1 | 282     | R   | Maximum alarm threshold, analogue input 1 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_LA2 | 274     | R   | Minimum alarm threshold, analogue input 2 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_HA2 | 284     | R   | Maximum alarm threshold, analogue input 2 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_LA3 | 276     | R   | Minimum alarm threshold, analogue input 3 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_HA3 | 286     | R   | Maximum alarm threshold, analogue input 3 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_LA4 | 278     | R   | Minimum alarm threshold, analogue input 4 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_HA4 | 288     | R   | Maximum alarm threshold, analogue input 4 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_LA5 | 280     | R   | Minimum alarm threshold, analogue input 5 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| S_HA5 | 290     | R   | Maximum alarm threshold, analogue input 5 | WORD      | Y   | -999.0 ... 999.0 | num/°C/°F/%RH/bar |
| DI1   | 33060   | R   | Digital input 1                           | 1 bit     |     | 0 ... 1          | flag              |
| DI2   | 33060.1 | R   | Digital input 2                           | 1 bit     |     | 0 ... 1          | flag              |
| DI3   | 33060.2 | R   | Digital input 3                           | 1 bit     |     | 0 ... 1          | flag              |
| D.I.  | 33060.3 | R   | Digital input 4                           | 1 bit     |     | 0 ... 1          | flag              |
| DI5   | 33060.4 | R   | Digital input 5                           | 1 bit     |     | 0 ... 1          | flag              |
| DI6   | 33060.5 | R   | Digital input 6                           | 1 bit     |     | 0 ... 1          | flag              |
| DI7   | 33060.6 | R   | Digital input 7                           | 1 bit     |     | 0 ... 1          | flag              |
| E1    | 33064   | R   | Analogue input 1 fault                    | 1 bit     |     | 0 ... 1          | flag              |
| E2    | 33064.1 | R   | Analogue input 2 fault                    | 1 bit     |     | 0 ... 1          | flag              |
| E3    | 33064.2 | R   | Analogue input 3 fault                    | 1 bit     |     | 0 ... 1          | flag              |
| E4    | 33064.3 | R   | Analogue input 4 fault                    | 1 bit     |     | 0 ... 1          | flag              |
| E5    | 33064.4 | R   | Analogue input 5 fault                    | 1 bit     |     | 0 ... 1          | flag              |
| AL1   | 33064.5 | R   | Analogue input 1 low threshold exceeded   | 1 bit     |     | 0 ... 1          | flag              |
| AH1   | 33065.2 | R   | Analogue input 1 high threshold exceeded  | 1 bit     |     | 0 ... 1          | flag              |
| AL2   | 33064.6 | R   | Analogue input 2 low threshold exceeded   | 1 bit     |     | 0 ... 1          | flag              |
| AH2   | 33065.3 | R   | Analogue input 2 high threshold exceeded  | 1 bit     |     | 0 ... 1          | flag              |
| AL3   | 33064.7 | R   | Analogue input 3 low threshold exceeded   | 1 bit     |     | 0 ... 1          | flag              |
| AH3   | 33065.4 | R   | Analogue input 3 high threshold exceeded  | 1 bit     |     | 0 ... 1          | flag              |
| AL4   | 33065   | R   | Analogue input 4 low threshold exceeded   | 1 bit     |     | 0 ... 1          | flag              |
| AH4   | 33065.5 | R   | Analogue input 4 high threshold exceeded  | 1 bit     |     | 0 ... 1          | flag              |
| AL5   | 33065.1 | R   | Analogue input 5 low threshold exceeded   | 1 bit     |     | 0 ... 1          | flag              |
| AH5   | 33065.6 | R   | Analogue input 5 high threshold exceeded  | 1 bit     |     | 0 ... 1          | flag              |
| EA1   | 33065.7 | R   | External 1                                | 1 bit     |     | 0 ... 1          | flag              |
| EA2   | 33066   | R   | External 2                                | 1 bit     |     | 0 ... 1          | flag              |
| EA3   | 33066.1 | R   | External 3                                | 1 bit     |     | 0 ... 1          | flag              |
| EA4   | 33066.2 | R   | External 4                                | 1 bit     |     | 0 ... 1          | flag              |
| EA5   | 33066.3 | R   | External 5                                | 1 bit     |     | 0 ... 1          | flag              |
| EA6   | 33066.4 | R   | External 6                                | 1 bit     |     | 0 ... 1          | flag              |
| EA7   | 33066.5 | R   | External 7                                | 1 bit     |     | 0 ... 1          | flag              |
| noL   | 33067.4 | R   | Serial communication failure              | 1 bit     |     | 0 ... 1          | flag              |
| A1    | 33066.6 | R   | General supervisor alarm 1                | 1 bit     |     | 0 ... 1          | flag              |
| A2    | 33066.7 | R   | General supervisor alarm 2                | 1 bit     |     | 0 ... 1          | flag              |

## **ELECTRICAL CONNECTIONS**

**Important! Make sure the machine is switched off before working on the electrical connections.**

The device is equipped with screw-on or removable terminal boards to connect electrical cables, the cross-section of which must not exceed 2.5 mm<sup>2</sup> (one wire per terminal for power connections): see the rating plate on the device for terminal ratings. Do not exceed the maximum permitted current; for higher loads, use a contactor with sufficient power capacity. Make sure that the power supply is of the correct voltage for the device.

Probes have no connection polarity and can be extended using a normal bipolar cable (note that the extension of the probes influences the instrument's electromagnetic compatibility -EMC: take great care with the wiring). Probe cables, power supply cables and the TTL serial cables should be routed separately from power cables.

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ELIWELL CONTROLS SRL declines all liability for damage due to:

- installation/use other than expressly specified and, in particular, in conflict with the safety prescriptions set down in regulations and/or specified as expressed herein;
- use on panels that do not provide adequate protection against electric shocks, water or dust when assembled;
- use on panels allowing access to dangerous parts without having to use tools;
- tampering with and/or modification of the product;
- installation/use on panels that do not comply with statutory laws and regulations.

## **CONDITIONS OF USE**

### **Permitted use**

For safety reasons, the device must be installed and used according to the instructions provided. In particular, parts carrying dangerous voltages must not be accessible in normal conditions. The device must be adequately protected from water and dust with regard to the application, and must only be accessible using tools (with the exception of the front panel). The device is suitable for use in household refrigeration appliances and/or similar equipment and has been tested for safety aspects in accordance with the harmonized European reference standards.

### **Improper use**

Any use other than that expressly permitted is prohibited. The relays provided are of a functional type and can be subject to failure: any protection devices required by product standards, or suggested by common sense for obvious safety requirements, must be installed externally to the controller.



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