TelevisIn & TelevisOut

Data acquisition and alarm signalling modules.

MANAGEMENT AND MONITORING

USER MANUAL

CONTENTS

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 Televis**In** & Televis**Out** 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**	
	Televis**In**	Televis**Out**
4-key keypad	✓	✓
Lock/unlock keypad from hotkey	✓	✓
Password-controlled access to configuration parameters	✓	✓
Temperature probe display range	NTC -50.0°C ... +110°C PTC: -50.0°C ... +150°C 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:	**NTC**: -50.0...+110°C; **PTC**: -50.0...+150°C; **PT1000**: -50.0...+400°C (on display with 3 digits + sign)	
Accuracy:	**NTC**, **PTC**:	±0.5% e.o.s. + 1 digit
	PT1000:	±1°C (-30°C ... 30°C) e ±1% e.o.s. (-50°C ... 400°C)
	0-1V:	±2% e.o.s.
	0-5V, **0-10V**, **0...20mA**, **4...20mA**:	±1% e.o.s.
Impedance	**0-1V**: 110kΩ; **0-5V**: 110kΩ; **0-10V**:	21kΩ; **0...20mA**: 100Ω; **4...20mA**: 100Ω
Resolution:	**NTC**, **PTC**, **PT1000**: 0.1°C;	**0-1V**, **0-5V**, **0-10V**, **0...20mA**, **4...20mA**: 0.1
Analogue Inputs:	**PB1**, **PB2**, **PB5**:	NTC, PTC, PT1000 inputs or configurable DIs
	PB3, **PB4**:	DI, NTC, 0-1V, 0-5V, 0-10V, 0...20mA or 4...20mA
configurable inputs		
Digital Inputs:	**DI1**, **DI2**:	Multifunctional digital inputs
Digital Outputs:	**OUT1**:	SPST relay 2A max 250Va

TELEVISOUT SPECIFICATIONS

Digital Outputs:	**OUT1**, **OUT2**, **OUT3**:	SPST relay 2A max 250Va
	OUT4:	SPDT relay 2A max 250V~
OC outputs/Digital Inputs:	**OUT5**/**DI1**:	OC Analogue Output or voltage-free Digital Input
	OUT6/**DI2**:	OC Analogue Output or voltage-free Digital Input

The two analogue outputs are low voltage (SELV) Open Collector (OC) ones: PWM with
- Precision: **2%**;
- Nominal range: **0...16.9V⎓** (12V~ rectified); closure **12V⎓**;
- Maximum current: **35mA** (min load of 340Ohm @12Vc)

N.B.: outputs OUT5 and OUT6 (typically connected to the device's 12Vc auxiliary output) cannot deliver more than **70mA** 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^2
Connectors:	**TTL** for MFK / Device Manager connection (via DMI) **RS485** to connect to TelevisSystem/Modbus supervisor.
Humidity:	Usage / Storage: 10...90% RH (non-condensing)

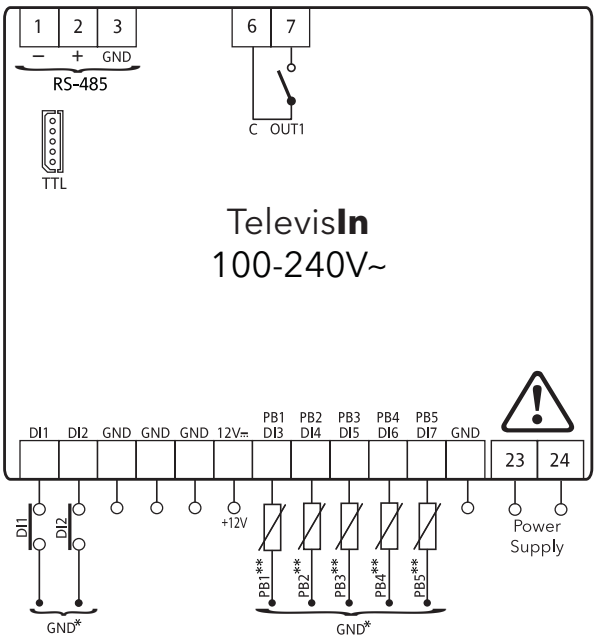
REGULATIONS

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: - suitable for storage - application: air - climate range: A - 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

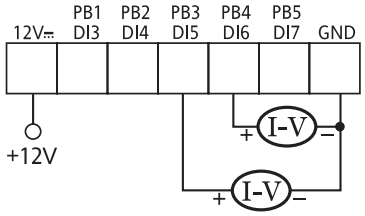
NOTES

* Connect the terminal to one of the GND terminals.

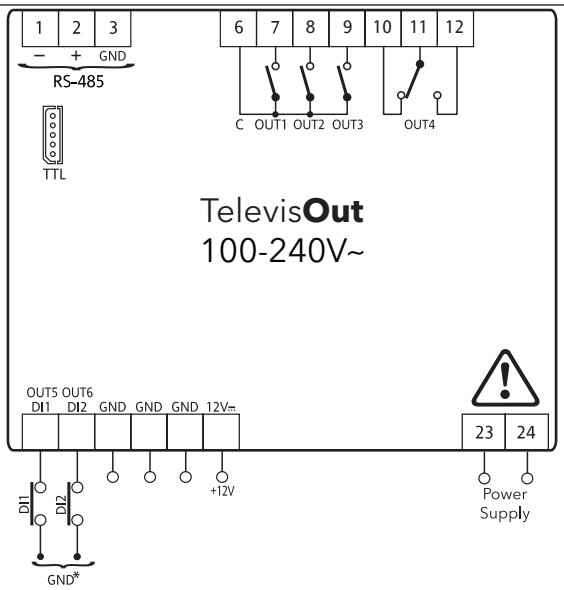
** Analogue inputs PB1...PB5 can also be configured as DI (H4x="DI")

*** 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.

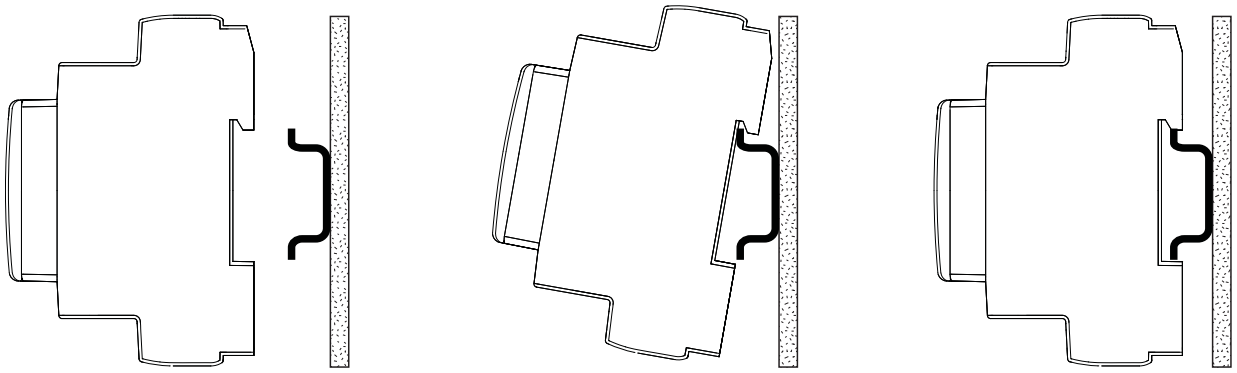
** SELV: SAFETY EXTRA LOW VOLTAGE

MECHANICAL INSTALLATION

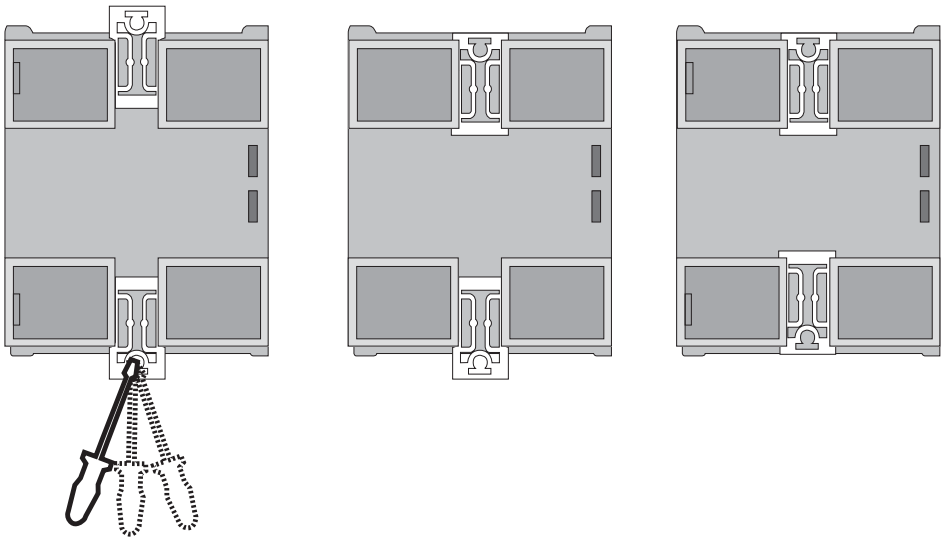
The instrument is intended for DIN rail mounting.
For GUIDA DIN installation, follow the steps described below:

- 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.

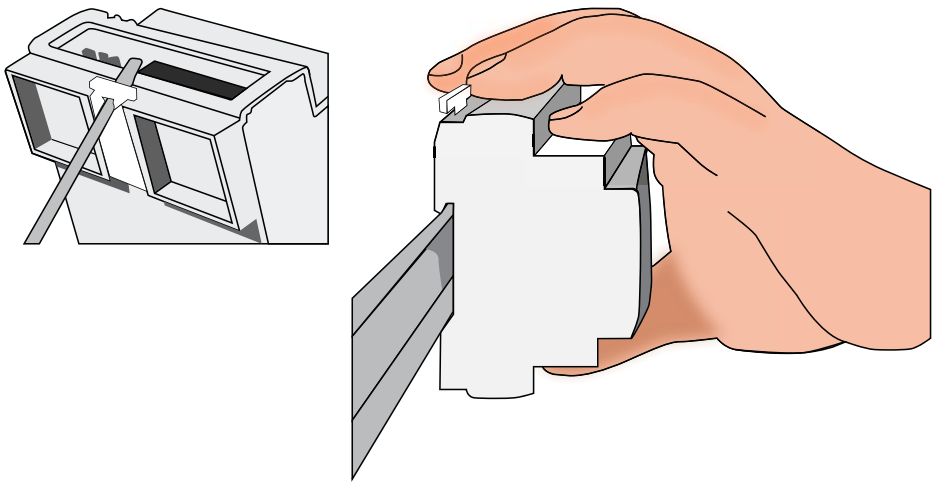
DIN RAIL INSTALLATION - SIDE VIEW



DIN RAIL INSTALLATION - REAR VIEW



DIN RAIL INSTALLATION - 3/4 VIEW



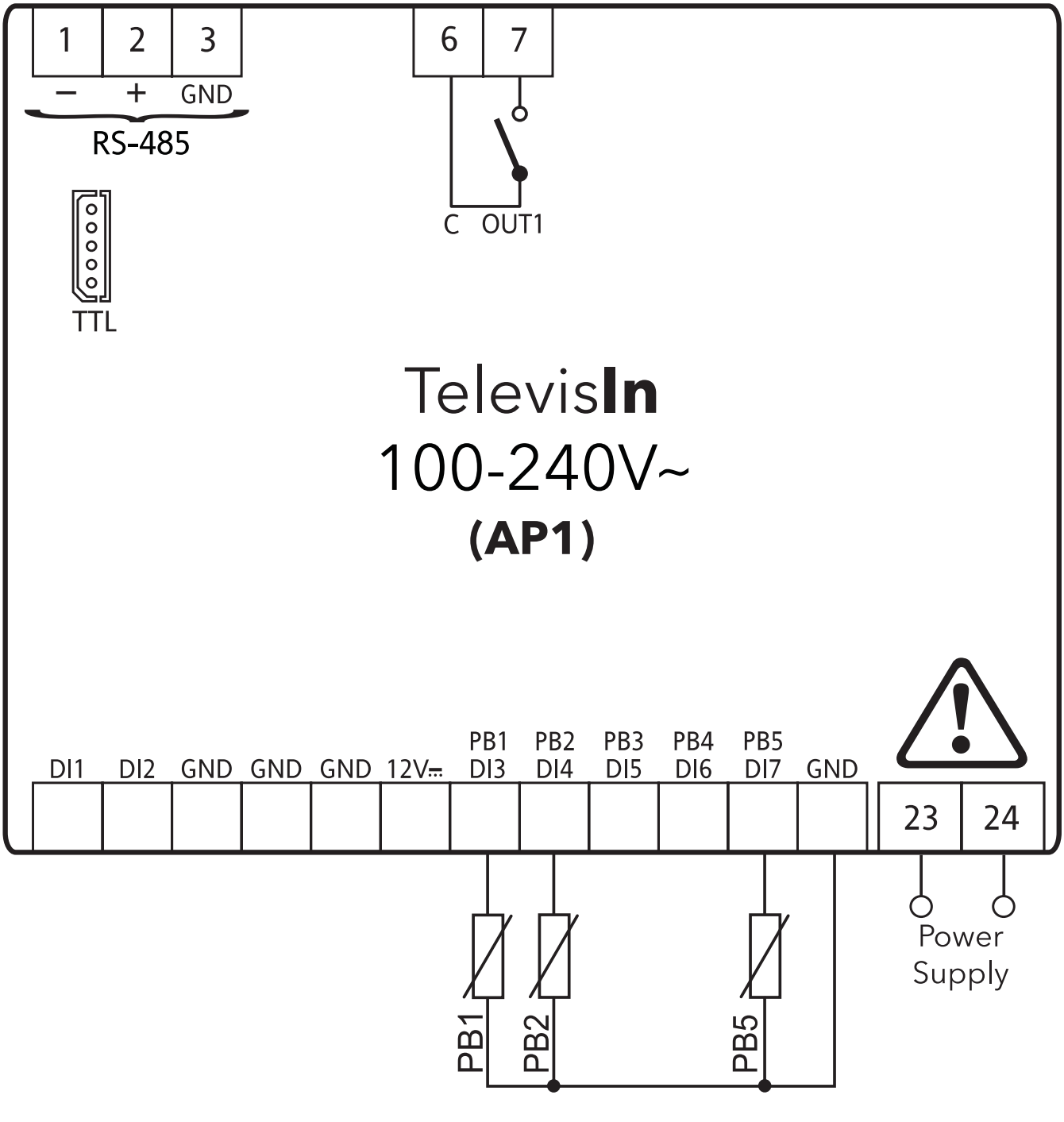
TELEVISIN MODEL

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

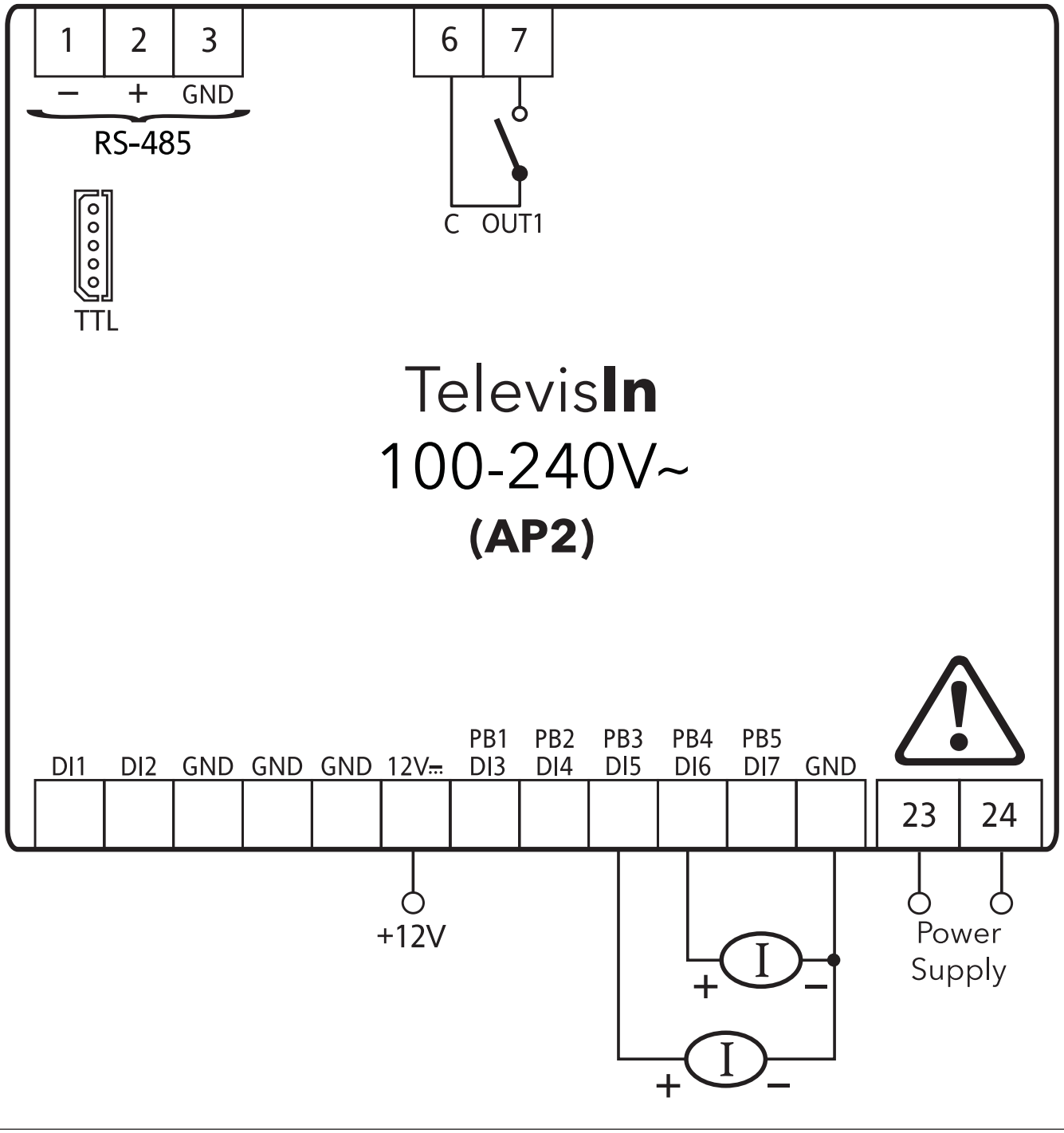


APPLICATION 2

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

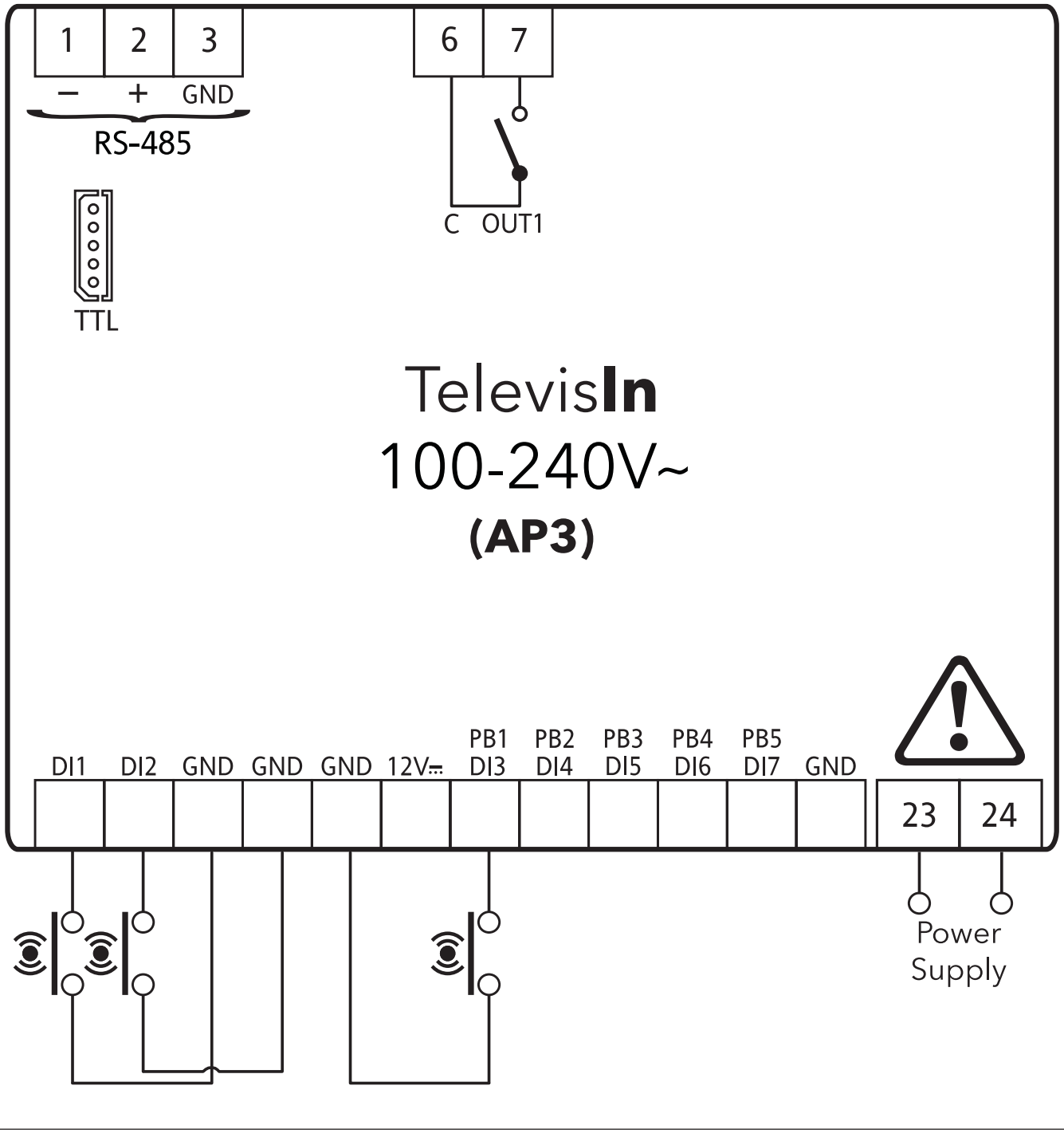


APPLICATION 3

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

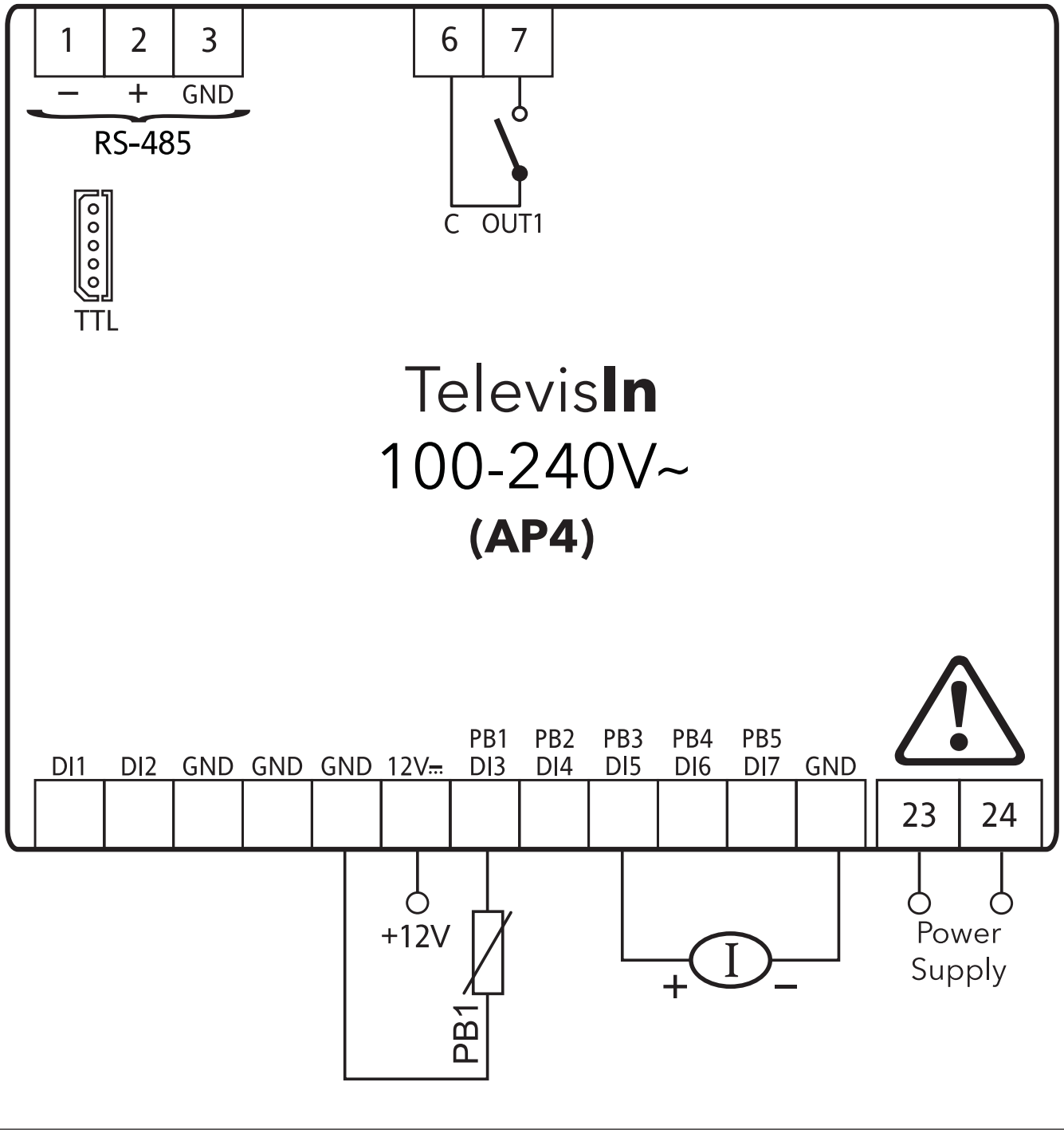


APPLICATION 4

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

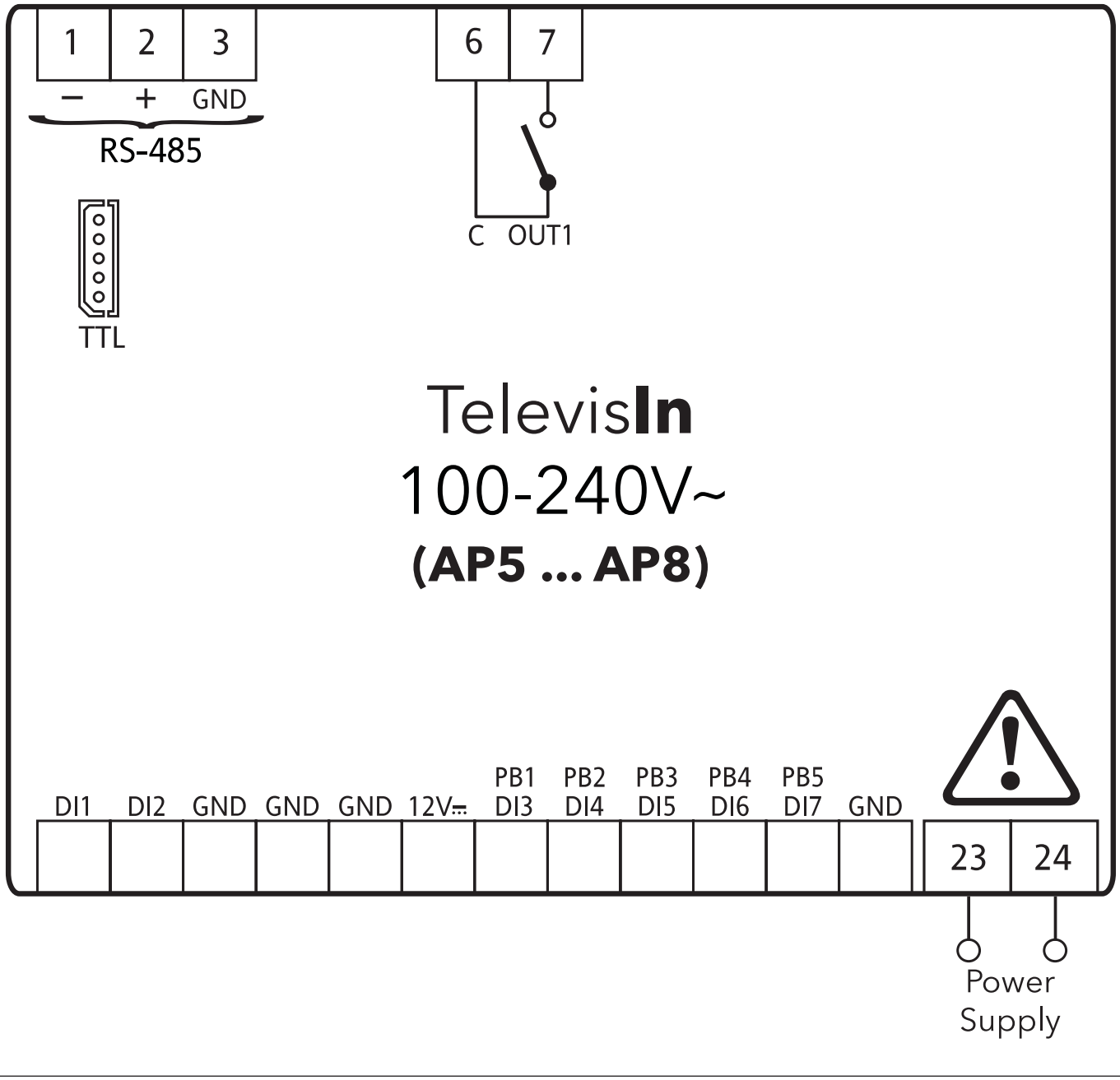


APPLICATIONS 5/6/7/8

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



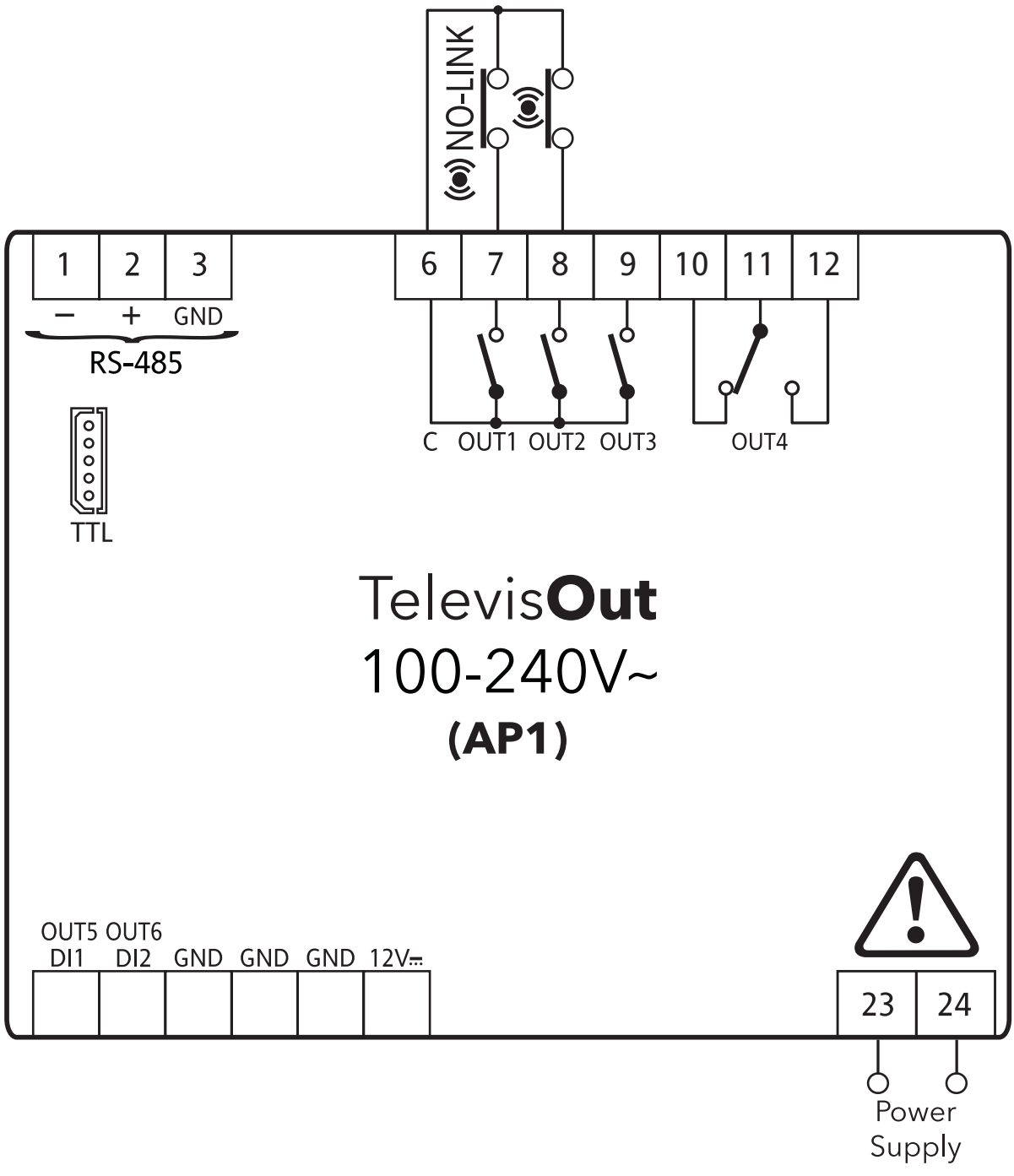
TELEVISOUT MODEL

APPLICATION 1

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

- Digital/OC inputs: DI1/OUT5: *not set (Digital Input/ Open Collector - PWM Output)*
  DI2/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

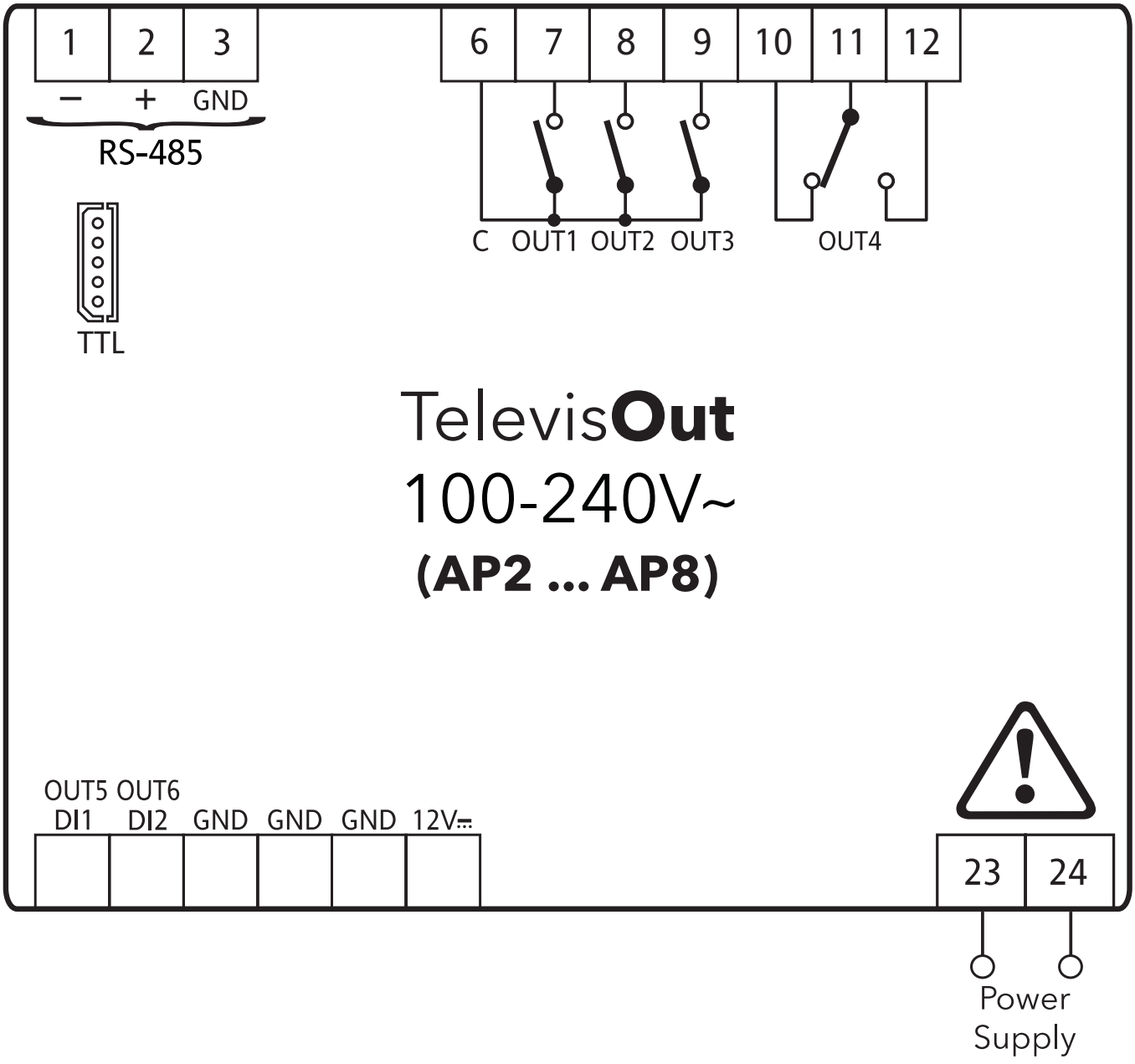


APPLICATIONS 2/3/4/5/6/7/8

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

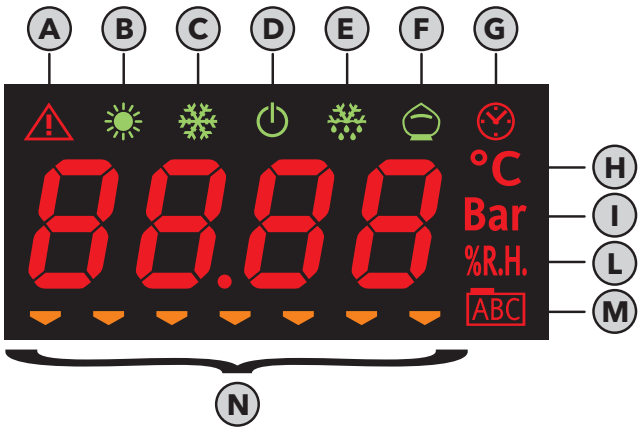
- Digital/OC inputs:	DI1/OUT5:	*not set (Digital Input/ Open Collector - PWM Output)*
	DI2/OUT6:	*not set (Digital Input/ Open Collector - PWM Output)*
- Digital Output:	OUT1:	*not set (2A max 250V~)*
	OUT2:	*not set (2A max 250V~)*
	OUT3:	*not set (2A max 250V~)*
	OUT4:	*not set (2A max 250V~)*

CONNECTION DIAGRAM



LED

TelevisIn & TelevisOut have this display:



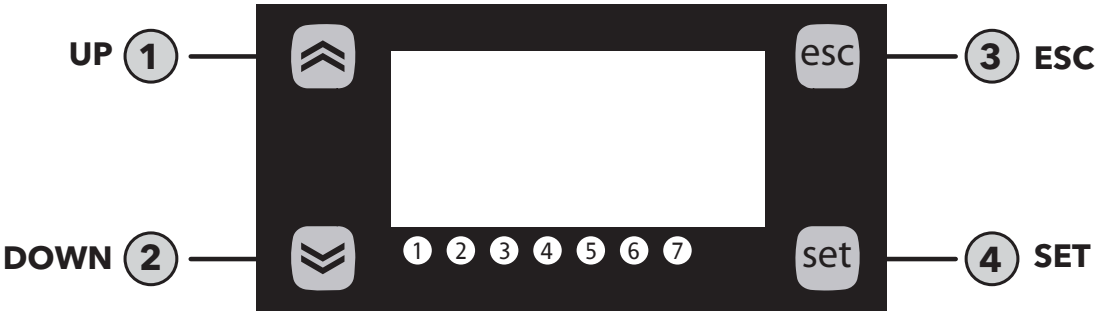
Meaning of LEDs:

	Icon	Description	Colour	Note
A		Alarm	red	acknowledgement from remote and/or DI
B		Blinks when serial communication is on	green	
C		NOT USED	green	
D		ON when the device is powered on but not when it is OFF	green	
E		NOT USED	green	
F		NOT USED	green	
G		NOT USED	red	
H	°C	Temperature unit of measure	red	
I	Bar	Pressure unit of measure	red	
L	%R.H.	Relative humidity unit of measure	red	
M	ABC	On during navigation Blinks when keypad is locked	red	
N	(1)...(7)	Manages utilities connected to the device. TelevisIn: indicates if Digital Inputs are ON 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	⌃⌃	• Increase values • Go to next label	---	---
2	⌄⌄	• Decrease values • Go to previous label	---	---
3	esc	• Exit without saving settings • Go back to previous level	---	---
4	set	• Confirm value / exit and save settings • Go to next level (access to folder, sub-folder, parameter, value) • Open State Menu	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
⌃⌃ + ⌄⌄	**Activates ON/OFF function** Pressing and holding these keys at the same time for 5 seconds or a remote command activates the ON/OFF function. • In OFF mode, the screen shows the word **OFF.** All alarms are disabled, including active and communication ones. Probe data capture remains active.
⌃⌃ + esc	**Activates the LOCK function (only in the "MACHINE STATE" menu).** Pressing and holding both keys together for 5 seconds or a Supervisor command locks / unlocks the keypad. The icon ABC blinks when the keypad is locked; nothing will happen when a key is pressed, not even the setpoint will be displayed.

PRELIMINARY CONFIGURATIONS

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

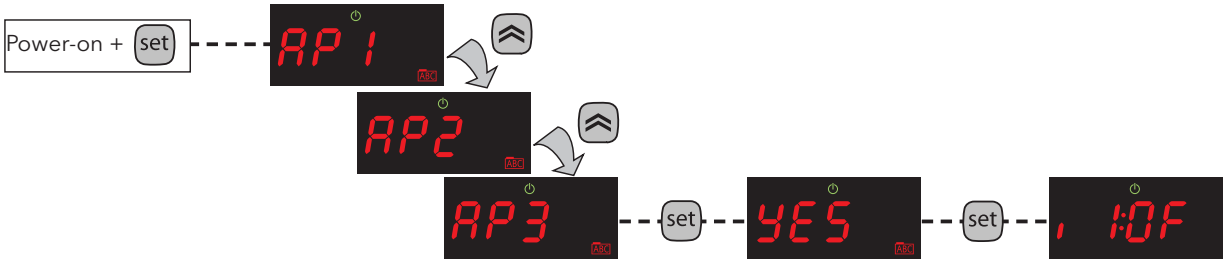
1) Select the preset Application that most closely matches your own.
2) Configure the main parameters listed in the USER menu to suit your requirements.
3) Make sure there are no active alarms (" ⚠ " icon off and labels E1, E2 or E3 not displayed).

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

Televis**In &** Televis**Out** 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 (Televis**In** and Televis**Out**) 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**: CA**x** 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.
  - dr**x** = C ➔ display in °C
  - dr**x** = F ➔ display in °F
  - dr**x** = rH ➔ display in %RH
  - dr**x** = bAr ➔ display in BAR
  - dr**x** = 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:

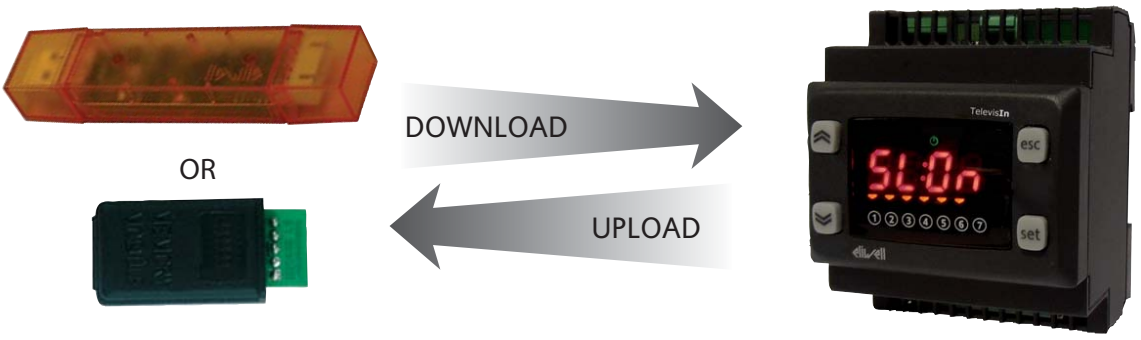
- **dLY** if the operation was successful
- **dLn** if the operation was not successful

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 set, scroll through the parameters using ⩓ and ⩔ then select one of the functions by pressing set:

- **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 set. 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:

UNICARD power supply UNICARD Controller

B) Field power:

UNICARD Controller Controller power supply

UNICARD power supply UNICARD Controller

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**
- **CA4**: calibration value for probe **Pb5**

In this case, the supervisor will read the value of the input + **CA**x (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 **Pb1**.	✓	×
CA2	To calibrate probe **Pb2**.	✓	×
CA3	To calibrate probe **Pb3**.	✓	×
CA4	To calibrate probe **Pb4**.	✓	×
CA5	To calibrate probe **Pb5**.	✓	×
rUP	To select the humidity probe for dewpoint calculation.	✓	×
rtP	To select the temperature probe for dewpoint calculation.	✓	×

DIGITAL INPUTS

Description

Televis**In** and Televis**Out** 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

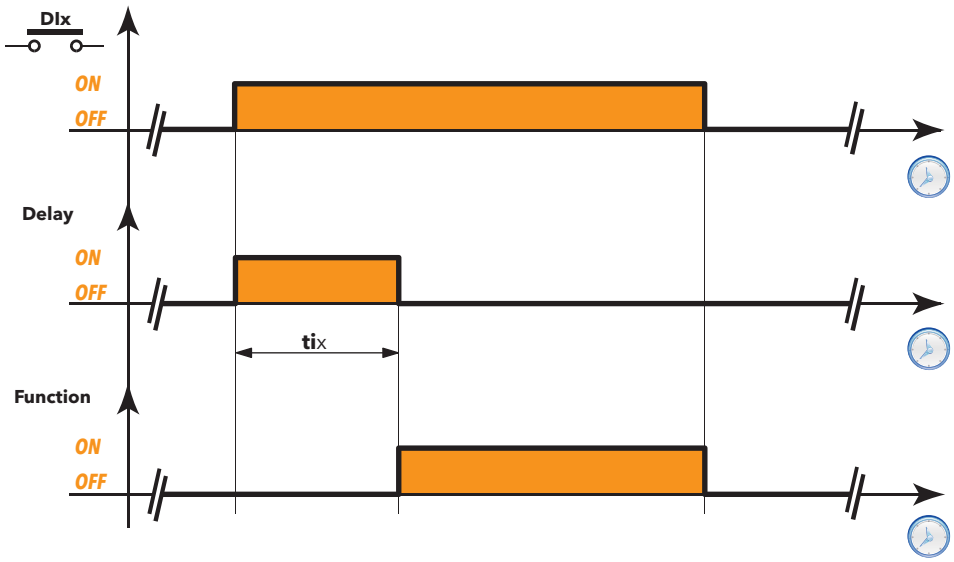
The activation of the associated function can also be delayed by a given time, that can be set in the following parameters:

- **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

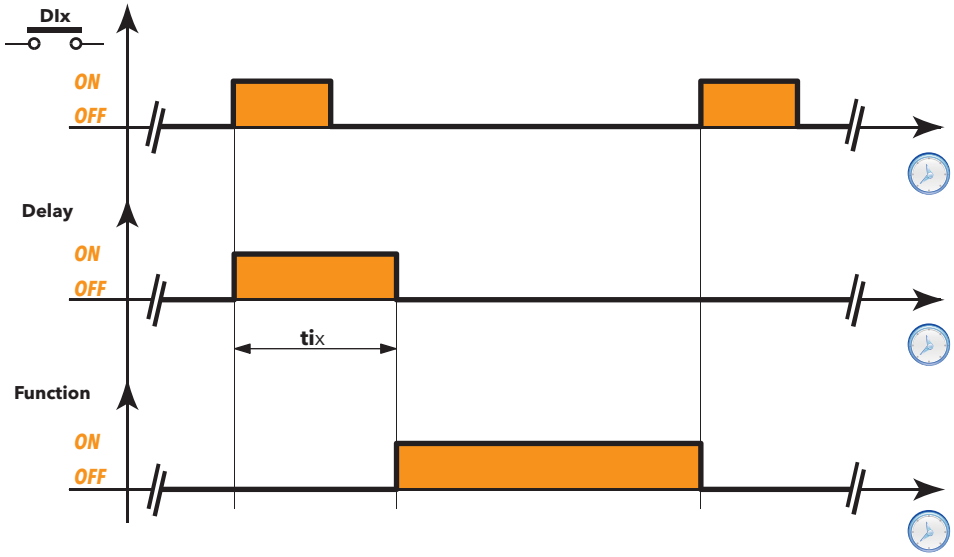
In this mode, the function remains active while the digital input is active.

The control diagram is as follows:



Edge-based function generation

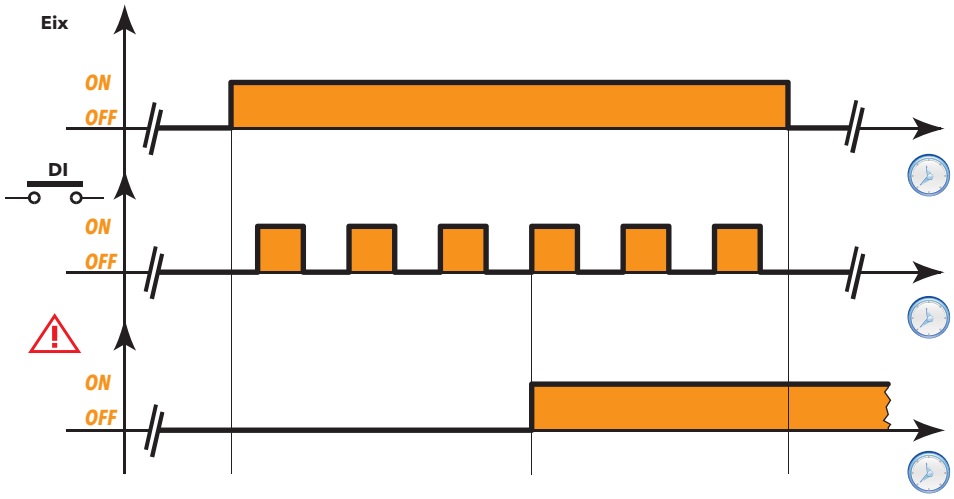
In this mode, the function is enabled and disabled at the positive edge of the impulse on the digital input. The control diagram is as follows:



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 **En**x **= 4** (the alarm activates on the fourth pulse):



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

Examples with: Eix **= 1', En**x **= 4**

Pulse no.	Time
1st	5 secs
2nd	10
3rd	30
4th	31 -> 65

→ Alarm

Pulse no.	Time
1st	5 secs
2nd	10
3rd	30
4th	70
5th	75
6th	80

→ Alarm

Pulse no.	Time
1st	5 secs
2nd	10
3rd	15
4th	20

→ Alarm

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 **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 measurement for parameter d16	✓	×
d16	To set the delay before signalling an alarm on digital input **DI6/Pb4**	✓	×
dt7	To set the unit of measurement for parameter d17	✓	×
d17	To set the delay before signalling an alarm on digital input **DI7/Pb5**	✓	×
En1	Number of activations of digital input DI1.	✓	✓
Ei1	Activation count interval (**En1**) for digital input DI1.	✓	✓
En2	Number of activations of digital input DI2.	✓	✓
Ei2	Activation count interval (**En2**) for digital input DI2.	✓	✓
En3	Number of activations of digital input DI3/Pb1.	✓	×
Ei3	Activation count interval (**En3**) for digital input DI3/Pb1.	✓	×
En4	Number of activations of digital input DI4/Pb2.	✓	×
Ei4	Activation count interval (**En4**) for digital input DI4/Pb2.	✓	×
En5	Number of activations of digital input DI5/Pb3.	✓	×
Ei5	Activation count interval (**En5**) for digital input DI5/Pb3.	✓	×
En6	Number of activations of digital input DI6/Pb4.	✓	×
Ei6	Activation count interval (**En6**) for digital input DI6/Pb4.	✓	×
En7	Number of activations of digital input DI7/Pb5.	✓	×
Ei7	Activation count interval (**En7**) 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**.

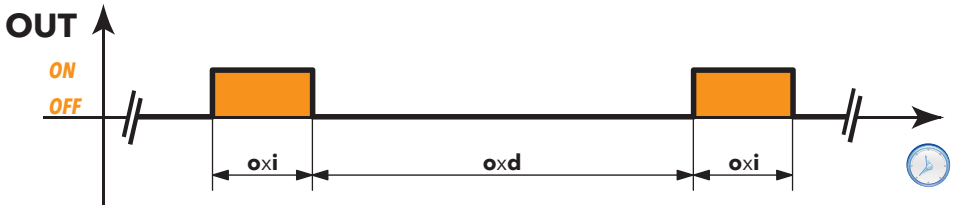
NOTE: Each digital output can be associated with an alarm on an analogue or digital input.

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	Televis**In**	Televis**Out**
OdO	Delay to activate outputs from switch on or after power failure.	×	✓
o1i	Indicates how long digital output 1 (**OUT1**) is active for (ON).	✓	✓
o1d	Indicates how long digital output 1 (**OUT1**) is off for (OFF).	✓	✓
o2i	Indicates how long digital output 2 (**OUT2**) is active for (ON).	×	✓
o2d	Indicates how long digital output 2 (**OUT2**) is off for (OFF).	×	✓
o3i	Indicates how long digital output 3 (**OUT3**) is active for (ON).	×	✓
o3d	Indicates how long digital output 3 (**OUT3**) is off for (OFF).	×	✓
o4i	Indicates how long digital output 4 (**OUT4**) is active for (ON).	×	✓
o4d	Indicates how long digital output 4 (**OUT4**) is off for (OFF).	×	✓
o5i	Indicates how long digital output 5 (**OUT5**) is active for (ON).	×	✓
o5d	Indicates how long digital output 5 (**OUT5**) is off for (OFF).	×	✓
o6i	Indicates how long digital output 6 (**OUT6**) is active for (ON).	×	✓
o6d	Indicates how long digital output 6 (**OUT6**) is off for (OFF).	×	✓
ooF	To activate/disable outputs when the controller is OFF.	×	✓

TELEVISIN TABLES

TELEVISIN "USER" MENU PARAMETERS TABLE

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

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

PAR.	DESCRIPTION	UM	RANGE	AP1	AP2	AP3	AP4	AP5...AP8
tA4	Delay signalling temperature alarm on probe **Pb4**.	min	0 ... 250		0			0
At5	Parameter **HA5** and **LA5** mode intended as the absolute temperature value or the setpoint differential. **AbS** = absolute value; **reL** = relative value.	flag	AbS/rEL	rEL				AbS
SE5	To configure alarm setpoint for probe **Pb5**.	**dr5**	-999.0 ... 999.0	0				0
LA5	Probe **Pb5** minimum alarm.	**dr5**	-999.0 ... HA1	-50				0
HA5	Probe **Pb5** maximum alarm.	**dr5**	LA1 ... 999.0	50				0
tA5	Delay signalling temperature alarm on probe **Pb5**.	min	0 ... 250	0				0
PAO	Alarm override time after device is switched on following a power failure.	min	0 ... 999	120	120			0
	COMMUNICATION parameters							
rEL	Firmware release. Reserved: read-only parameter	/	/	/	/	/	/	/
tAb	Parameters table. Reserved: read-only parameter	/	/	/	/	/	/	/
	DISPLAY parameters							
PS1	PAssword 1. When enabled (**PS1 ≠ 0**) this password provides access to level1 parameters (**User**).	num	0 ... 250	0	0	0	0	0
ndt	Display with decimal point.	flag	n/y					n
CA1	To calibrate probe **Pb1**. (The **UM** depends on the value of parameter **dr1**).	dr1	-999.0 ... 999.0				0	0
CA2	To calibrate probe **Pb2**. (The **UM** depends on the value of parameter **dr2**).	dr2	-999.0 ... 999.0					0
CA3	To calibrate probe **Pb3**. (The **UM** depends on the value of parameter **dr3**).	dr3	-999.0 ... 999.0				0	0
CA4	To calibrate probe **Pb4**. (The **UM** depends on the value of parameter **dr4**).	dr4	-999.0 ... 999.0					0
CA5	To calibrate probe **Pb5**. (The **UM** depends on the value of parameter **dr5**).	dr5	-999.0 ... 999.0					0
Ldd	Time-out value to unlock display.	min	0 ... 250					0
dr1	Unit of measure probe **Pb1**.	num	C/F/rH/bAr/n				C	C
dr2	Unit of measure probe **Pb2**.	num	C/F/rH/bAr/n					C
dr3	Unit of measure probe **Pb3**.	num	C/F/rH/bAr/n				rH	C
dr4	Unit of measure probe **Pb4**.	num	C/F/rH/bAr/n					C
dr5	Unit of measure probe **Pb5**.	num	C/F/rH/bAr/n					C
ddd	Selects type of value to display.	num	0 ... 19				6	0
	COPY CARD/UNICARD parameters							
UL	Upload. To transfer programming parameters from instrument to CopyCard.	/	/	/	/	/	/	/
dL	Download. To transfer programming parameters from Copy Card to instrument.	/	/	/	/	/	/	/
Fr	Formatting. To erase data on Copy Card.	/	/	/	/	/	/	/
PA2	➤ Folder that permits access to the "Installer" menu. If **PS2≠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
	ANALOGUE INPUT parameters (Ai folder)							
H41	To set the presence of probe **Pb1/DI3**. **diS** (0) = input not active **di** (1) = input configured as a digital input **Pro** (2) = input configured as a probe	num	diS/di/Pro	Pro			Pro	diS
H42	To set the presence of probe **Pb2/DI4**. Same as **H41**.	num	diS/di/Pro	Pro			diS	diS
H43	To set the presence of probe **Pb3/DI5**. Same as **H41**.	num	diS/di/Pro		Pro		Pro	diS
H44	To set the presence of probe **Pb4/DI6**. Same as **H41**.	num	diS/di/Pro		Pro		diS	diS
H45	To set the presence of probe **Pb5/DI7**. Same as **H41**.	num	diS/di/Pro	Pro			diS	diS
H00	To select the type of probes connected to **Pb1**, **Pb2** and **Pb5**. **ntc** (0) = NTC **Ptc** (1) = PTC **Pt10** (2) = PT1000	num	ntc/Ptc/Pt10	Ptc			ntc	ntc
H01	To select the type of probe connected to **Pb3**. **ntc** (0) = NTC **01** (1) = 0 ... 1V **05** (2) = 0 ... 5V **010** (3) = 0 ... 10V **020** (4) = 0 ... 20mA **420** (5) = 4 ... 20mA	num	ntc/01/05 010/020/420		420		420	ntc
H02	To select the type of probe connected to **Pb4**. **ntc** (0) = NTC **01** (1) = 0 ... 1V **05** (2) = 0 ... 5V **010** (3) = 0 ... 10V **020** (4) = 0 ... 20mA **420** (5) = 4 ... 20mA	num	ntc/01/05 010/020/420		420		ntc	ntc
H03	Lower display limit probe Pb3. (The **UM** depends on the value of parameter **dr3**).	**dr3**	-999.0...999.0		-10		0	0
H04	Upper display limit probe Pb3. (The **UM** depends on the value of parameter **dr3**).	**dr3**	-999.0...999.0		70		100	0
H05	Lower display limit probe Pb4. (The **UM** depends on the value of parameter **dr4**).	**dr4**	-999.0...999.0		-10		0	0
H06	Upper display limit probe Pb4. (The **UM** depends on the value of parameter **dr4**).	**dr4**	-999.0...999.0		70		100	0
rUP	To select which humidity probe to use for dewpoint calculation. **0** = disabled **1** = probe Pb3 **2** = probe Pb4	num	0 ... 2				1	0
rtP	To select which temperature probe to use for dewpoint calculation. **0** = disabled **1** = probe Pb1 **2** = probe Pb2 **3** = probe Pb3 **4** = probe Pb4 **5** = probe Pb5	num	0 ... 5				1	0
	DIGITAL INPUT parameters (di folder)							
H11	To configure digital input 1 (**DI1**). **0** = disabled **1** = acknowledge digital output **OUT1** **2** = not used **3** = not used **4** = not used **5** = not used **6** = not used **7** = external alarm **8** = general **NOTE:** - The "+" sign indicates that the input is active when the contact is closed. - The "−" sign indicates that the input is active when the contact is open.	num	-8 ... 8			7	0	0
H12	To configure digital input 2 (**DI2**). Same as **H11**.	num	-8 ... 8			7	0	0
H13	To configure digital input 2 (**DI3/PB1**). Same as **H11**.	num	-8 ... 8			7		0
H14	To configure digital input 2 (**DI4/PB2**). Same as **H11**.	num	-8 ... 8					0
H15	To configure digital input 2 (**DI5/PB3**). Same as **H11**.	num	-8 ... 8					0

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

PAR.	DESCRIPTION	UM	RANGE	AP1	AP2	AP3	AP4	AP5...AP8
d13	Delay signalling alarm on digital input **DI3**.	**dt3**	0 ... 250			0		0
dt4	To set the unit of measure for parameter **d14**. **SEC** (0) = seconds **Pri** (1) = minutes	flag	SEC/Pri					SEC
d14	Delay signalling alarm on digital input **DI4**.	**dt4**	0 ... 250					0
dt5	To set the unit of measure for parameter **d15**. **SEC** (0) = seconds **Pri** (1) = minutes	flag	SEC/Pri					SEC
d15	Delay signalling alarm on digital input **DI5**.	**dt5**	0 ... 250					0
dt6	To set the unit of measure for parameter **d16**. **SEC** (0) = seconds **Pri** (1) = minutes	flag	SEC/Pri					SEC
d16	Delay signalling alarm on digital input **DI6**.	**dt6**	0 ... 250					0
dt7	To set the unit of measure for parameter **d17**. **SEC** (0) = seconds **Pri** (1) = minutes	flag	SEC/Pri					SEC
d17	Delay signalling alarm on digital input **DI7**.	**dt7**	0 ... 250					0
En1	Number of activations of digital input **DI1**. **0** = disabled	num	0 ... 15			0	0	0
Ei1	Activation count interval (**En1**) for digital input **DI1**.	min	0 ... 200			0	0	0
En2	Number of activations of digital input **DI2**. **0** = disabled	num	0 ... 15			0	0	0
Ei2	Activation count interval (**En2**) for digital input **DI2**.	min	0 ... 200			0	0	0
En3	Number of activations of digital input **DI3**. **0** = disabled	num	0 ... 15			0		0
Ei3	Activation count interval (**En**) for digital input **DI3**.	min	0 ... 200			0		0
En4	Number of activations of digital input **DI4**. **0** = disabled	num	0 ... 15					0
Ei4	Activation count interval (**En4**) for digital input **DI4**.	min	0 ... 200					0
En5	Number of activations of digital input **DI5**. **0** = disabled	num	0 ... 15					0
Ei5	Activation count interval (**En5**) for digital input **DI5**.	min	0 ... 200					0
En6	Number of activations of digital input **DI6**. **0** = disabled	num	0 ... 15					0
Ei6	Activation count interval (**En6**) for digital input **DI6**.	min	0 ... 200					0
En7	Number of activations of digital input **DI7**. **0** = disabled	num	0 ... 15					0
Ei7	Activation count interval (**En7**) for digital input **DI7**.	min	0 ... 200					0
	digital output parameters (Out folder)							
H21	To configure digital input 1 (**OUT1**). **0** = disabled **1** = no-link **2** = general alarm **3** = temperature alarm probe **Pb1** **4** = temperature alarm probe **Pb2** **5** = temperature alarm probe **Pb3** **6** = temperature alarm probe **Pb4** **7** = temperature alarm **Pb5** **8** = alarm digital input **DI1** **9** = alarm digital input **DI2** **10** = alarm digital input **DI3** **11** = alarm digital input **DI4** **12** = alarm digital input **DI5** **13** = alarm digital input **DI6** **14** = alarm digital input **DI7** **NOTE:** - The "+" sign indicates that the relay will activate when there is an alarm. - The "-" sign indicates that the relay will not activate when there is an alarm.	num	-14 ... 14				0	0
OdO	Delay to activate outputs from switch on or after power failure.	min	0 ... 250				0	
ooF	To activate/disable outputs when the controller is OFF. **n** (0) = no; **y** (1) = yes.	flag	n/y				0	
	ALARM parameters (AL folder)							
AFd	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
At1	Parameter **HA1** and **LA1** mode intended as the absolute temperature value or the setpoint differential. **AbS** (0) = absolute value; **rEL** (1) = relative value. **NOTE**: In case of relative values (par. **At1=1**), parameter **HA1** should be set to positive values, whilst parameter **LA1** should only have negative values.	flag	AbS/rEL	rEL			rEL	AbS
SE1	To configure alarm setpoint for probe **Pb1**.	**dr1**	-999.0 ... 999.0	AbS			AbS	AbS
LA1	**Pb1** probe low alarm. Temperature value (intended as the distance from the setpoint **SE1** or absolute value in relation to **At1**) which will generate an alarm signal when the value read drops below it.	**dr1**	-999.0 ... HA1	-50			-50	0
HA1	**Pb1** probe high alarm. Temperature value (intended as the distance from the setpoint **SE1** or absolute value in relation to **At1**) which will generate an alarm signal when the value read goes above it.	**dr1**	LA1 ... 999.0	50			50	0
tA1	Delay signalling temperature alarm on probe **Pb1**. **This parameter refers to high/low temperature alarms LA1 and HA1 only.**	min	0 ... 250	0			0	0
At2	Parameter **HA2** and **LA2** mode intended as the absolute temperature value or as the setpoint differential. **AbS** (0) = absolute value; **rEL** (1) = relative value. **NOTE**: In case of relative values (par. **At2=1**), parameter **HA2** should be set to positive values, whilst parameter **LA2** should only have negative values.	flag	AbS/rEL	rEL			rEL	AbS
SE2	To configure alarm setpoint for probe **Pb2**.	**dr2**	-999.0 ... 999.0	0			0	0
LA2	Probe **Pb2** minimum alarm. Temperature value (intended as the distance from the setpoint **SE2** or absolute value in relation to **At2**) which will generate an alarm signal when the value read drops below it.	**dr2**	-999.0 ... HA1	-50			-50	0
HA2	Probe **Pb2** maximum alarm. Temperature value (intended as the distance from the setpoint **SE2** or absolute value in relation to **At2**) which will generate an alarm signal when the value read goes above it.	**dr2**	LA1 ... 999.0	50			50	0
tA2	Delay signalling temperature alarm on probe **Pb2**. **This parameter refers to high/low temperature alarms LA2 and HA2 only.**	min	0 ... 250	0			0	0
At3	Parameter **HA3** and **LA3** mode intended as the absolute temperature value or the setpoint differential. **AbS** (0) = absolute value; **rEL** (1) = relative value. **NOTE**: In case of relative values (par. **At3=1**), parameter **HA3** should be set to positive values, whilst parameter **LA3** should only have negative values.	flag	AbS/rEL		rEL		rEL	AbS
SE3	To configure alarm setpoint for probe **Pb3**.	**dr3**	-999.0 ... 999.0		0		0	0
LA3	Probe **Pb3** minimum alarm. Temperature value (intended as the distance from the setpoint **SE3** or absolute value in relation to **At3**) which will generate an alarm signal when the value read drops below it.	**dr3**	-999.0 ... HA1		-50		-50	0
HA3	Probe **Pb3** maximum alarm. Temperature value (intended as the distance from the setpoint **SE3** or absolute value in relation to **At3**) which will generate an alarm signal when the value read goes above it.	**dr3**	LA1 ... 999.0		50		50	0
tA3	Delay signalling temperature alarm on probe **Pb3**. **This parameter refers to high/low temperature alarms LA3 and HA3 only.**	min	0 ... 250		0		0	0
At4	Parameter **HA4** and **LA4** mode intended as the absolute temperature value or the setpoint differential. **AbS** (0) = absolute value; **rEL** (1) = relative value. **NOTE**: In case of relative values (par. **At4=1**), parameter **HA4** should be set to positive values, whilst parameter **LA4** should only have negative values.	flag	AbS/rEL		rEL		rEL	AbS
SE4	To configure alarm setpoint for probe **Pb4**.	**dr4**	-999.0 ... 999.0		0		0	0
LA4	Probe **Pb4** minimum alarm. Temperature value (intended as the distance from the setpoint **SE4** or absolute value in relation to **At4**) which will generate an alarm signal when the value read drops below it.	**dr4**	-999.0 ... HA1		-50		-50	0
HA4	Probe **Pb4** maximum alarm. Temperature value (intended as the distance from the setpoint **SE4** or absolute value in relation to **At4**) which will generate an alarm signal when the value read goes above it.	**dr4**	LA1 ... 999.0		50		50	0
tA4	Delay signalling temperature alarm on probe **Pb4**. **This parameter refers to high/low temperature alarms LA4 and HA4 only.**	min	0 ... 250		0		0	0

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

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

TELEVISOUT TABLES

TELEVISOUT "USER" MENU PARAMETERS TABLE

PAR.	DESCRIPTION	UM	RANGE	AP1	AP2...AP8
	DIGITAL INPUT parameters				
H11	To configure digital input 1 (**DI1**). **0** = disabled	num	-8 ... 8		0
H12	To configure digital input 2 (**DI2**). **0** = disabled	num	-8 ... 8		0
i1L	To enable digital input **DI1** to block the value of the analogue input shown in the main menu (set in parameter **ddd**) .	flag	n/y		n
i2L	To enable digital input **DI2** to block the value of the analogue input shown in the main menu (set in parameter **ddd**) .	flag	n/y		n
i1d	To configure the acquisition mode for digital input **DI1**.	flag	Ed/LE		Ed
i2d	To configure the acquisition mode for the activation of digital input **DI2**.	flag	Ed/LE		Ed
dt1	To set the unit of measure for parameter **d11**. **SEC** = seconds; **Pri** = minutes.	flag	SEC/Pri		SEC
d11	Delay signalling alarm on digital input **DI1**.	**dt1**	0 ... 250		0
dt2	To set the unit of measure for parameter **d12**. **SEC** = seconds; **Pri** = minutes.	flag	SEC/Pri		SEC
d12	Delay signalling alarm on digital input **DI2**.	**dt2**	0 ... 250		0
En1	Number of activations of digital input **DI1**. **0** = disabled	num	0 ... 15		0
Ei1	Activation count interval (**En1**) for digital input **DI1**.	min	0 ... 200		0
En2	Number of activations of digital input **DI2**. **0** = disabled	num	0 ... 15		0
Ei2	Activation count interval (**En2**) for digital input **DI2**.	min	0 ... 200		0
	DIGITAL OUTPUT parameters				
H21	To configure digital output 1 (**OUT1**).	num	-14 ... 14	-1	0
H22	To configure digital output 2 (**OUT2**).	num	-14 ... 14	-2	0
H23	To configure digital output 3 (**OUT3**).	num	-14 ... 14		0
H24	To configure digital output 4 (**OUT4**).	num	-14 ... 14		0
H25	To configure analogue output 1 (**OUT5**).	num	-14 ... 14		0
H26	To configure analogue output 2 (**OUT6**).	num	-14 ... 14		0
0d0	Delay to activate outputs from switch on or after power failure.	min	0 ... 250	0	0
o1i	ON time phone dialler relay 1 (**OUT1**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o1d	OFF time phone dialler relay 1 (**OUT1**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
02i	ON time phone dialler relay 2 (**OUT2**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
02d	OFF time phone dialler relay 2 (**OUT2**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o3i	ON time phone dialler relay 3 (**OUT3**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o3d	OFF time phone dialler relay 3 (**OUT3**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o4i	ON time phone dialler relay 4 (**OUT4**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o4d	OFF time phone dialler relay 4 (**OUT4**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o5i	ON time phone dialler relay 5 (**OUT5**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o5d	OFF time phone dialler relay 5 (**OUT5**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o6i	ON time phone dialler relay 6 (**OUT6**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o6d	OFF time phone dialler relay 6 (**OUT6**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
ooF	To activate/disable outputs when the controller is OFF. **n** (0) = no; **y** (1) = yes.	flag	n/y		n

PAR.	DESCRIPTION	UM	RANGE	AP1	AP2...AP8
	ALARM parameters				
PAO	Alarm override time after device is switched on following a power failure.	min	0 ... 999		0
Atd	Duration of LINK² supervision alarm. **0** = alarm disabled.	min	0 ... 250		0
Art	LINK² supervision alarm activation period. **0** = disabled	min	0 ... 250		0
dtA	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
CLC	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
	COMMUNICATION parameters				
rEL	Firmware release. Reserved: read-only parameter	/	/	/	/
tAb	Parameters table. Reserved: read-only parameter	/	/	/	/
	DISPLAY parameters				
PS1	PAssword 1. When enabled (**PS1 ≠ 0**) this password provides access to level1 parameters (**User**).	num	0 ... 250	0	0
ddd	Selects type of value to display.	num	0 ... 19		0
	COPY CARD/UNICARD parameters				
UL	Upload. To transfer programming parameters from instrument to Copy Card.	/	/	/	/
dL	Download. To transfer programming parameters from Copy Card to instrument.	/	/	/	/
Fr	Formatting. To erase data on Copy Card.	/	/	/	/
	FUNCTIONS				

The following functions are available:

Function	Function label ACTIVE	Function label not active
DO1 alarm acknowledgement	tAo1	tAo1
DO2 alarm acknowledgement	tAo2	tAo2

PA2 ➤ Folder that permits access to the "Installer" menu. If **PS2≠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".

TELEVISOUT "INSTALLER" MENU PARAMETERS TABLE

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

PAR.	DESCRIPTION	UM	RANGE	AP1	AP2...AP8
H24	To configure digital output 4 (**OUT4**). Same as **H21**.	num	-14 ... 14		0
H25	To configure analogue output 1 (**OUT5**). Same as **H21**.	num	-14 ... 14		0
H26	To configure analogue output 2 (**OUT6**). Same as **H21**.	num	-14 ... 14		0
OdO	Delay to activate outputs from switch on or after power failure.	min	0 ... 250	0	0
o1i	ON time phone dialler relay 1 (**OUT1**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o1d	OFF time phone dialler relay 1 (**OUT1**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
02i	ON time phone dialler relay 2 (**OUT2**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
02d	OFF time phone dialler relay 2 (**OUT2**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o3i	ON time phone dialler relay 3 (**OUT3**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o3d	OFF time phone dialler relay 3 (**OUT3**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o4i	ON time phone dialler relay 4 (**OUT4**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o4d	OFF time phone dialler relay 4 (**OUT4**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o5i	ON time phone dialler relay 5 (**OUT5**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o5d	OFF time phone dialler relay 5 (**OUT5**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
o6i	ON time phone dialler relay 6 (**OUT6**). Indicates how long the digital output is active for (ON).	sec	0 ... 250		0
o6d	OFF time phone dialler relay 6 (**OUT6**). Indicates how long the digital output is off for (OFF).	sec	0 ... 250		0
ooF	To activate/disable outputs when the controller is OFF. **n** (0) = no; **y** (1) = yes.	flag	n/y	n	n
	ALARM parameters (AL folder)				
PAO	Alarm override time after device is switched on following a power failure. **This parameter refers to high/low temperature alarms only**.	min	0 ... 999		0
Atd	Duration of LINK^2 supervision alarm. **0** = alarm disabled.	min	0 ... 250		0
Art	LINK^2 supervision alarm activation period. **0** = disabled	min	0 ... 250		0
dtA	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
CLC	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. **NOTE**: This function is only enabled if the following conditions occur: 1) At least one relay output has been configured as a general alarm. 2) At least one relay output has been configured as no-link. 3) CLC > 0 4) The supervisor has not blocked communication via the relative command.	min	0 ... 250	0	0
	COMMUNICATION parameters (Add folder)				
PtS	Protocol selection **t** (0) = Televis **d** (1) = ModBus	flag	t/d	t **(Parameter not present in vectors)**	
dEA	Device address: indicates the device address to the management protocol.	num	0 ... 14	0 **(Parameter not present in vectors)**	
FAA	Family address: indicates the device family to the management protocol.	num	0 ... 14	0 **(Parameter not present in vectors)**	
Adr	Modbus protocol controller address	num	1 ... 250	1 **(Parameter not present in vectors)**	
Pty	To set the Modbus parity bit **n** (0) = none **E** (1) = even **o** (2) = uneven	num	n/E/o	E **(Parameter not present in vectors)**	
StP	To select the Modbus stop bit **1b** (0) = 1 stop bit **2b** (1) = 2 stop bits	flag	1b/2b	1b **(Parameter not present in vectors)**	

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

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 ⚠	Reset	Parameters involved to 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
E1	Probe Pb1 faulty	• Measured values are outside operating range • probe faulty/short-circuited/open	• **E1** label shown on display • Alarm icon permanently on	• check probe wiring • replace probe
E2	Probe Pb2 faulty	• Measured values are outside operating range • probe faulty/short-circuited/open	• **E2** label shown on display • Alarm icon permanently on.	• check probe wiring • replace probe
E3	Probe Pb3 faulty	• Measured values are outside operating range • probe faulty/short-circuited/open	• **E3** label shown on display • Alarm icon permanently on.	• check probe wiring • replace probe
E4	Probe Pb4 faulty	• Measured values are outside operating range • probe faulty/short-circuited/open	•**E4** label shown on display • Alarm icon permanently on	• check probe wiring • replace probe
E5	Probe Pb5 faulty	• Measured values are outside operating range • probe faulty/short-circuited/open	•**E5** label shown on display • Alarm icon permanently on	• check probe wiring • replace probe
AH1	HIGH temperature alarm Pb1	Value read by probe Pb1 > HA1 after time set in "tA1". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AH1** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb1 to return below (**HA1-AFd**).
AL1	LOW temperature alarm Pb1	Value read by probe Pb1 > LA1 after time set in "tA1". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AL1** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb1 to rise above (**LA1+AFd**).
AH2	HIGH temperature alarm Pb2	Value read by probe Pb2 > HA2 after time set in "tA2". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AH2** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb2 to return below (**HA2-AFd**).
AL2	LOW temperature alarm Pb2	Value read by probe Pb2 > LA2 after time set in "tA2". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AL2** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb2 to rise back above (**LA2+AFd**).
AH3	HIGH temperature alarm Pb3	Value read by probe Pb3 > HA3 after time set in "tA3". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AH3** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb3 to return below (**HA3-AFd**).
AL3	LOW temperature alarm Pb3	Value read by probe Pb3 > LA3 after time set in "tA3". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AL3** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb3 to rise back above (**LA3+AFd**).
AH4	HIGH temperature alarm Pb4	Value read by probe Pb4 > HA4 after time set in "tA4". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AL4** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb4 to return below (**HA4-AFd**).
AL4	LOW temperature alarm Pb4	Value read by probe Pb4 > LA4 after time set in "tA4". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AL4** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb4 to rise back above (**LA4+AFd**).
AH5	HIGH temperature alarm Pb5	Value read by probe Pb5 > HA5 after time set in "tA5". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AH5** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb5 to return below (**HA5-AFd**).
AL5	LOW temperature alarm Pb5	Value read by probe Pb5 > LA5 after time set in "tA5". (see "MAX/MIN TEMPERATURE ALARMS")	• Label **AL5** recorded in the **AL** folder • No effect on control	• Wait for temperature value read by Pb5 to rise back above (**LA5+AFd**).
EA1	External Alarm	Digital input DI1 activated (**H11 = ±7**)	• Label **EA1** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on DI1
EA2	External Alarm	Digital input DI2 activated (**H12 = ±7**)	• Label **EA2** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on Di2

Label	Fault	Cause	Effects	Remedy
EA3	External Alarm	Digital input DI3/Pb1 activated (**H13 = ±7**)	• Label **EA3** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm DI3/Pb1
EA4	External Alarm	Digital input DI4/Pb2 activated (**H14 = ±7**)	• Label **EA4** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on DI4/Pb2
EA5	External Alarm	Digital input DI5/Pb3 activated (**H15 = ±7**)	• Label **EA5** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on DI5/Pb3
EA6	External Alarm	Digital input DI6/Pb4 activated (**H16 = ±7**)	• Label **EA6** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on DI6/Pb4
EA7	External Alarm	Digital input DI7/Pb5 activated (**H17 = ±7**)	• Label **EA7** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on DI7/Pb5
A1	General alarm from supervisor	Activation of digital output OUT1 configured as general alarm (**H21 = 2**)	• Label **A1** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on OUT1
A2	General alarm from supervisor	Activation of digital output OUT2 configured as general alarm (**H22 = 2**)	• Label **A2** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on OUT2
A3	General alarm from supervisor	Activation of digital output OUT3 configured as general alarm (**H23 = 2**)	• Label **A3** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on OUT3
A4	General alarm from supervisor	Activation of digital output OUT4 configured as general alarm (**H24 = 2**)	• Label **A4** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on OUT4
A5	General alarm from supervisor	Activation of digital output OUT5/DI1 configured as general alarm (**H25 = 2**)	• Label **A5** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on OUT5/DI1
A6	General alarm from supervisor	Activation of digital output OUT6/DI2 configured as general alarm (**H26 = 2**)	• Label **A6** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm on OUT6/DI2
L_OF	No-link alarm from supervisor	Activation of a digital output configured as no-link. (**H21...H26 = 1**)	• Label **L_OF** recorded in the **AL** folder • Alarm icon permanently on	• Check and remove the external cause which triggered the alarm
SL:OF	No-link alarm	The device is no longer communicating with the supervisor	•**SL:OF** label shown on display • Alarm icon permanently on	• Restore communication between the device and the supervisor.

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
E1	Probe Pb1 error	✓	×
E2	Probe Pb2 error	✓	×
E3	Probe Pb3 error	✓	×
E4	Probe Pb4 error.	✓	×
E5	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** Televis**In 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: ≥ **HAx** is **Atx=AbS(olute)** and ≥ than (**Sex + HAx**) if **Atx=rEL(ative)**
- Low alarm: ≤ **LAx** if **Atx=AbS(olute)** and ≤ than (**Sex + LAx**) if **Atx=rEL(ative)**

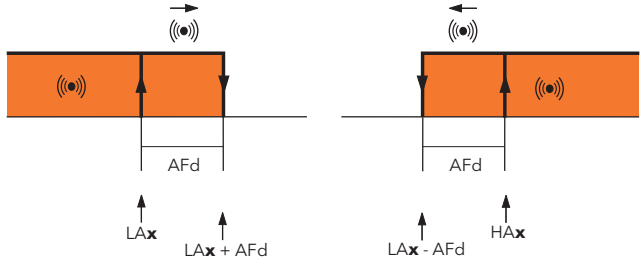
If **Atx=AbS(olute)** the values of **HAx and LAx** must be with a sign, if **Atx=rEL(ative)** it is necessary that **HAx > 0 and LAx < 0**.

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).

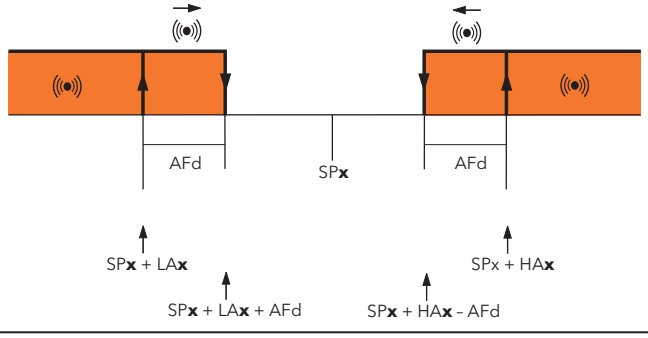
The maximum/minimum alarm will be reset when the temperature of probe Pb1 is:

- Reset from high alarm: ≤ (**HAx - AFd**) if **Atx=Ab(solute)** and ≤ (**Sex + HAx - AFd**) if **Atx=rE(lative)**
- Reset after low alarm: ≥ (**LAx + AFd**) if **Atx=Ab(solute)** and ≥ (**Sex + LAx + AFd**) if **Atx=rE(lative)**

TEMPERATURE AS AN ABSOLUTE VALUE (Atx=0)



TEMPERATURE VALUE RELATIVE TO SEx (Atx=1)



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
AH1	High temperature alarm referring to probe Pb1	✓	×
AL1	Low temperature alarm referring to probe Pb1	✓	×
AH2	High temperature alarm referring to probe Pb2	✓	×
AL2	Low temperature alarm referring to probe Pb2	✓	×
AH3	High temperature alarm referring to probe Pb3	✓	×
AL3	Low temperature alarm referring to probe Pb3	✓	×
AH4	High temperature alarm referring to probe Pb4	✓	×
AL4	Low temperature alarm referring to probe Pb4	✓	×
AH5	High temperature alarm referring to probe Pb5	✓	×
AL5	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
SE1	To configure alarm setpoint for probe Pb1.	✓	×
SE2	To configure alarm setpoint for probe Pb2.	✓	×
SE3	To configure alarm setpoint for probe Pb3.	✓	×
SE4	To configure alarm setpoint for probe Pb4.	✓	×
SE5	To configure alarm setpoint for probe Pb5.	✓	×
At1	Parameter HA1 and LA1 (absolute or relative) mode for setpoint SE1	✓	×
At2	Parameter HA2 and LA2 (absolute or relative) mode for setpoint SE2	✓	×
At3	Parameter HA3 and LA3 (absolute or relative) mode for setpoint SE3	✓	×
At4	Parameter HA4 and LA4 (absolute or relative) mode for setpoint SE4	✓	×
At5	Parameter HA5 and LA5 (absolute or relative) mode for setpoint SE5	✓	×
Afd	Alarm activation differential	✓	×
HA1	Maximum alarm threshold probe Pb1	✓	×
LA1	Minimum alarm threshold probe Pb1	✓	×
HA2	Maximum alarm threshold probe Pb2	✓	×
LA2	Minimum alarm threshold probe Pb2	✓	×
HA3	Maximum alarm threshold probe Pb3	✓	×
LA3	Minimum alarm threshold probe Pb3	✓	×
HA4	Maximum alarm threshold probe Pb4	✓	×
LA4	Minimum alarm threshold probe Pb4	✓	×
HA5	Maximum alarm threshold probe Pb5	✓	×
LA5	Minimum alarm threshold probe Pb5	✓	×
PAO	Temperature alarms disabling time from power-on	✓	×
tA1	Time delay to signal temperature alarm on probe Pb1	✓	×
tA2	Time delay to signal temperature alarm on probe Pb2	✓	×
tA3	Time delay to signal temperature alarm on probe Pb3	✓	×
tA4	Time delay to signal temperature alarm on probe Pb4	✓	×
tA5	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**x** activations occur in the time period set in Ei**x** (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
EA1	External alarm on input DI1	✓	✓
EA2	External alarm on input DI2	✓	✓
EA3	External alarm on input DI3/PB1	✓	×
EA4	External alarm on input DI4/PB2	✓	×
EA5	External alarm on input DI5/PB3	✓	×
EA6	External alarm on input DI6/PB4	✓	×
EA7	External alarm on input DI7/PB5	✓	×

USER PARAMETERS

Label	Description	TelevisIn	TelevisOut
En1	Number of activations of digital input DI1. **0** = disabled.	✓	✓
Ei1	Activation count interval (**En1**) for digital input DI1.	✓	✓
En2	Number of activations of digital input DI2. **0** = disabled.	✓	✓
Ei2	Activation count interval (**En2**) for digital input DI2.	✓	✓
En3	Number of activations of digital input DI3. **0** = disabled.	✓	×
Ei3	Activation count interval (**En3**) for digital input DI3.	✓	×
En4	Number of activations of digital input DI4. **0** = disabled.	✓	×
Ei4	Activation count interval (**En4**) for digital input DI4.	✓	×
En5	Number of activations of digital input DI5. **0** = disabled.	✓	×
Ei5	Activation count interval (**En5**) for digital input DI5.	✓	×
En6	Number of activations of digital input DI6. **0** = disabled.	✓	×
Ei6	Activation count interval (**En6**) for digital input DI6.	✓	×
En7	Number of activations of digital input DI7. **0** = disabled.	✓	×
Ei7	Activation count interval (**En7**) 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, Televis**In**/Televis**Out** 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 (**Televis**Out** only**)**
- The supervisor has not blocked communication via the relative command.

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

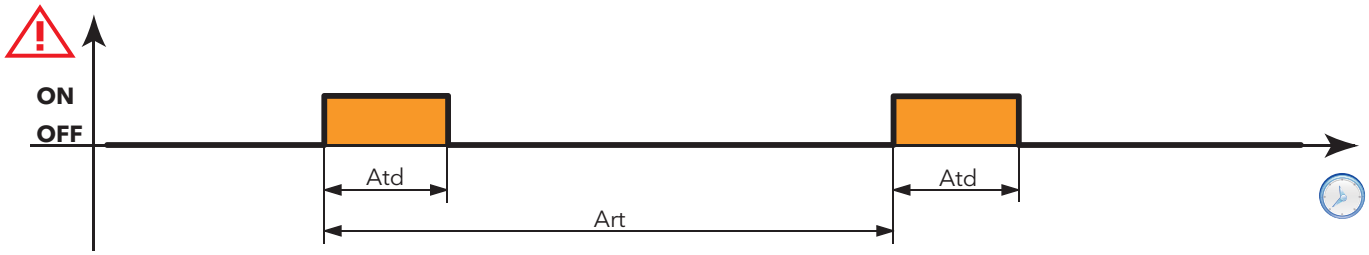
USER PARAMETERS

Label	Description	Televis**In**	Televis**Out**
CLC	Activation time for no-link/failed communication alarm	×	✓
H21	To configure digital output 1 (**OUT1**).	✓	✓
H22	To configure digital output 2 (**OUT2**).	×	✓
H23	To configure digital output 3 (**OUT3**).	×	✓
H24	To configure digital output 4 (**OUT4**).	×	✓
H25	To configure analogue output 1 (**OUT5/DI1**).	×	✓
H26	To configure analogue output 2 (**OUT6/DI2**).	×	✓

SUPERVISOR TEST ALARM

OPERATING CONDITIONS

Televis**In** & Televis**Out** 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	Televis**In**	Televis**Out**
Atd	Duration of LINK² supervision alarm.	×	✓
Art	LINK² 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 (A**x**, where **x** equals the actual physical output **OUT1...OUT6** activated) and the illuminated alarm LED.

SIGNALLING

Code	Meaning	TelevisIn	TelevisOut
A1	digital output OUT1 activation alarm	✓	✓
A2	digital output OUT2 activation alarm	×	✓
A3	digital output OUT3 activation alarm	×	✓
A4	digital output OUT4 activation alarm	×	✓
A5	analogue output OUT5/DI1 activation alarm	×	✓
A6	analogue output OUT6/DI2 activation alarm	×	✓

USER PARAMETERS

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

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
L_OF	Supervisor no-link alarm	✓	✓

USER PARAMETERS

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

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

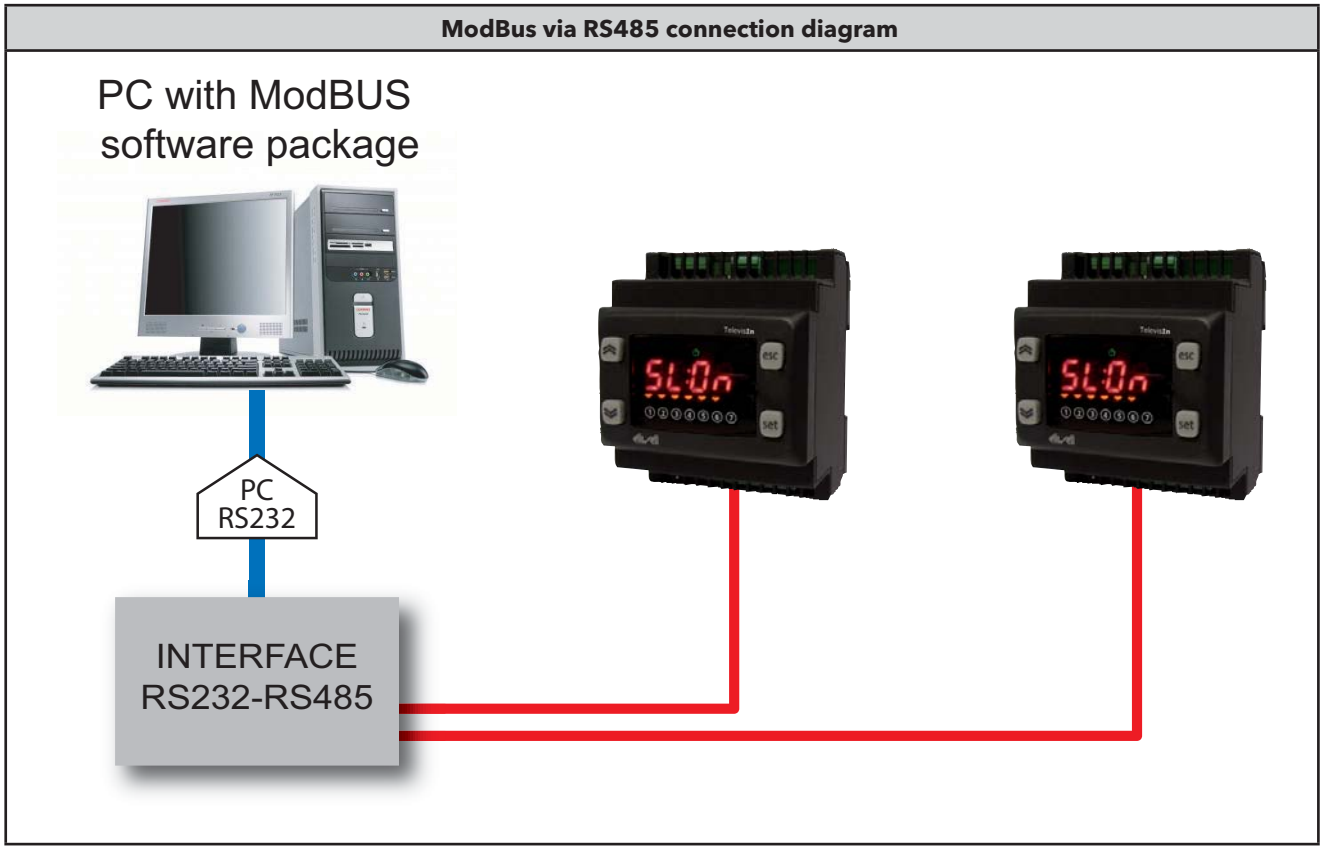
They can be modified using:

- 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 via RS485 connection diagram



MODBUS COMMANDS AVAILABLE AND DATA AREAS

The following commands are implemented:

Modbus command	Description of command
3	Read 16 consecutive registers for Client side Read 1 single register for parameters.
16	Write 15 consecutive registers for Client side Write 1 register for the parameters
43	Read device ID It is possible to read the following 3 fields:

Field code	Field description
0	Manufacturer ID (="Invensys")
1	Device model/polycarbonate ID
2	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 x 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
PtS	Select COM1 (TTL) protocol	t	t = Televis d = Modbus
dEA	Device index in family	0	0 ... 14
FAA	Device family	0	0 ... 14
Adr	Modbus protocol controller address	1	1 ... 250
Pty	Modbus protocol parity bit	E	• n= NONE • E= EVEN • o= ODD
StP	Modbus protocol stop bit	1b	• 1b= 1 BIT • 2b= 2 BIT

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 (Televis**In** and Televis**Out**) 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	(00000101**01000110**)
8806.8	BYTE	5	1350	(**00000101**01000110)
8806.14	1 BIT	0	1350	(0**0**000010101000110)
8806.7	4 BIT	10	1350	(00000**1010**1000110)

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	----------(0000000**11**1111111111111)
49337	2 BIT	3	65535	(0000000011111**11**11111111)
49337.2	2 BIT	3	65535	(0000000011**11**1111111111)
49337.4	2 BIT	3	65535	(0000000**11**1111111111111)
49337.6	2 BIT	3	65535	(0000000**11**1111111111111)

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	OdO	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
APPLICATION 1 PARAMETERS									
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-OdO	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-PAO	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
APPLICATION 2 PARAMETERS									
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-OdO	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-PAO	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
APPLICATION 3 PARAMETERS									
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-OdO	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-PAO	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
APPLICATION 4 PARAMETERS									
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-OdO	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-PAO	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
APPLICATION 5 PARAMETERS									
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-OdO	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
APPLICATION 6 PARAMETERS									
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-OdO	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-PAO	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.
APPLICATION 7 PARAMETERS									
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-OdO	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-PAO	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
APPLICATION 8 PARAMETERS									
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

Folder	Label	Par. value ADDRESS	VIS. PAR. ADDRESS	R/W	DESCRIPTION	DATE SIZE	CPL	RANGE	M.U.
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-OdO	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-PAO	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^2 (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.

DISCLAIMER

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- 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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