ALARMS

ALC **Temperature alarms configuration:** (Ab; rE)

Ab= absolute temperature: alarm temperature is given by the ALL or ALU values. rE = temperature alarms are referred to the set point. Temperature alarm is enabled when the temperature exceeds the "SET+ALU" or "SET-ALL" values.

ALU **MAXIMUM temperature alarm:** (SET÷150°C; SET÷302°F) when this temperature is reached the alarm is enabled, after the "ALd" delay time.

ALL **Minimum temperature alarm:** (-100.0 ÷ SET°C; -148÷302°F) when this temperature is reached the alarm is enabled, after the "ALd" delay time.

AFH **Differential for temperature alarm recovery:** (0,1÷25,5°C; 1÷45°F) Intervention differential for recovery of temperature alarm.

AId **Temperature alarm delay:** (0÷255 min) time interval between the detection of an alarm condition and alarm signalling.

dAo **Exclusion of temperature alarm at startup:** (from 0.0 min to 23.5h) time interval between the detection of the temperature alarm condition after instrument power on and alarm signalling.

ALARM RELAY MANAGEMENT

tbA **Alarm relay silencing (with oA1=ALr):** (n= silencing disabled: alarm relay stays on till alarm condition lasts, y =silencing enabled: alarm relay is switched OFF by pressing a key during an alarm).

Aro **Alarm relay activation with power failure:**

y = the alarm relay is activated if a temperature alarm happens during a power failure

n = the alarm relay is never activated during a power failure

ALF **Alarm relay activation for all the alarms:**

y = the alarm relay is activated for all the alarms

n = the alarm relay is activated only in case temperature alarms and regulation probe failure.

bon **Time of buzzer restart after muting, in case of alarm duration:** (0÷30min; with 0 the buzzer is always off after muting)

AoP **Alarm relay polarity:** it set if the alarm relay is open or closed when an alarm happens.

CL= terminals 1-2 closed during an alarm; oP = terminals 1-2 open during an alarm

DIGITAL INPUT

i1P **Digital input polarity:** oP: the digital input is activated by opening the contact; CL: the digital input is activated by closing the contact.

i1F **Digital input configuration:** EAL = external alarm: "EA" message is displayed; bAL = serious alarm "CA" message is displayed. PAL = pressure switch alarm, "CA" message is displayed; dor = door switch function; dEF = activation of a defrost cycle; AUS =to switch on the second relay if oA1 = AUS; Htr = kind of action inversion (cooling – heating); FAn = not set it; ES = Energy saving.

did: (0÷255 min) **with i1F= EAL or i1F = bAL digital input alarm delay:** delay between the detection of the external alarm condition and its signalling.
with i1F= dor: door open signalling delay

with i1F = PAL: time for pressure switch function: time interval to calculate the number of the pressure switch activation.

nPS **Pressure switch number:** (0 ÷15) Number of activation of the pressure switch, during the "did" interval, before signalling the alarm event (I2F= PAL). If the nPS activation in the did time is reached, switch off and on the instrument to
restart normal regulation.

odc **Compressor status with door open:** no, Fan = normal; CPr; **F_C** = Compressor OFF.

rrd Outputs restart after doA alarm: no = outputs not affected by the doA alarm; **yES** = outputs restart with the doA alarm;

HES **Temperature increase during the Energy Saving cycle:** (-30,0°C÷30,0°C/-22÷86°F) it sets the increasing value of the set point during the Energy Saving cycle.

OTHER

Adr **Serial address** (1÷244): Identifies the instrument address when connected to a ModBUS compatible monitoring system.

PbC **Type of probe:** it allows to set the kind of probe used by the instrument: PtC = PTC probe, Pt1 = Pt1000 probe.

onF **on/off key enabling:** nu = disabled; oFF = enabled; ES = not set it.

rSE **Real set point:** (readable only), it shows the set point used during the energy saving cycle or during the continuous cycle.

rEL **Software release** for internal use.

Ptb **Parameter table code:** readable only.

POWER FAILURE

If the controller is connected to the battery, during a power failure:

1. The Alarm Icon is on.
2. Every 5s the buzzer rings 3 times for 1s.

The first time a key is pushed the buzzer is silenced. It return ringing after the **"bon"** time if the power failure keeps on lasting.

By pushing the **SET** key the controller will display the temperature for 5s.

Power failure and temperature alarms

If during a power failure a temperature alarm happens:

1. The alarm icon is on.
2. The buzzer starts ringing continuously.
3. The display shows: Real temperature for 1s, Alarm label for 1s and remains off for 5s.

The first time a key is pushed the buzzer is silenced for the **"bon"** time.

The battery guaranties 48h of functioning in this conditions.

ALARM SIGNALS

Message	Cause	Outputs
"P1"	Room probe failure	Compressor output acc. to par. "Con" and "COF"
"HA"	Maximum temperature alarm	Outputs unchanged.
"LA"	Minimum temperature alarm	Outputs unchanged.
"dA"	Door open	Compressor according to rrd
"EA"	External alarm	Output unchanged.
"CA"	Serious external alarm (i1F=bAL)	All outputs OFF.
"CA"	Pressure switch alarm (i1F=PAL)	All outputs OFF

ALARM RECOVERY

Probe alarm "**P1**" starts some seconds after the fault in the related probe; it automatically stops some seconds after the probe restarts normal operation. Check connections before replacing the probe.

Temperature alarms "**HA**" and "**LA**" automatically stop as soon as the thermostat temperature returns to normal values.

Alarms "**EA**" and "**CA**" (with i1F=bAL) recover as soon as the digital input is disabled.

Alarm "**CA**" (with i1F=PAL) recovers only by **switching off and on** the instrument.

OTHER MESSAGES

Pon	Keyboard unlocked.
PoF	Keyboard locked
noP	**In programming mode**: none parameter is present in Pr1 **On the display** or in dP2, dP3, dP4: the selected probe is nor enabled
noA	**None alarm is recorded.**