

7. PARAMETER TABLE

Default settings table

Part number	Default settings
IREVMOLNOU	-
IREVMOENOU	-
IREVSOLNOU	Def. 1
IREVSOEAOU	Def. 1
IREVCOLNOU	Def. 2
IREVCOLCOU	Def. 2
IREVCOHNOU	Def. 2
IREVCOHCOU	Def. 2
IREVFOENOU	Def. 2

Key:

Parameter type:
C = Configuration,
F = frequent

Variable type:
A = analogue,
I = integer,
D = digital



Noted:

- MSYFCH = parameter visible on models IREVM%, IREVS%, IREVV%, IREVF%, IREVC% and PBEVH%;
- The grey rows in the table denote masked parameters

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W
Pro	/2	Probe measurement stability	MSYFCH	4	1	15	-	I	15	115	R/W
C	/3	Probe display stability	MSYFCH	0	0	15	-	I	16	116	R/W
		Value Display delay (s)									
		0 disabled			8	50					
		1 5			9	60					
		2 10			10	75					
		3 15			11	90					
		4 20			12	105					
		5 25			13	120					
		6 30			14	150					
		7 40			15	180					
C	/4	Virtual probe composition 0 = Control probe S1 100 = Probe S2	MSYFCH	0	0	100	-	I	17	117	R/W
C	/5	Temperature unit of measure: 0 = °C; 1 = °F	MSYFCH	0	0	1	-	D	40	40	R/W
C	/6	Display decimal point: 0/1=no/yes	MSYFCH	0	0	1	-	D	41	41	R/W
C	/tl	Display on user terminal	MSYFCH	1	1	7	-	I	18	118	R/W
		1 Virtual probe			5	Probe 4					
		2 Probe 1			6	Reserved					
		3 Probe 2			7	Set point					
		4 Probe 3									
C	/tE	Reading on remote display	MSYFCH	0	0	6	-	I	19	119	R/W
		0 Not fitted			4	Probe 3					
		1 Virtual probe			5	Probe 4					
		2 Probe 1			6	Reserved					
		4 Probe 3									
C	/P	Type of probe 0 = NTC Standard Range -50T90°C 1 = NTC Enhanced Range -40T150°C	MSYFCH	0	0	2	-	I	20	120	R/W
C	/A2	Probe 2 configuration (S2)	YFCH	2	0	4	-	I	21	121	R/W
		0 Absent			3	Condenser					
		1 Product (display only)	MS	0	0	4	-	I	21	121	R/W
		2 Defrost			4	Frost					
C	/A3	Probe 3 configuration (S3/ DI1)	MSYFCH	0	0	4	-	I	22	122	R/W
		0 Digital input 1			3	Condenser					
		1 Product (display only)			4	Frost					
		2 Defrost									
C	/A4	Probe 4 configuration (S4/ DI2)	MSYFCH	0	0	4	-	I	23	123	R/W
		0 Digital input 2			3	Condenser					
		1 Product (display only)			4	Frost					
		2 Defrost									
C	/c1	Probe 1 calibration	MSYFCH	0.0	-20	20	-	A	11	11	R/W
C	/c2	Probe 2 calibration	MSYFCH	0.0	-20	20	-	A	12	12	R/W
C	/c3	Probe 3 calibration	MSYFCH	0.0	-20	20	-	A	13	13	R/W
C	/c4	Probe 4 calibration	MSYFCH	0.0	-20	20	-	A	14	14	R/W

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W	
Ctl ❄️												
F	St	Set point	MSYFCH	Def. 1 2	Def. 2 -18	r1	r2	°C/°F	A	16	16	R/W
F	rd	Differential	SYFCH	2.0		0.1	20	°C/°F	A	17	17	R/W
C	rn	Neutral zone	SYFCH	4.0		0.0	60	°C/°F	A	34	34	R/W
C	rr	Reverse differential	SYFCH	2.0		0.1	20	°C/°F	A	35	35	R/W
C	r1	Minimum set point	MSYFCH	-50		-50	r2	°C/°F	A	18	18	R/W
C	r2	Maximum set point	MSYFCH	60		r1	200	°C/°F	A	19	19	R/W
C	r3	Operating mode 0 = Direct with defrost control (cooling) 1 = Direct (cooling) 2 = Reverse (heating)	SYFCH	0		0	2	-	I	25	125	R/W
C	r4	Automatic night-time set point variation	MSYFCH	3.0		-20	20	°C/°F	A	20	20	R/W
C	r5	Enable temperature monitoring: 0/1=no/yes	MSYFCH	0		0	1	-	D	42	42	R/W
F	rt	Duration of current max and min temperature monitoring session	MSYFCH	0		0	999	hour	I	26	126	R
F	rH	Maximum temperature read	MSYFCH	-		-	-	°C/°F	A	21	21	R
F	rL	Minimum temperature read	MSYFCH	-		-	-	°C/°F	A	22	22	R

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W
CMP 🛑											
C	c0	Compressor, fan and AUX start delay at power on	SYFCH	0	0	15	min	I	27	127	R/W
C	c1	Minimum time between successive compressor starts	SYFCH	0	0	15	min	I	28	128	R/W
C	c2	Minimum compressor off time	SYFCH	2	0	15	min	I	29	129	R/W
C	c3	Minimum compressor on time	SYFCH	0	0	15	min	I	30	130	R/W
C	c4	Compressor running time with duty setting	SYFCH	0	0	100	min	I	31	131	R/W
C	cc	Continuous cycle duration	SYFCH	0	0	15	hour	I	32	132	R/W
C	c6	Low temperature alarm bypass time after continuous cycle	SYFCH	2	0	250	hr/min	I	33	133	R/W
C	c7	Maximum pump down time (PD) 0 = Pump down disabled	SYFCH	0	0	900	s	I	34	134	R/W
C	c8	Compressor start delay after opening PD valve	SYFCH	5	0	60	s	I	35	135	R/W
C	c9	Autostart in pump down 0 = Disabled 1 = Pump down whenever closing pump down valve & following low pressure switch activation with no cooling demand	SYFCH	0	0	1	-	D	43	43	R/W
C	c10	Pump down by time or pressure 0/1 = pressure/ time	SYFCH	0	0	1	-	D	44	44	R/W
C	c11	Second compressor start delay	SYFCH	4	0	250	s	I	36	136	R/W

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W
dEF ❄️											
C	d0	Type of defrost 0 = heater by temperature 1 = hot gas by temperature 2 = heater by time (Ed1, Ed2 not shown) 3 = hot gas by time (Ed1, Ed2 not shown) 4 = heater by time with temperature control (Ed1, Ed2 not shown)	SYFCH	0	0	4	-	I	37	137	R/W
F	dl	Maximum time between consecutive defrosts 0 = defrost not performed	SYFCH	8	0	250	hr/min	I	38	138	R/W
F	dt1	End defrost temperature probe 2	SYFCH	4	-50	200	°C/°F	A	23	23	R/W
F	dt2	End defrost temperature probe 3 (aux evaporator)	SYFCH	4	-50	200	°C/°F	A	24	24	R/W
F	dP1	Maximum defrost duration	SYFCH	30	1	250	min/s	I	39	139	R/W
F	dP2	Maximum aux evaporator defrost duration	SYFCH	30	1	250	min/s	I	40	140	R/W
C	d3	Defrost activation delay	SYFCH	0	0	250	min	I	41	141	R/W
C	d4	Defrost at start-up: 0/1=disabled/enabled	SYFCH	0	0	1	flag	D	45	45	R/W
C	d5	Defrost delay at start-up (if d4=1) or from dl	SYFCH	0	0	250	min	I	42	142	R/W
C	d6	Terminal display during defrost 0 = Temperature alternating with dEF 1 = Display disabled 2 = dEF	SYFCH	1	0	2	-	I	43	143	R/W
F	dd	Dripping time after defrost (fans off)	SYFCH	2	0	15	min	I	44	144	R/W
F	d8	High temperature alarm bypass time after defrost (and door open)	SYFCH	1	0	250	hr/min	I	45	145	R/W
C	d8d	Alarm bypass time after door open	SYFCH	0	0	250	min	I	139	239	R/W
C	d9	Defrost priority over compressor protectors 0/1 = yes/no	SYFCH	0	0	1	-	D	46	46	R/W
F	d/1	Display defrost probe 1	MSYFCH	-	-	-	°C/°F	A	1	1	R
F	d/2	Display defrost probe 2	MSYFCH	-	-	-	°C/°F	A	2	2	R
C	dC	Time base for defrost 0 = dl in hours, dP1 and dP2 in minutes 1 = dl in minutes, dP1 and dP2 in seconds	SYFCH	0	0	1	-	D	47	47	R/W
C	dC1	Time base for c6 and d8: 0/1 = hours/minutes	SYFCH	0	0	1	-	D	65	65	R/W
C	d10	Defrost time in "Running time" mode 0 = function disabled	SYFCH	0	0	250	hour	I	46	146	R/W
C	d11	Running time defrost temperature threshold	SYFCH	1.0	-20	20	°C/°F	A	25	25	R/W

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W															
C	d12	Advanced defrosts	SYFCH	0	0	3	-	I	47	147	R/W															
		<table border="1"> <thead> <tr> <th>d12</th> <th>Skip defrost</th> <th>Automatic variation of dl</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Disabled</td> <td>Disabled</td> </tr> <tr> <td>1</td> <td>Disabled</td> <td>Enabled</td> </tr> <tr> <td>2</td> <td>Enabled</td> <td>Disabled</td> </tr> <tr> <td>3</td> <td>Enabled</td> <td>Enabled</td> </tr> </tbody> </table>	d12	Skip defrost	Automatic variation of dl	0	Disabled	Disabled	1	Disabled	Enabled	2	Enabled	Disabled	3	Enabled	Enabled									
d12	Skip defrost	Automatic variation of dl																								
0	Disabled	Disabled																								
1	Disabled	Enabled																								
2	Enabled	Disabled																								
3	Enabled	Enabled																								
C	dn	Nominal defrost duration	SYFCH	65	1	100	-	I	48	148	R/W															
C	dH	Proportional factor for variation of dl	SYFCH	50	0	100	-	I	49	149	R/W															

ALM 

C	A0	Alarm and fan differential	MSYFCH	2.0	0.1	20	°C/°F	A	26	26	R/W											
C	A1	Alarm thresholds (AL, AH) relative to set point or absolute 0: AL and AH are relative thresholds to the set point 1: AL and AH are absolute thresholds	MSYFCH	0	0	1	-	D	48	48	R/W											
F	AL	Low temperature alarm threshold	MSYF	0.0	A1=1→50 (alarm 'LO' disabled) A1=0→0 (alarm 'LO' disabled)	200	°C/°F	F	27	27	R/W											
F	AH	High temperature alarm threshold	MSYF	0.0	A1=1→50 (alarm 'HI' disabled) A1=0→0 (alarm 'HI' disabled)	A1=1→200 (alarm 'HI' disabled) A1=0→200	°C/°F	F	28	28	R/W											
F	Ad	High and low temperature alarm delay	MSYFCH	120	0	250	min	I	50	150	R/W											
C	A4	Digital input configuration 1 (DI1) 0 = not active 1 = immediate external alarm 2 = delayed external alarm 3 = select probes (ir33M) / enable defrost 4 = start defrost 5 = door switch with compressor and evaporator fans off 6 = remote ON/OFF 7 = curtain switch 8 = low pressure switch 9 = door switch with fans off 10 = direct/reverse operation 11 = light sensor 12 = activate aux output 13 = door switch with compressor and fans off and light not managed 14 = door switch with fans off and light not managed	SYFCH	0	0	14	-	I	51	151	R/W											
C	A5	Digital input configuration 2 (DI2) See A4	MSYFCH	0	0	14	-	I	52	152	R/W											
C	A6	Stop compressor on external alarm 0 = compressor always off; 100 = compressor always on	SYFCH	0	0	100	min	I	53	153	R/W											
C	A7	Digital alarm input delay 0 = control outputs unchanged	SYFCH	0	0	250	min	I	54	154	R/W											
C	A8	Enable alarms Ed1 and Ed2 (end defrost by timeout) 0 = alarms disabled	SYFCH	0	0	1	-	D	49	49	R/W											
C	Ado	Light management with door switch	MSYFCH	0	0	1	-	D	50	50	R/W											
		<table border="1"> <thead> <tr> <th>Ado</th> <th>Light when opening the door</th> <th>Algorithm</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>off on</td> <td>Extended normal</td> <td>Open-close Open-close-open-close</td> </tr> <tr> <td>1</td> <td>off on</td> <td>normal extended</td> <td></td> </tr> </tbody> </table>	Ado	Light when opening the door	Algorithm	Description	0	off on	Extended normal	Open-close Open-close-open-close	1	off on	normal extended									
Ado	Light when opening the door	Algorithm	Description																			
0	off on	Extended normal	Open-close Open-close-open-close																			
1	off on	normal extended																				
C	Ac	High condenser temperature alarm threshold	SYFCH	70.0	0	200	°C/°F	A	29	29	R/W											
C	AE	High condenser temperature alarm differential	SYFCH	10.0	0.1	20	°C/°F	A	30	30	R/W											
C	Acd	High condenser temperature alarm delay 0 = Immediate alarm	SYFCH	0	0	250	min	I	56	156	R/W											
C	AF	Light sensor OFF time 0 = Sensor in the door jamb > 0 = Sensor inside the cold room or cabinet	SYFCH	0	0	250	s	I	57	157	R/W											
C	ALF	Frost protection alarm threshold	MSYFCH	-5.0	-50	200	°C/°F	A	36	36	R/W											
C	AdF	Frost protection alarm delay	MSYFCH	1	0	15	min	I	136	236	R/W											

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W
											
C	F0	Evaporator fan management 0 = always on 1 = activation based on Sd-Sv (difference between virtual probe and evaporator temperature) 2 = activation based on Sd (evaporator temperature)	FCH	0	0	2	-	I	58	158	R/W
F	F1	Fan activation temperature (only if F0 = 1 or 2)	FCH	5.0	-50	200	°C/°F	A	31	31	R/W
C	F2	Evaporator fans with compressor off 0 = See F0, 1 = Always off	FCH	0	0	1	-	D	51	51	R/W
C	F3	Evaporator fans during defrost: 0/1=on/off	FCH	1	0	1	-	D	52	52	R/W
F	Fd	Post-dripping time (fans off)	FCH	1	0	15	min	I	59	159	R/W
C	F4	Condenser fan deactivation temperature	MSYFCH	40	-50	200	°C/°F	A	32	32	R/W
C	F5	Condenser fan activation differential	MSYFCH	5.0	0.1	20	°C/°F	A	33	33	R/W

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W
											
C	H0	Serial address	MSYFCH	195	0	207	-	I	60	160	R/W
C	H1	AUX output configuration 0 = normally energised alarm 1 = normally de-energised alarm 2 = auxiliary 3 = light 4 = auxiliary evaporator defrost 5 = pump down valve 6 = condenser fan 7 = delayed compressor 8 = auxiliary with deactivation when OFF 9 = light with deactivation when OFF 10 = no function 11 = reverse with neutral zone 12 = second compressor step 13 = second compressor step with rotation	CH	1	0	13	-	I	61	161	R/W
C	H2	Disable keypad functions	MSYFCH	1	0	6	-	I	62	162	R/W
C	H4	Buzzer: 0/1=enabled/disabled	MSYFCH	0	0	1	-	D	53	53	R/W
C	H6	Terminal keypad lock configuration 0 = all buttons enabled	MSYFCH	0	0	255	-	I	65	165	R/W
C	H7	Keypad: 0 = standard; 1 = modified	MSYFCH	0	0	1	-	D	54	54	R/W
C	H8	Output switched with scheduler 0 = Light; 1 = AUX	MSYFCH	0	0	1	-	D	60	60	R/W
C	H9	Set point variation with scheduler 0/1 = no/yes	MSYFCH	0	0	1	-	D	61	61	R/W
C	Hdn	Number of default parameter sets available	MSYFCH	0	0	6	-	I	137	237	R/W
C	Hdh	Anti-sweat heater offset 0 = anti-sweat heater function disabled (°C) 32 = anti-sweat heater function disabled (°F)	MSYFCH	0	-50	200	°C/°F	A	37	37	R/W
C	HrL	Remote light relay status on Master: 0 = disabled	MSYFCH	0	0	1	-	D	62	62	R/W
C	HrA	Remote AUX relay status on Master: 0 = disabled	MSYFCH	0	0	1	-	D	63	63	R/W
C	HSA	Remote controller alarms on Master: 0 = disabled	MSYFCH	0	0	1	-	D	64	64	R/W
C	In	Type of unit 0 = Normal 1 = Master 2...6 = Slave 1 to 5	MSYFCH	0	0	6	-	I	138	238	R/W

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W
											
C	HAn	Number of HA alarms	MSYFCH	0	0	15	-	I	67	167	R
C	HA...HA2	HA HACCP alarms activated (press Set)	MSYFCH	-	-	-	-	-	-	-	R
	y__	Alarm 1 to 3 - Year	-	0	0	99	years	I	70/76/82	170	R
	M__	Alarm 1 to 3 - Month	-	0	1	12	month	I	71/77/83	171	R
	d__	Alarm 1 to 3 - Day of the month	-	0	1	7	day	I	72/78/84	172	R
	h__	Alarm 1 to 3 - Hour	-	0	0	23	hour	I	73/79/84	173	R
	n__	Alarm 1 to 3 - Minute	-	0	0	59	minute	I	74/80/85	174	R
	t__	Alarm 1 to 3 - Duration	-	0	0	99	hour	I	75/81/86	175	R
C	HFn	Number of HF alarms	MSYFCH	-	-	-	-	I	68	176...181	R
C	HF...HF2	HF HACCP alarms activated (press Set)	MSYFCH	-	-	-	-	I	-	-	R
	y__	Alarm 1 to 3 - Year		0	0	99	years	I	88/94/100	188	R
	M__	Alarm 1 to 3 - Month		0	1	12	month	I	89/95/101	189	R
	d__	Alarm 1 to 3 - Day of the month		0	1	7	day	I	90/96/102	190	R
	h__	Alarm 1 to 3 - Hour		0	0	23	hour	I	91/97/103	191	R
	n__	Alarm 1 to 3 - Minute		0	0	59	minute	I	92/98/104	192	R
	t__	Alarm 1 to 3 - Duration		0	0	99	hour	I	93/99/105	193	R
C	Htd	HACCP alarm delay 0 = Monitoring disabled	MSYFCH	0	0	250	min	I	69	169	R/W

User	Par.	Description	Models	Def	Min	Max	UOM	Type	CAREL SVP	ModBus®	R/W
rtc <input checked="" type="checkbox"/>											
C	td1...8	Defrost 1 to 8 (press Set)	SYFCH	-	-	-	-	-	-		R/W
	d__	Defrost 1 to 8 - day		0	0	11	day	I	106/109/.../127	206/209/.../227	R/W
	h__	Defrost 1 to 8 - hour		0	0	23	hour	I	107/110/.../128	207/210/.../228	R/W
	n__	Defrost 1 to 8 - minute		0	0	59	min	I	108/111/.../129	208/211/.../229	R/W
C	ton	Light/aux on time	SYFCH	-	-	-	-	-	-		R/W
	d__	Day		0	1	7	day	I	130	230	R/W
	h__	Hour		0	0	23	hour	I	131	231	R/W
	n__	Minute		0	0	59	minute	I	132	232	R/W
C	toF	Light/aux off time	SYFCH	-	-	-	-	-	-		R/W
	d__	Day		0	1	7	day	I	133	233	R/W
	h__	Hour		0	0	23	hour	I	134	234	R/W
	n__	Minute		0	0	59	minute	I	135	235	R/W
C	tc	Date/time (press Set)	MSYFCH	-	-	-	-	-	-		R/W
	y__	Date/time: year		12	0	99	year	I	1	101	R/W
	m__	Date/time: month		8	1	12	month	I	2	102	R/W
	d__	Date/time: day of the month		1	1	31	day	I	3	103	R/W
	u__	Day of the week		1	1	7	day	I	4	104	R/W
	h__	Date/time: hour		0	0	23	hour	I	5	105	R/W
	n__	Date/time: minute		0	0	59	minute	I	6	106	R/W

7.14 Variables only accessible via serial connection

Description	Type	CAREL SVP	Modbus	R/W
Virtual probe	A	3	3	R
Probe 1 reading	A	4	4	R
Probe 2 reading	A	5	5	R
Probe 3 reading	A	6	6	R
Probe 4 reading	A	7	7	R
Number of parameter sets available	I	137	237	R
Digital input 1 status	D	6	6	R
Digital input 2 status	D	7	7	R
Virtual probe fault alarm	D	9	9	R
Probe alarm 1	D	10	10	R
Probe alarm 2	D	11	11	R
Probe alarm 3	D	12	12	R
Probe alarm 4	D	13	13	R
Compressor status relay	D	1	1	R
Defrost relay status	D	2	2	R
Fan relay status	D	3	3	R
AUX 1 relay status	D	4	4	R
Digital input 1 status	D	6	6	R
Digital input 2 status	D	7	7	R
Defrost status	D	31	31	R
Defrost call command	D	34	34	RW
Continuous cycle status	D	35	35	R
Continuous cycle call command	D	36	36	RW
Door status	D	37	37	R
AUX activation command	D	57	57	RW
Light activation command	D	58	58	RW
Controller ON/OFF	D	59	59	RW
Password	I	14	114	RW
Virtual probe fault alarm	D	9	9	R
Probe 1/2/3/4 fault alarm	D	10/11/12/13/14	10/11/12/13/14	R
Low temperature alarm	D	15	15	R
High temperature alarm	D	16	16	R
Immediate external alarm	D	17	17	R
Delayed external alarm	D	18	18	R
Evaporator 1 defrost timeout alarm	D	19	19	R
Evaporator 2 defrost timeout alarm	D	20	20	R
Pump down timeout alarm	D	21	21	R
Low pressure alarm	D	21	21	R
High condenser temperature alarm	D	24	24	R
Door open for too long alarm	D	25	25	R
RTC error	D	26	26	R
Control parameter EEPROM error	D	27	27	R
Operating parameter EEPROM error	D	28	28	R
HA HACCP alarm	D	29	29	R
HF HACCP alarm	D	30	30	R
Alarm autostart in pump down	D	32	32	R

8. SIGNALS AND ALARMS

8.1 Signals

Signals are messages shown on the display to notify the user of the control procedures in progress (e.g. defrost) or confirm the controls from the keypad or remote control.

Code	Icon	Description
---	-	Probe not enabled
dEF	❄️	Defrost running
dFb		Start defrost call
dFE		End defrost call
cc	🔄❄️	Continuous cycle
ccb		Start continuous cycle call
ccE		End continuous cycle call
HcP	🏠	Access HACCP menu
Ed1	-	Defrost on evaporator 1 ended by timeout
Ed2	-	Defrost on evaporator 2 ended by timeout
On	-	Switch ON
OFF	-	Switch OFF
rES	-	Reset alarms with manual reset Reset HACCP alarms Reset temperature monitoring
AUX	-	Auxiliary output activation call
d/1	-	Display defrost probe 1

Tab. 8.a

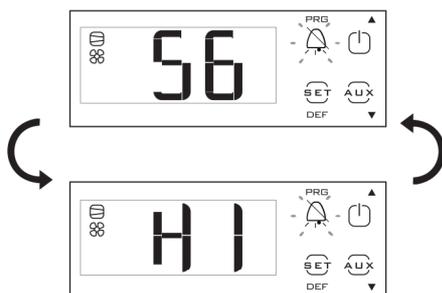
8.2 Alarms

There are two types of alarms:

- system: EEPROM, communication, HACCP, high (HI) and low (LO) temperature;
- control: pump down ended by timeout (Pd), low pressure (LP).

The EE/EF data memory alarms shutdown the controller. The auxiliary digital output AUX can be configured to signal the alarm status, normally open or normally closed. See chapter 5. The controller indicates alarms due to faults on the controller itself, on the probes or in network communication. An alarm can also be activated from an external contact, immediate or delayed. See paragraph 5.2. The display shows "IA" or "dA" and at the same time the bell icon flashes and the buzzer is activated. If more than one error occurs, these are displayed in sequence.

Example: display after HI error:

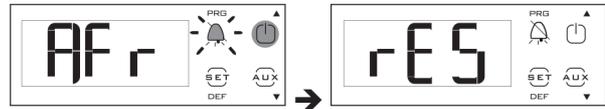


Note: to mute the buzzer press Prg/mute.

8.3 Reset alarms

All the alarms with manual reset can be cleared by pressing Prg/mute and UP together for more than 5 seconds.

Example: manually reset the frost protection alarm (AFr).



8.4 HACCP alarms and display

To activate monitoring, see par. 8.6.

(HACCP = Hazard Analysis and Critical Control Point).

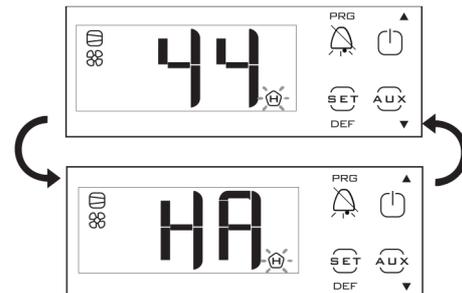
HACCP allows control of the operating temperature, recording any anomalies due to power failures or an increase in the temperature due to other causes (breakages, extreme operating conditions, user errors, etc.).

Two types of HACCP event are managed:

- type HA alarms, high temperature during the operation;
- type HF alarms, high temperature after power failure (blackout).

When an alarm is recorded, the HACCP LED flashes, the display shows the alarm code, the alarm is saved and the alarm relay and buzzer are activated.

Example: display after HA error and alarm reset:



To display the HA and HF alarms:

- enter the HACCP menu by pressing:



- scroll the list of alarms by pressing UP and DOWN;
- press Set to select the required alarm (HA, HA1, HA2/HF, HF1, HF2);
- use UP or DOWN to see the description of the alarm: year, month, day, hours, minutes and duration in minutes of the selected alarm;
- press Prg/mute again to return to the previous list.

In addition, the HACCP alarm menu allows the following operations:

- delete the HACCP alarm signal by pressing, for 5 seconds:



- delete the HACCP alarm and all the alarms saved by pressing, for 5 seconds:



This procedure displays the message rES, deletes the entire memory of alarms and reinitialises monitoring of the HACCP alarms.

Code on display	Cause of the alarm	Icon flashing on display	Alarm relay	Buzzer	Reset	PD valve	Compressor	Defrost	Evaporator fans	Condenser fans	Continuous cycle	AUX neutral zone	AUX light Anti-sweat	AUX auxiliary Anti-sweat	AUX second step
rE	Virtual control probe fault		ON	ON	autom.	duty setting (c4)	duty setting (c4)	-	-	-	-	OFF	OFF	OFF	duty setting (c4)
E0	Probe S1 fault		OFF	OFF	autom.	duty setting (c4)	duty setting (c4)	-	-	-	-	OFF	OFF	OFF	duty setting (c4)
E1	Probe S2 fault		OFF	OFF	automatic	-	-	-	-	-	-	-	-	-	-
E2	Probe S3 fault		OFF	OFF	autom.	-	-	-	-	-	-	-	-	-	-
E3	Probe S4 fault		OFF	OFF	autom.	-	-	-	-	-	-	-	-	-	-
LO	Low temperature alarm		ON	ON	autom.	-	-	-	-	-	-	-	-	-	-
HI	High temperature alarm		ON	ON	autom.	-	-	-	-	-	-	-	OFF	OFF	-
Afr	Frost protect on alarm		ON	ON	manual	OFF	OFF	-	-	-	-	-	-	-	OFF
IA	Immediate alarm from external contact		ON	ON	automatic	duty setting (A6)	duty setting (A6)	-	-	-	-	OFF	OFF	OFF	duty setting (A6)
dA	Delayed alarm from external contact		ON	ON	automatic	duty setting (A6)	duty setting (A6)	-	-	-	-	OFF if A7≠0	OFF if A7≠0	OFF if A7≠0	duty setting (A6) if A7≠0
Pd	Alarm maximum pump down time		ON	ON	automatic/ manual	-	-	-	-	-	-	-	-	-	-
LP	Low pressure alarm		ON	ON	automatic/ manual	OFF	OFF	-	-	-	-	-	-	-	OFF
AtS	Autostart in pump down		ON	ON	automatic/ manual	-	-	-	-	-	-	-	-	-	-
cht	High condenser temp. pre-alarm	-	OFF	OFF	automatic/ manual	-	-	-	-	-	-	-	-	-	-
CHt	High condenser temperature alarm		ON	ON	manual	OFF	OFF	-	-	-	-	-	OFF	OFF	OFF
dor	Door open for too long alarm		ON	ON	automatic	-	-	-	-	-	-	-	-	-	-
Etc	Real time clock fault		OFF	OFF	automatic/ manual	-	-	-	-	-	-	-	-	-	-
EE	Unit parameter EEPROM error		OFF	OFF	automatic	OFF	OFF	not run	OFF	OFF	not run	OFF	OFF	OFF	OFF
EF	Operating parameter EEPROM error		OFF	OFF	automatic	OFF	OFF	not run	OFF	OFF	not run	OFF	OFF	OFF	OFF
HA	Type HA HACCP alarm		OFF	OFF	manual	-	-	-	-	-	-	-	-	-	-
HF	Type HF HACCP alarm		OFF	OFF	manual	-	-	-	-	-	-	-	-	-	-
n1...n6	indicate unit alarm ON 1...6 in network		ON	OM	automatic	-	-	-	-	-	-	-	-	-	-