

9 WORKING SETPOINT AND CONFIGURATION PARAMETERS

9.1 Working Setpoint					
PARAM.	MIN.	MAX.	U.M.	DEF.	WORKING SETPOINT
r1	r2		°C/°F (1)	0,0	working setpoint; see also r0 and r12
9.2 Parametri di configurazione					
PARAM.	MIN.	MAX.	U.M.	DEF.	WORKING SETPOINT
SP	r1	r2	°C/°F (1)	0,0	working setpoint; see also r0 and r12
ANALOG INPUTS					
CA1	-25	25,0	°C/°F (1)	0,0	room probe offset
CA2	-25	25,0	°C/°F (1)	0,0	if P4 = 1, evaporator probe offset if P4 = 2, condenser probe offset
P0	0	1	- - -	1	probe type (0 = PTC; 1 = NTC)
P1	0	1	- - -	1	degree Celsius decimal point (during normal operation) 1 = YES
P2	0	1	- - -	0	unit of measurement for temperature (2) 0 = °C (Celsius degree; resolution depends on P1 parameter) 1 = °F (Fahrenheit degree; resolution is 1 °F)
P4	0	2	- - -	0	second input function 0 = digital input (door switch or multifunction) 1 = analog input (evaporator probe) 2 = analog input (condenser probe)
P5	0	2	- - -	0	magnitude displayed during normal operation 0 = room temperature 1 = working setpoint 2 = if P4 = 0, "- - -" if P4 = 1, evaporator temperature if P4 = 2, condenser temperature
P8	0	250	0,1 s	5	delayed display of temperature changes as detected by the probes
MAIN REGULATOR					
r0	0,1	15,0	°C/°F (1)	2,0	working setpoint differential; see also r12
r1	-99	r2	°C/°F (1)	-40	minimum working setpoint
r2	r1	199,0	°C/°F (1)	50,0	maximum working setpoint
r4	0,0	99,0	°C/°F (1)	0,0	working setpoint increase during the "energy saving" function; see also i0, i10 and HE2
r5	0	1	- - -	0	cooling or heating operation (3) 0 = cooling 1 = heating
r12	0	1	- - -	1	working setpoint differential type 0 = asymmetric 1 = symmetric
COMPRESSOR PROTECTION SYSTEM					
C0	0	240	min	0	delay in switching on of compressor after the device switches on (4)
C2	0	240	min	3	minimum compressor switch-off duration (5)
C3	0	240	s	0	minimum duration of compressor switch on time
C4	0	240	min	0	duration of compressor switch off time during a room temperature probe error (code "Pr1"); see also C5
C5	0	240	min	10	duration of compressor switch on time during a room temperature probe error (code "Pr1"); see also C4
C6	0,0	199	°C/°F (1)	80,0	condenser temperature is higher than that at which the condenser overheating alarm is activated (code "COH") (6)
C7	0,0	199	°C/°F (1)	90,0	condenser temperature above which the compressor shut down alarm is activated (code "CSd")
C8	0	15	min	1	compressor shut down alarm delay (code "CSd") (7)
DEFROST					
d0	0	99	h	8	if d8 = 0, 1 or 2, defrost interval 0 = interval defrost will never be activated if d8 = 3, maximum defrost interval
d2	-99	99,0	°C/°F (1)	2,0	evaporator temperature at end of defrost; see also d3
d3	0	99	min	30	if P4 = 0 or 2, defrost duration if P4 = 1, maximum defrost duration; see also d2 0 = defrost will not be activated
d4	0	1	- - -	0	defrost when device is switched on (4) 1 = YES
d5	0	99	min	0	if d4 = 0, minimum time between switching on of device and activation of defrost (4) if d4 = 1, delay in activation of defrost after device is switched on (4)
d6	0	2	- - -	1	temperature displayed during defrost (only if P5 = 0) 0 = room temperature 1 = if on activation of defrost, the room temperature is below the "work setpoint + Δt", at maximum "work setpoint + Δt"; if on activation of defrost, the room temperature is above "work setpoint + Δt", at maximum the room temperature on activation of defrost (8) (9) 2 = label "DEF"
d7	0	15	min	2	dripping duration (during dripping the compressor will remain switched off)
d8	0	3	- - -	0	defrost activation methods 0 = AT INTERVALS - FOR TIME - defrost will be activated once the device has altogether been running for time d0 1 = AT INTERVALS - FOR COMPRESSOR SWITCH-ON - defrost will be activated once the compressor has altogether been switched on for time d0 2 = AT INTERVALS - FOR EVAPORATOR TEMPERATURE - defrost will be activated when the evaporator temperature has remained below the temperature d9 for a total time of d0 (10)

d9	-99	99,0	°C/°F (1)	0,0	3 = ADAPTIVE - defrost will be activated at intervals, whose duration will each time depend on the duration of compressor switch-ons, the evaporator temperature and the door switch input activation; see also d18, d19, d20, d22, i13 and i14 (10) evaporator temperature is higher than that at which the defrost interval counter is suspended (only if d8 = 2)
d11	0	1	- - -	0	defrost alarm switches off once maximum time limit has been reached (code "dFd"; only if P4 = 1 and in absence of evaporator probe error (code "Pr2") 1 = YES
d18	0	999	min	40	defrost interval (defrost will be activated when the compressor has been on totally, with the evaporator temperature below that of d22, for time d18; only if d8 = 3) 0 = defrost will never be activated due to the effect of this condition
d19	0,0	40,0	°C/°F (1)	3,0	evaporator temperature below which the defrost is activated (relative to the evaporator temperatures average, or "evaporator temperatures average - d19"; only if d8 = 3)
d20	0	999	min	180	minimum consecutive time the compressor must be switched on such as to provoke the defrost activation 0 = defrost will never be activated due to the effect of this condition
d22	0,0	19,9	°C/°F (1)	2,0	evaporator temperature above which the defrost interval count shall be suspended (relating to the average of evaporator temperatures, that is to say, "evaporator temperatures average + d22"; only if d8 = 3); see also d18
TEMPERATURE ALARMS (11) (12)					
A1	0,0	99,0	°C/°F (1)	10,0	room temperature below which the minimum temperature alarm is triggered (code "AL"; it concerns the working setpoint, that is to say, "working setpoint - A1"); see also A11 0 = alarm absent
A4	0,0	99,0	°C/°F (1)	10,0	room temperature above which the maximum temperature alarm is triggered (code "AH"; it concerns the working setpoint, that is to say, "working setpoint + A4"); see also A11 0 = alarm absent
A6	0	99	10 min	12	delay in maximum temperature alarm (code "AH") after the device is switched on (4)
A7	0	240	min	15	minimum temperature alarm delay (code "AL") and maximum temperature alarm delay (code "AH")
A11	0,1	15,0	°C/°F (1)	2,0	differential of A1 and A4 parameters
DIGITAL INPUTS					
i0	0	4	- - -	1	effect caused by the activation of the digital input 0 = no effect 1 = DOOR SWITCH - DOOR SWITCH INPUT ALARM ACTIVATION (code "id") - the compressor will be switched off (at maximum for time i3 or until the input is deactivated); see also i2 (13) 2 = MULTIFUNCTION - ACTIVATION OF "ENERGY SAVING" FUNCTION - the "energy saving" function will be activated (just with effect on the compressor, until the input is deactivated); see also r4 3 = MULTIFUNCTION - ACTIVATION OF MULTIFUNCTION INPUT ALARM (code "iA") - the device will continue to operate normally; see also i2 4 = MULTIFUNCTION - ACTIVATION OF THE MAXIMUM PRESSURE SWITCH ALARM (code "iA") - the compressor will be switched off (until the input is deactivated); see also i2
i1	0	1	- - -	0	type of digital input contact 0 = normally open (active input with closed contact) 1 = normally closed (active input with open contact)
i2	-1	120	min	30	if i0 = 1, delay in signalling of door switch input alarm (code "id") -1 = the alarm will not be signalled if i0 = 3, delay in signalling of multifunction input alarm (code "iA") -1 = the alarm will not be signalled if i0 = 4, delay in switching on of compressor after the deactivation of the maximum pressure switch alarm (code "iA") -1 = reserved
i3	-1	120	min	15	maximum duration of the effect caused by the activation of the door switch input on the compressor -1 = the effect will last until the input is deactivated
i10	0	999	min	0	time that must pass in absence of door switch input activations (after the room temperature has reached the working setpoint) for the "energy saving" function to be activated; see also r4 and HE2 0 = the function will never be activated due to the effect of this condition
i13	0	240	- - -	180	number of door switch input activations such as to provoke the defrost activation 0 = defrost will never be activated due to the effect of this condition
i14	0	240	min	32	minimum duration of the door switch input activation such as to provoke the defrost activation 0 = defrost will never be activated due to the effect of this condition
ENERGY SAVING					
HE2	0	999	min	0	maximum duration of the "energy saving" function activated due to the effect of absence of door switch input activation; see also r4 and i10 0 = the function will last until the input is activated
HE3	0	240	min	2	time interval with no key strokes, after which the "low consumption" function is activated 0 = the mode shall never be activated
VARIOUS					
POF	0	1	- - -	1	○ key activation 1 = YES
PAS	-99	999	min	-19	access password for the configuration parameters 0 = the password need not be set

Notes:

- (1) the unit of measurement depends on P2
- (2) properly set the parameters corresponding to the regulators after setting P2 parameter
- (3) if r5 parameter is set at 1, the "energy saving" function and the defrost management will be switched off
- (4) the parameter has effect even after an interruption in the power supply that occurs while the device is switched on
- (5) the time set by parameter C2 is counted also when the device is off
- (6) the differential of parameter is 2.0°C/4°F
- (7) if when the device is switched on, the condenser temperature is already above that established in C7 parameter, then C8 parameter will not have effect
- (8) the value Δt depends on r12 parameter (r0 if r12 = 0, r0/2 if r12 = 1)
- (9) the display restores normal operation when, at the end of the dripping phase, room temperature falls below the value that locked the display (or if a temperature alarm is triggered)
- (10) if P4 parameter is set at 0 or 2, the device will function as if d8 parameter were set at 0
- (11) during defrost and dripping, the maximum temperature alarm is absent, provided that it was triggered after defrost activation.
- (12) during activation of the door switch input, the maximum temperature alarm is absent, provided the alarm was signaled after the activation of the input
- (13) the compressor is switched off 10 s after the activation of the input.