

EVCO CONTROLLER PF-EV3201 N3



BASIC OPERATION

This thermostat is pre-configured to run a fridge or freezer, with a setpoint range between +10°C and -22°C.

To use it exclusively as a fridge or freezer, change the parameters following the instructions below to enable additional features- such as high and low temperature alarm and a timed defrost function (fridge only).

Switching device ON/ OFF

	If POF=1, touch the ON/STAND-BY key for 4 s		
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If the device is switched on, the display will show the P5 value ("cabinet temperature" default).

LED	ON	OFF	FLASHING
	compressor on	compressor off	- compressor protection active - setpoint setting active

Unlock keypad

If display shows "Loc" this means the keypad is locked. To unlock keypad touch any key for 1s. The display will show the label "UnL"

Set the setpoint

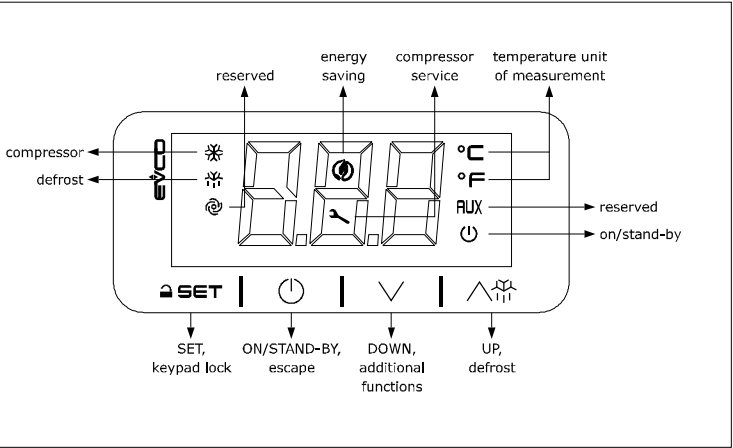
Check that the keypad is not locked.

1.		Touch the SET key.
2.		Touch the UP or DOWN key within 15s to set the value. Recommended temp: Fridge + 4°C; Freezer -18°C
3.		Touch the SET key (or do not operate for 15 s).

Activate manual defrost (if d0 = 0, default)

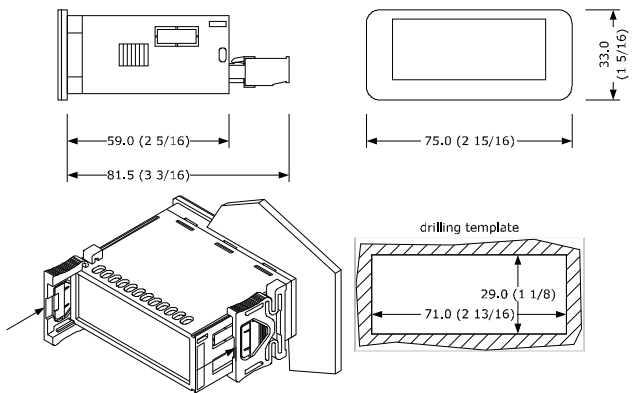
Check that the keypad is not locked and that overcooling is not active.

1.		Touch the UP key for 2 s.
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DIMENSIONS & INSTALLATION

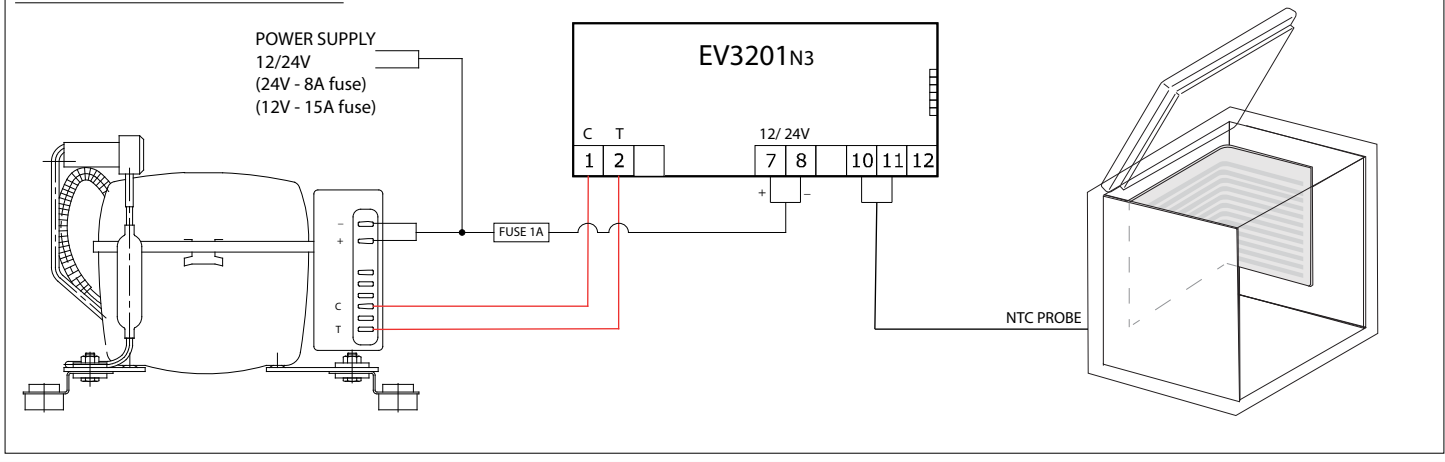
Measurements in mm (inches). To be fitted to a panel, snap in brackets provided.



Setting configuration parameters (see next 2 pages for set parameters)

1.		Touch the SET key for 4 s: the display will show the label "PA".
2.		Touch the SET key.
3.		Touch the UP or DOWN key within 15 s to set the PAS value (default "-19").
4.		Touch the SET key (or do not operate for 15 s): the display will show the label "SP".
5.		Touch the UP or DOWN key to select a parameter.
6.		Touch the SET key.
7.		Touch the UP or DOWN key within 15 s to set the value.
8.		Touch the SET key (or do not operate for 15 s).
9.		Touch the SET key for 4 s (or do not operate for 60 s) to exit the procedure.

ELECTRICAL CONNECTIONS



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	PAR.	SET POINT	MIN...MAX.	FRIDGE/FREEZER (DEFAULT)	FRIDGE	FREEZER
	SP	set point	r1... r2	4	4	-18
	PAR.	ANALOGUE INPUTS	MIN... MAX			
	CA1	cabinet probe offset	-25... 25°C/°F if P4 = 3, air in probe offset	0		
	P0	probe type	0 = PTC 1 = NTC	1		
	P1	enable °C decimal point	0 = no 1 = yes	1		
	P2	temperature unit of measurement	0 = °C 1 = °F	0		
	P4	configurable input function	0 = door switch/multi-purpose input 1 = evaporator probe 2 = condenser probe	0		
	P5	value displayed	0 = regulation temperature 1 = setpoint 2 = auxiliary temperature	0		
	P8	display refresh time	0... 250 s : 10	5		
	PAR.	REGULATION	MIN... MAX			
	r0	setpoint differential	1... 15 °C/ °F ... r2	1.5		
	r1	minimum setpoint	-99 °C/ °F... r2	-22	2	-22
	r2	maximum setpoint	r1... 199 °C/ °F	10	10	-12
	r5	cooling or heating operation	0 = cooling 1 = heating	0		
	PAR.	COMPRESSOR	MIN... MAX			
	C0	compressor on delay after power-on	0... 240 min	0		
	C2	compressor off minimum time	0... 240 min	6		
	C3	compressor on minimum time	0... 240 s	0		
	C4	compressor off time during cabinet probe alarm	0... 240 min	10		
	PAR.	DEFROST (if r5 = 0)	MIN... MAX			
	d0	automatic defrost interval	0... 99 h 0 = only manual if d8 = 3, maximum interval	0	8	0
	d1	defrost type	0 = electric 1 = hot gas 2 = compressor stopped	2		
	d2	threshold for defrost end	-99... 99 °C/ °F	8		
	d3	defrost duration	0... 99 min se P3 = 1, maximum duration	0	20	0
	d4	enable defrost at power-on	0 = no 1 = yes	0		
	d5	defrost delay after power-on	0... 99 min	0		
	d6	value displayed during defrost	0 = cabinet temperature 1 = display locked 2 = dEF label	1		
	d7	dripping time	0... 15 min	0		
	d8	defrost interval counting mode	0 = device on hours 1 = compressor on hours 2 = hours evaporator temperature <d9 3 = adaptive 4 = real time	0	1	1
	d11	enable defrost timeout alarm	0 = no 1 = yes	0		
	d20	compressor on consecutive time for defrost	0... 999 min 0 = disabled	0		
	PAR.	ALARMS	MIN...MAX			
	A1	threshold for low temperature alarm	-99... 99 °C/ °F	0	0	-22
	A4	threshold for high temperature alarm	-99... 99 °C/ °F	0	10	-10
	A6	high temperature alarm delay after power-on	0... 99 min x 10	90	30	90
	A7	high/low temperature alarms delay	0... 240 min	30		
	A11	high/low temperature alarms reset differential	1... 15 °C/ °F	1.5		
	PAR.	ON/OFF	MIN...MAX			
	POF	enable ON/STAND-BY key	0 = no 1 = yes	1	1	1

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Alarms

COD.	DESCRIPTION	RESET	REMEDIES
Pr1	cabinet probe alarm	automatic	- check probe integrity
rtc	clock alarm	manual	- set date, time and day of week
AL	low temperature alarm	automatic	- check probe integrity - check there is not excessive ice build-up - check thermostat settings
AH	high temperature alarm	automatic	- check probe integrity - check compressor is running - confirm frost is even on evaporator if compressor is running - if compressor not running check electrical connections
PF	power failure alarm	manual	- touch a key - check electrical setting
dFd	defrost timeout alarm	manual	- touch a key - check d2, d3 and d11 (fridge only)

To RESET factory default values, please follow instructions outlined below and then reset default parameters for the fridge or freezer:

1.		Touch the SET key for 4 seconds: the display will show the label "PA"
2.		Touch the SET key.
3.		Touch the UP or DOWN key within 15s to set the value "149"
4.		Touch the SET key: the display will show the label "dEF"
5.		Touch the SET key
6.		Touch the UP or DOWN key within 15s to set the value "4"
7.		Touch the SET key: the display will show "---" blinking for 4s, then the device will stop the procedure
8.		Interrupt power supply to the device and reboot
6. bis		Touch the SET key for 2s (before point 6 above) in order to interrupt the reset procedure and exit

CHANGING FROM CELCIUS (°C) TO FAHRENHEIT (°F)

Follow instructions outlined below:

1.		Touch the SET key for 4 s: the display will show the label "PA".
2.		Touch the SET key.
3.		Touch the UP or DOWN key within 15 s to set the PAS value (default "-19").
4.		Touch the SET key (or do not operate for 15 s): the display will show the label "SP".
5.		Touch the UP or DOWN key to select parameters P2, r1 and r2 in turn. (use values in table below for °C or °F as required)
6.		Touch the SET key.
7.		Touch the UP or DOWN key within 15 s to set the value (see values °C and °F below)
8.		Touch the SET key (or do not operate for 15 s).
9.		Touch the SET key for 4 s (or do not operate for 60 s) to exit the procedure.

°F Values

	PAR.	ANALOGUE INPUTS	MIN... MAX	FRIDGE	FREEZER
	P2	temperature unit of measurement	0 = °C 1 = °F	1	1
	PAR.	REGULATION	MIN... MAX		
	r0	setpoint differential	1... 15 °C/ °F ... r2	2	2
	r1	minimum setpoint	-99 °C/ °F... r2	36	-8
	r2	maximum setpoint	r1... 199 °C/ °F	50	10
	PAR.	SET POINT	MIN... MAX		
	SP	setpoint	r1... r2	39	0

Fahrenheit (°F) Alarm Settings

	PAR.	ALARMS	MIN...MAX	FRIDGE	FREEZER
	A1	threshold for low temperature alarm	-99... 99 °C/ °F	32	-7.6
	A4	threshold for high temperature alarm	-99... 99 °C/ °F	50	14

°C Values (for reference)

	PAR.	ANALOGUE INPUTS	MIN... MAX	FRIDGE	FREEZER
	P2	temperature unit of measurement	0 = °C 1 = °F	0	0
	PAR.	REGULATION	MIN... MAX		
	r0	setpoint differential	1... 15 °C/ °F ... r2	1.5	1.5
	r1	minimum setpoint	-99 °C/ °F... r2	2	-22
	r2	maximum setpoint	r1... 199 °C/ °F	10	-12
	PAR.	SET POINT	MIN... MAX		
	SP	setpoint	r1... r2	4	-18