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CONSIDER THE ENVIRONMENT

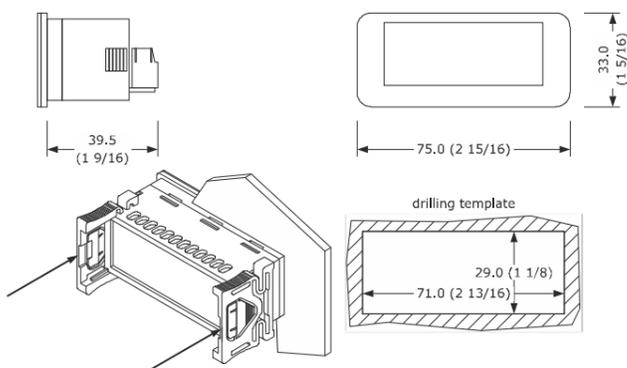
1 ENGLISH

- 230 VAC or 115 VAC power supply (according to the model)
- room probe (PTC/NTC)
- operation with EV3KEY programming key.

Purchasing code	Power supply
EV3T10N7	230 VAC
EV3T10N5	115 VAC

1 MEASUREMENTS AND INSTALLATION

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

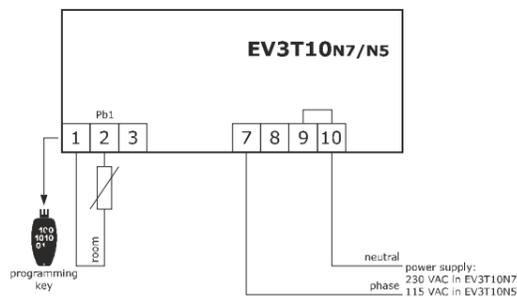


INSTALLATION PRECAUTIONS

- the thickness of the panel must be between 0.8 and 2.0 mm (1/32 and 1/16 in)
- ensure that the working conditions are within the limits stated in the *TECHNICAL SPECIFICATIONS* section
- do not install the device close to heat sources, equipment with a strong magnetic field, in places subject to direct sunlight, rain, damp, excessive dust, mechanical vibrations or shocks
- in compliance with safety regulations, the device must be installed properly to ensure adequate protection from contact with electrical parts. All protective parts must be fixed in such a way as to need the aid of a tool to remove them.

2 ELECTRICAL CONNECTION

N.B.
- use cables of an adequate section for the current running through them
- to reduce any electromagnetic interference, locate the power cables as far away as possible from the signal cables.



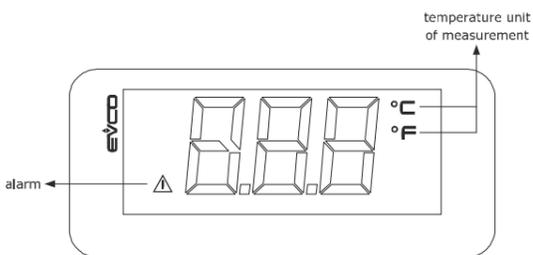
PRECAUTIONS FOR ELECTRICAL CONNECTION

- if using an electrical or pneumatic screwdriver, adjust the tightening torque
- if the device is moved from a cold to a warm place, humidity may cause condensation to form inside. Wait for about an hour before switching on the power
- make sure that the supply voltage, electrical frequency and power are within the set limits. See the section *TECHNICAL SPECIFICATIONS*
- disconnect the power supply before carrying out any type of maintenance
- do not use the device as a safety device
- for repairs and for further information, contact the EVCO sales network.

3 FIRST-TIME USE

1. Carry out the installation following the instructions given in the section *MEASUREMENTS AND INSTALLATION*.
2. Make the electrical connection as shown in the section *ELECTRICAL CONNECTION*, without powering up the device.
3. Power up the device.

4 USER INTERFACE AND MAIN FUNCTIONS



4.1 Switching the device on/off

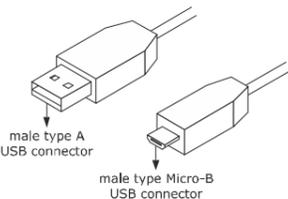
Power up/disconnect the device. If the device is switched on, the display will show the room temperature; if the display shows an alarm code, see the section *ALARMS*.

LED	ON	OFF	FLASHING
	alarm active	-	-
°C/°F	temperature displayed	-	-

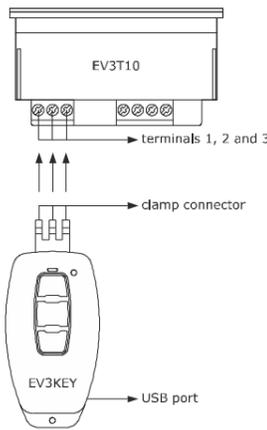
5 SETTINGS

5.1 Setting configuration parameters using the Parameters Manager set-up software system

1. Users will need a personal computer with the Parameters Manager set-up software system correctly installed and a free USB port which is not used by any programme. Parameters Manager is available on the website www.evco.it > products > remote and onsite management and monitoring systems > set-up software system > parameters manager.
2. Users will need an EV3KEY programming key.
3. Users will need a type A male USB cable/type Micro-B male USB cable.



4. Make sure that the device is switched off.
5. Unscrew terminals 1, 2 and 3 on the device until they are completely open and remove any previously connected cables.
6. Insert the clamp connector on EV3KEY fully into terminals 1, 2 and 3 of the device as illustrated in the diagram below.

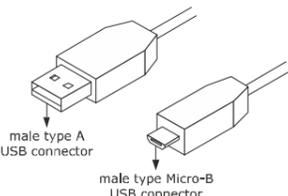


7. Do not screw terminals 1, 2 and 3 on the device to connect EV3KEY.
8. Connect one end of the USB cable to the USB port of EV3KEY.
9. Connect the other end of the USB cable to the USB port of the personal computer.
10. Start up Parameters Manager; see the software manual for details.

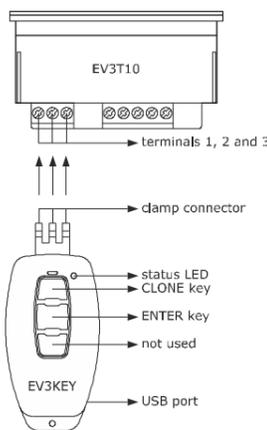
5.2 Setting configuration parameters using the EV3KEY programming key

N.B.
- uploading/downloading the configuration parameters normally takes a couple of seconds
- if the configuration upload/download is successfully completed, the EV3KEY status LED will turn green for 1 s; conversely, if the configuration upload/download fails, the status LED will flash red (repeat the upload/download).

1. Users will need a personal computer with a free USB port which is not used by any programme or a USB power supply.
2. Users will need an EV3KEY programming key.
3. Users will need a type A male USB cable/type Micro-B male USB cable.



4. Make sure that the device is switched off.
5. Unscrew terminals 1, 2 and 3 on the device until they are completely open and remove any previously connected cables.
6. Insert the clamp connector on EV3KEY fully into terminals 1, 2 and 3 of the device as illustrated in the diagram below.



7. Do not screw terminals 1, 2 and 3 on the device to connect EV3KEY.
8. Connect one end of the USB cable to the USB port of EV3KEY.
9. Connect the other end of the USB cable to the USB port of the personal computer or to the USB power supply.

5.2.1 Uploading the configuration (copying the configuration from the controller to EV3KEY)

1. Press the CLONE key for 1 s: the status LED will turn red for 1 s.
2. Press and release the ENTER key when the status LED turns red: the status LED will flash red for a couple of seconds and will then turn green for 1 s (the upload has successfully been completed).
3. Disconnect both ends of the USB cable.
4. Remove EV3KEY from terminals 1, 2 and 3 on the device.

5.2.2 Downloading the configuration (copying the configuration from EV3KEY to the controller)

N.B.
- the configuration can only be downloaded if the firmware of the device from which it originates and the firmware of the destination device are the same; if the firmware is not the same, the configuration download will fail and the status LED on the EV3KEY will turn red for 1 s.
- if the configuration download fails, it may be necessary to refresh the device's factory default settings using the Parameters Manager set-up software system.

1. Press and release the CLONE key: the status LED will flash red for a couple of seconds and then will turn green for 1 s (the download has successfully been completed).
2. Disconnect both ends of the USB cable.
3. Remove EV3KEY from terminals 1, 2 and 3 on the device.

6 CONFIGURATION PARAMETERS

NO.	PAR.	DEF.	ANALOGUE INPUTS	MIN... MAX.
1	CA1	0.0	room probe offset	-25... 25 °C/°F
2	P0	1	type of probe	0 = PTC 1 = NTC
3	P1	1	enable decimal point °C	0 = no 1 = yes
4	P2	0	temperature measurement unit	0 = °C 1 = °F
5	P8	5	display refresh time	0... 250 s : 10
NO.	PAR.	DEF.	ALARMS	MIN... MAX.
6	A1	0.0	first temperature alarm threshold	-99... 199 °C/°F
7	A2	0	first temperature alarm type	0 = disabled 1 = minimum 2 = maximum
8	A3	0	first temperature alarm delay	0... 999 min
9	A4	0.0	second temperature alarm threshold	-99... 199 °C/°F
10	A5	0	second temperature alarm type	0 = disabled 1 = absolute minimum 2 = absolute maximum
11	A6	0	second temperature alarm delay	0... 999 min
12	A7	0	temperature alarm delay from power-on	0... 999 min
13	A11	2.0	temperature alarm switch off differential	0.1... 99 °C/1... 99 °F

7 ALARMS

CODE	DESCRIPTION	RESET	TO CORRECT
Pr1	room probe alarm	automatic	- check P0 - check integrity of the probe - check electrical connection
AL1	low temperature first alarm	automatic	check A1 and A2
AH1	high temperature first alarm	automatic	check A1 and A2
AL2	low temperature second alarm	automatic	check A4 and A5
AH2	high temperature second alarm	automatic	check A4 and A5

8 TECHNICAL SPECIFICATIONS

Purpose of the control device:	function controller.	
Construction of the control device:	built-in electronic device.	
Housing:	black, self-extinguishing.	
Category of heat and fire resistance:	D.	
Measurements:	75.0 x 33.0 x 39.5 mm (2 15/16 x 1 5/16 x 1 9/16 in).	
Mounting methods for the control device:	to be fitted to a panel, snap-in brackets provided.	
Degree of protection provided by the casing:	IP65 (front).	
Connection method:	fixed screw terminal blocks for wires up to 2.5 mm ² .	
Maximum permitted length for connection cables:		
power supply:	10 m (32.8 ft)	
analogue inputs:	10 m (32.8 ft).	
Operating temperature:	from 0 to 55 °C (from 32 to 131 °F).	
Storage temperature:	from -25 to 70 °C (from -13 to 158 °F).	
Operating humidity:	relative humidity without condensate from 10 to 90%.	
Pollution status of the control device:	2.	
Compliance:		
RoHS 2011/65/EC	WEEE 2012/19/EU	REACH (EC) Regulation no. 1907/2006
EMC 2014/30/EU	LVD 2014/35/EU	
Power supply:		
230 VAC (+10% -15%), 50/60 Hz (±3 Hz), max. 2 VA insulated in EV3T10N7		
115 VAC (+10% -15%), 50/60 Hz (±3 Hz), max. 2 VA insulated in EV3T10N5.		
Earthing methods for the control device:	none.	
Rated impulse-withstand voltage:	4 KV.	
Over-voltage category:	III.	
Software class and structure:	A.	
Analogue inputs:	1 for PTC or NTC probes (cabinet probe).	
PTC probes:	Type of sensor: KTY 81-121 (990 Ω @ 25 °C, 77 °F) Measurement field: from -50 to 150 °C (from -58 to 302 °F) Resolution: 0.1 °C (1 °F).	
NTC probes:	Type of sensor: B3435 (10 KΩ @ 25 °C, 77 °F) Measurement field: from -40 to 105 °C (from -40 to 121 °F) Resolution: 0.1 °C (1 °F).	
Displays:	custom display, 3 digit, with function icons.	

N.B.
The device must be disposed of according to local regulations governing the collection of electrical and electronic equipment.

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