

EH3C

Proportional electric heating controller



EH3C proportional electric heating controllers are designed to regulate the air temperature in three phase (400 V) heating systems by providing a continuously adjustable control of the load. The controller regulates the ratio between on-time and off-time to generate the required heating power.

Key features

- An optional PT500 sensor is required (e.g. FLTSN-P500-010 or ROTSN-P500)
- Thermal protection with auto reset and shutdown in case of overheating
- LED indication for output and power
- Can also be controlled via an analogue signal generated by another temperature controller or by a BMS system
- Front panel knobs for temperature setpoint selection (5–30 °C) - day and night
- Analogue output (0–10 V or 0–20 mA) available for slave functionality with multiple EH3C devices or an EVS(S) electronic fan speed controller
- Robust metal enclosure

Area of use

- For wall and DIN-rail mounting
- Systems where air temperature needs to be maintained

Technical specifications

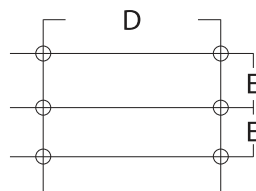
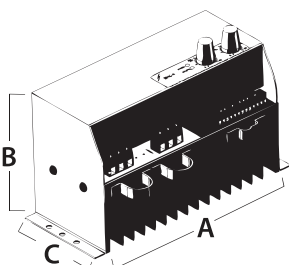
Supply voltage	EH3C4-15	380–440 VAC
Analogue output		0–10 VDC / 0–20 mA
Analogue input		0–10 VDC / 0–20 mA
Min. load		2 A
Max. load		22 A
Protection standard		IP20
Ambient conditions	Temperature	-40 - 50 °C
	Relative humidity	90% rH (non-condensing)

Standards

- Low Voltage Directive 2014/35/EU:
 - Standard IEC669-2-1
 - Standard IEC669-1
- EMC Directive 2014/30/EU:
 - CENELEC EN61000-6-3
 - EN61000-6-2



Fixing and dimensions - EH3C4-15



Article code	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Weight
EH3C4-15	162	99.5	75	172	12.5	1050 g

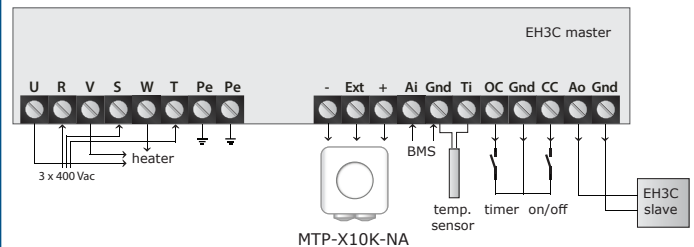
Article codes

Article code	Current rating 400 VAC	Current low volt. part	Fuse low volt. part
EH3C4-15	22 A	0,2 A	0,630 A



Wiring and connections

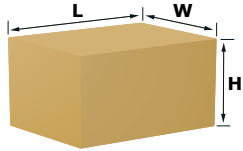
Master mode - example



R	
S	Power supply, 3x 400 VAC / 50-60 Hz
T	
U	
V	Output to electrical heater
W	
Pe	Earth connections
Ai	Analogue input for remote control (BMS signal) - 0-2V heater stops / 2–10 V heater runs (put bridge between "+" from "Ext" and Ai when not in use)
Ti	Passive PT500 temperature sensor (like f.e. FLTSN-P500-010 or ROTSN-P500)
CC	contact normally closed – switch for remote control (when CC is opened the heater stops)
OC	contact normally open – input for timer for night temperature (when OC is closed setpoint depends on position of potentiometer)
Ao	Analogue output



Packaging



Article code	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight [kg]	Gross weight [kg]
EH3C4-15	Unit (1 pc.)	220	128	108	1,115 kg	1,217 kg
	Box (15 pcs.)	590	380	280	16,725 kg	19,245 kg
	1/2 pallet (240 pcs.)	1.200	800	1.290	267,6 kg	325,72 kg
	Pallet (420 pcs.)	1.200	800	2.160	468,3 kg	558,46 kg

Global trade item numbers (GTIN)

Packaging	Unit (1 pc.)
EH3C4-15	05401003002254