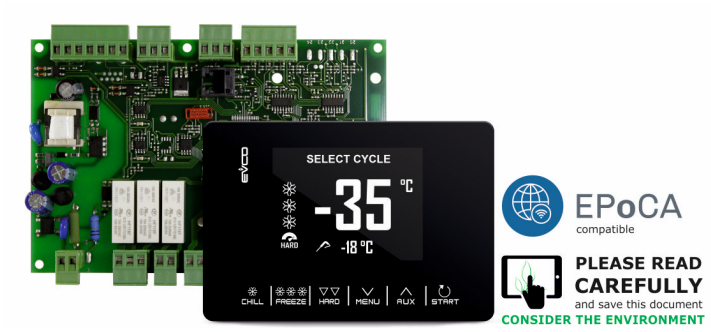
EVJS 800 series

Controllers for blast chillers



EN ENGLISH

- Front installation on a plastic or metal panel.
- Power supply 115... 230 VAC.
- Incorporated clock.
- Cabinet probe, needle probe and auxiliary probe (PTC/NTC).
- Door switch input and multi-purpose input.
- Compressor relay 30 A res. @ 250 VAC.
- Alarm buzzer.
- TTL MODBUS slave port for programming key, EVconnect app, EPoCA remote monitoring system or for BMS.

Available models

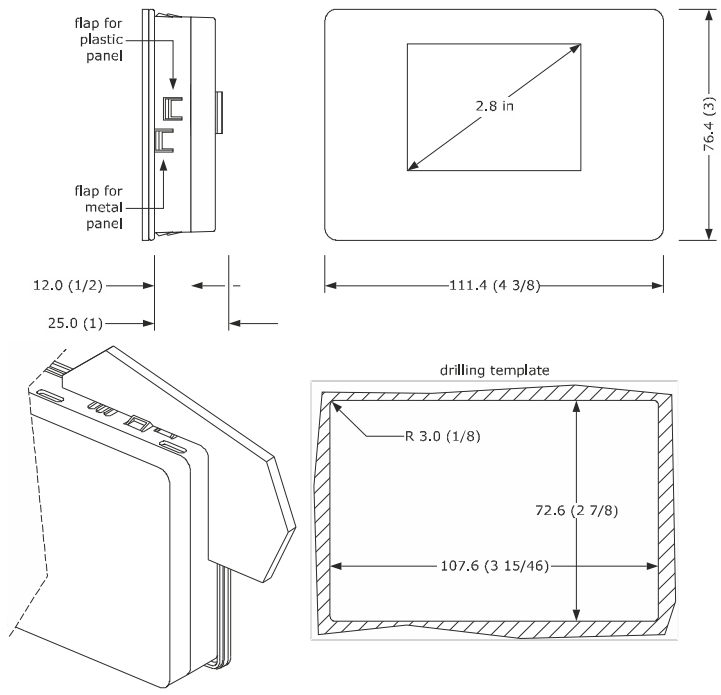
Purchasing codes	Incorporated features	Power supply	Analogue inputs
EVJS815P9	clock, alarm buzzer	115... 230 VAC	3 for PTC/NTC
EVJS825P9	clock, alarm buzzer, programs	115... 230 VAC	3 for PTC/NTC

1 MEASUREMENTS AND INSTALLATION | Measurements in mm (inches)

1.1 Measurements and installation user interface

Front installation on a plastic or metal panel (with elastic holding flaps).

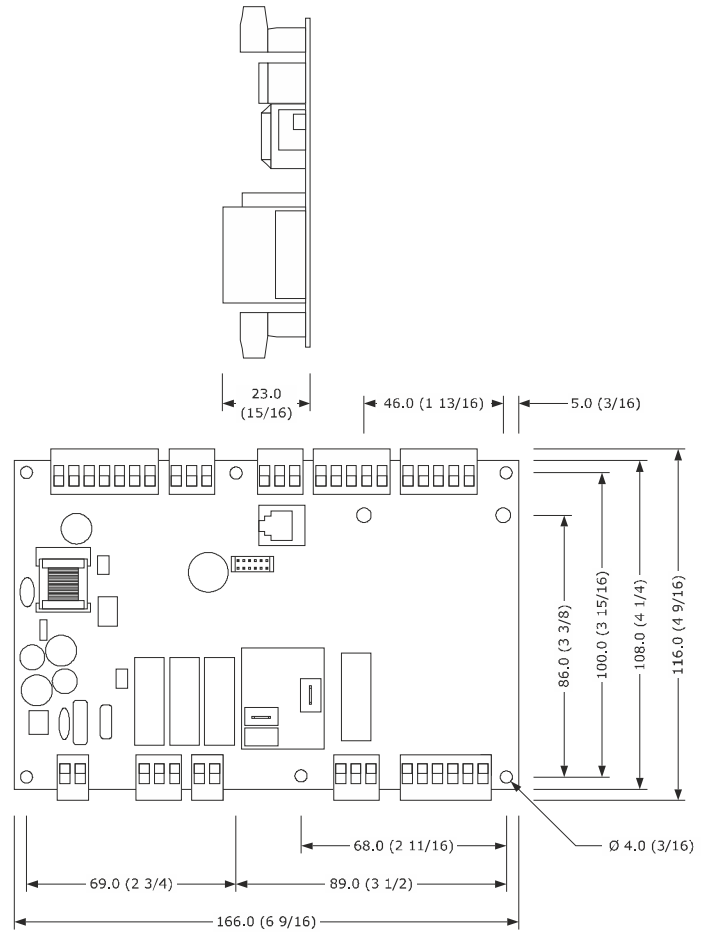
N.B.
The thickness of a metal panel must be between 0.8 and 1.5 mm (1/32 and 1/16 in), while that for a plastic panel must be between 0.8 and 3.4 mm (1/32 and 1/8 in).



1.2 Measurements and installation user interface

To be installed on an electrical switchboard, on spacers.

N.B.
Any metal parts close to the control module must be far enough away so as not to compromise the safety distance.



INSTALLATION PRECAUTIONS

- 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 USE

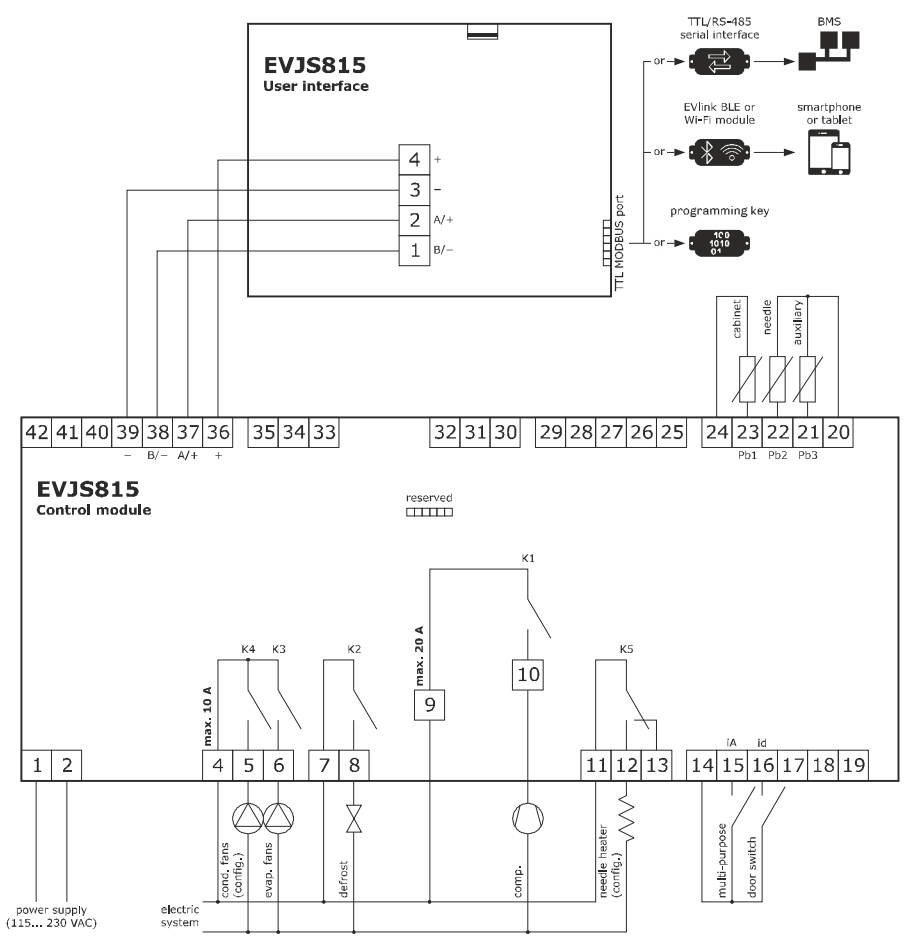
Consult the installer manual (code 144JS800E104).

3 TECHNICAL SPECIFICATIONS

Purpose of the control device	Function controller
Construction of the control device	Built-in electronic device
Container	Black, self-extinguishing
Category of heat and fire resistance	D
Measurements	
User interface: 111.4 x 76.4 x 25.0 (4 3/8 x 3 x 1)	Control module: 166.0 x 116.0 x 23.0 (6 9/16 x 4 9/16 x 15/16)
Mounting methods for the control device	
User interface: front installation on a plastic or metal panel (with elastic holding flaps)	Control module: to be installed on an electrical switchboard, on spacers
Degree of protection provided by the overing	
User interface: IP65 (front), on condition the device is fitted to a metal panel with thickness 0.8 mm (1/32 in)	Control module: IP00
Connection method	
User interface: removable screw terminal blocks for wires up to 1 mm²	Control module: removable screw terminal blocks for wires up to 2,5 mm², 6.3 mm faston
Maximum permitted length for connection cables	
User-interface-control module: 20 m (65.6 ft)	
Power supply: 10 m (32.8 ft)	Analogue inputs: 10 m (32.8 ft)
Digital inputs: 10 m (32.8 ft)	Digital outputs: 10 m (32.8 ft)
Operating temperature	From -5 to 55 °C (from 23 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
Conformity	
RoHS 2011/65/CE / WEEE 2012/19/EU / REACH (EC) Regulation 1907/2006	
EMC 2014/30/UE	LVD 2014/35/UE
Power supply	115... 230 VAC (+10% -15%), 50/60 Hz (±3 Hz), max. 6 VA insulated
Earthing methods for the control device	None
Rated impulse-withstand voltage	2.5 KV
Over-voltage category	II
Software class and structure	A
Clock	By request (incorporated secondary lithium battery)
Clock drift	≤ 55 s/month at 25 °C (77 °F)
Clock battery autonomy in the absence of a power supply	6 momths
Clock battery charging time	24 h (the battery is charged by the power supply of the device)
Analogue inputs	3 for PTC or NTC probes (cabinet probe, needle probe and auxiliary probe)
PTC probes — Sensor type	KTY 81-121 (990 Ω @ 25 °C, 77 °F)
PTC probes — Measurement field	From -50 to 150 °C (from -58 to 302 °F)
PTC probes — Resolution	0.1 °C (1 °F)
NTC probes — Sensor type	ß3435 (10 K□Ω @ 25 °C, 77 °F)
NTC probes — Measurement field	From -40 to 105 °C (from -40 to 221 °F)
NTC probes — Resolution	0.1 °C (1 °F)
Digital inputs	2 dry contacts (door switch and multi-purpose)
Dry contact — Contact type	5 VDC, 2 mA
Dry contact — Power supply	None
Dry contact — Protection	None
Digital outputs	5 with electro-mechanical relay
Relay K1	SPST, 30 A res. @ 250 VAC
Relay K2	SPST, 8 A res. @ 250 VAC
Relay K3	SPST, 8 A res. @ 250 VAC
Relay K4	SPST, 8 A res. @ 250 VAC
Relay K5	SPDT, 8 A res. @ 250 VAC
The device guarantees double insulation between each digital output connector and the rest of the components of the device	
Type 1 or Type 2 Actions	Type 1
Additional features of Type 1 or Type 2 actions	C
Displays	2.8 inch colour graphic display
Alarm buzzer	Incorporated
Communications ports	1 TTL MODBUS slave port for programming key, EVconnect app, EPoCA remote monitoring system or for BMS

4 ELECTRICAL CONNECTION

N.B.
- Use cables of an adequate section for the current running through them.
- To reduce any electromagnetic interference connect the power cables as far away as possible from the signal cables.
- Due to the supply difficulties of the 30 A fast-on relay, for an undefined period of time it will be replaced by a relay of equivalent capacity with the addition of a two-way screw terminal block (rated current 12 A).



PRECAUTIONS FOR ELECTRICAL CONNECTION

- If using an electrical or pneumatic screwdriver, adjust the tightening torque.
- If the device has been moved from a cold to a warm place, the humidity may have caused condensation to form inside. Wait 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 doing any type of maintenance.
- Do not use the device as safety device.
- For repairs and for further information, contact the EVCO sales network.

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

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