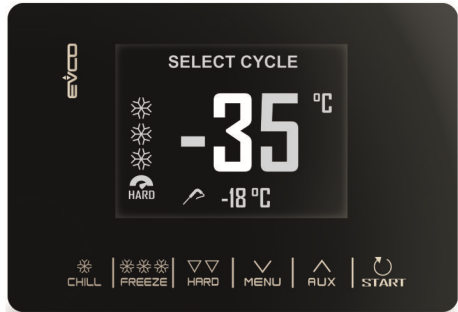


EVJ 800 series

Controllers for blast chillers



PLEASE READ CAREFULLY
and save this document
CONSIDER THE ENVIRONMENT

- EN ENGLISH**
- Front installation on a plastic or metal panel or installed from behind a glass or methacrylate panel (according to the model).
 - Power supply 115... 230 VAC.
 - Incorporated clock (according to the model).
 - Cabinet probe and needle probe (PTC/NTC).
 - Door switch input.
 - Compressor relay 30 A res. @ 250 VAC.
 - Alarm buzzer.
 - Incorporated BLE connectivity for EVconnect app (according to the model).
 - TTL MODBUS slave port for programming key, EVconnect app or BMS.

Available models

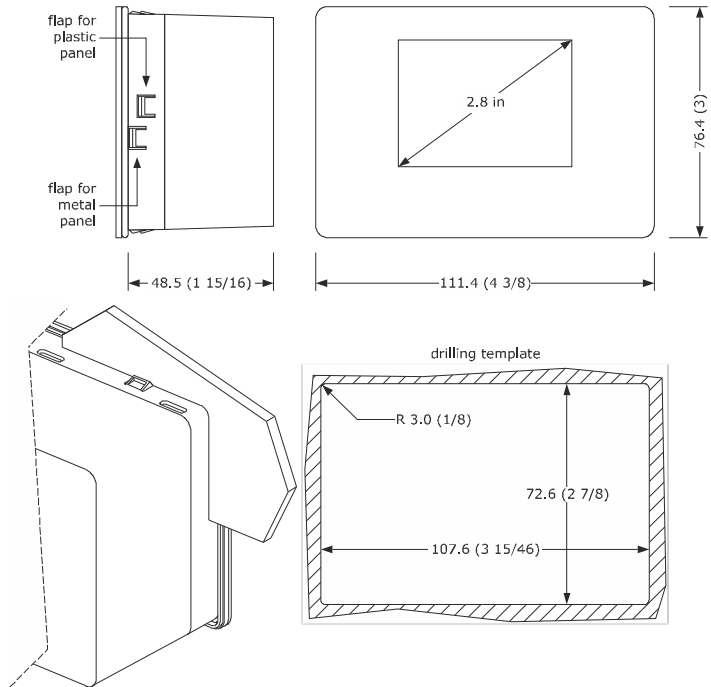
Purchasing codes	Installation mode	Incorporated features	Power supply	Analogue inputs
EVJ805P9VX3	front	-	115... 230 VAC	2 for PTC/NTC
EVJ815P9VX3XXV	front	clock, BLE connectivity	115... 230 VAC	2 for PTC/NTC

1 MEASUREMENTS AND INSTALLATION | Measurements in mm (inches)

1.1 Models in plastic container for front installation

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).

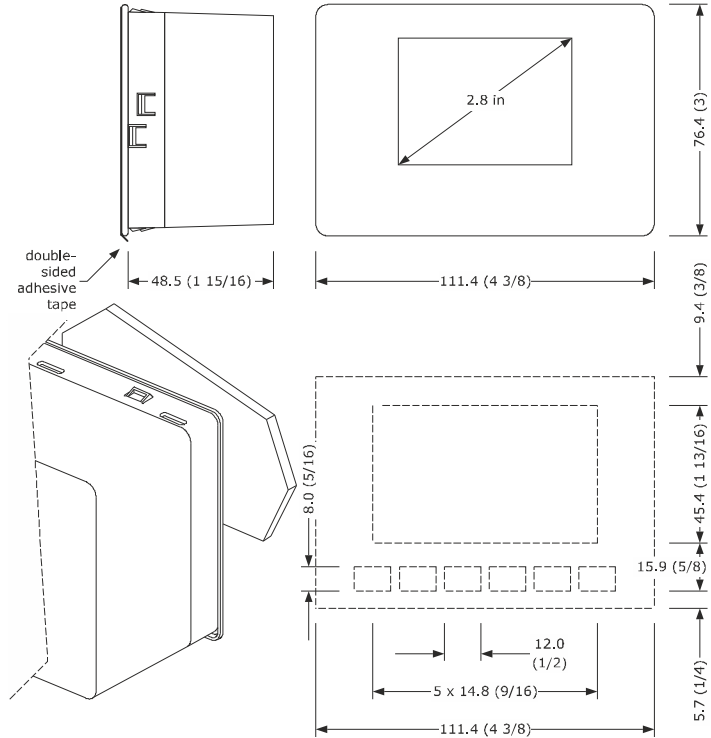


1.2 Models in plastic container installed from behind

Installed from behind a glass or methacrylate panel (with biadhesive) customizing the keys on the front of the unit.

N.B.

- The thickness of a glass panel must be between 2.0 and 4.0 mm (1/16 and 1/8 in), while that for a methacrylate panel must be between 2.0 and 3.0 mm (1/16 e 1/8 in)
- The panel and the material used to make screen printing must not contain conductive substances
- Keep the device and the panel at a temperature between 15 and 38 °C (59 and 100 °F) about an hour before the installation
- Before the installation clean the panel surface in contact with the biadhesive carefully, making sure the product used to clean is suitable for the panel material (we recommend using isopropyl alcohol, hydrocarbon solvent in case of greasy surfaces); keep cleaning with a cloth as long as it results clean and dry after the use
- During the installation, exert a uniform and constant pressure about 30 s on the panel surface in contact with the biadhesive; later keep the device and the panel horizontally about 48 h at a temperature between 15 and 38 °C (59 and 100 °F).



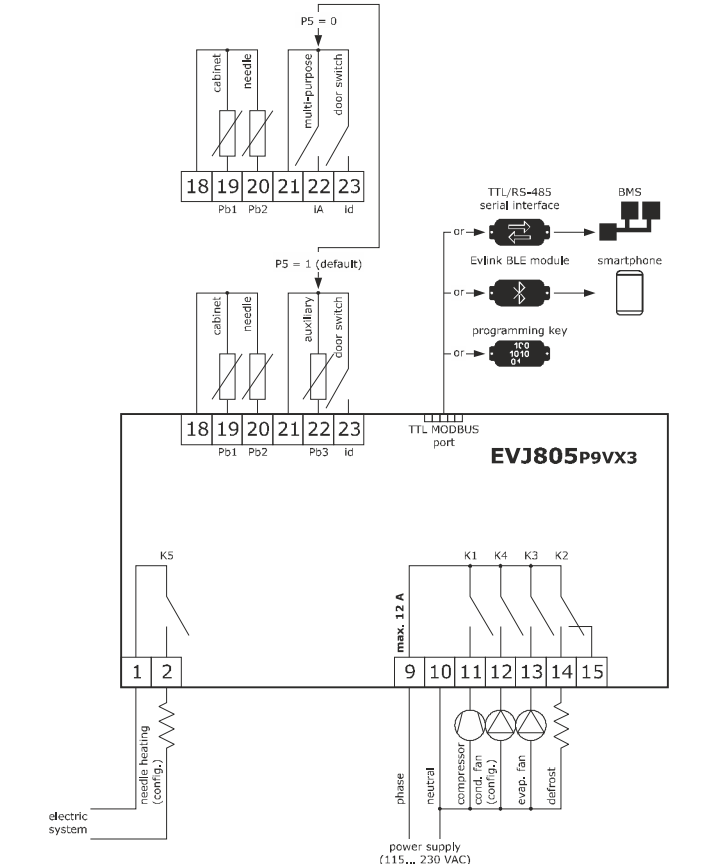
INSTALLATION PRECAUTIONS

- 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 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.



In model EVJ815P9VX3XXV the EVlink BLE module is incorporated.

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.

3 USE

Consult the installer manual (code 144J800E104).

4 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	111.4 x 76.4 x 48.0 mm (4 3/8 x 3 x 1 15/16 in)
Mounting methods for the control device	according to the model, front installation on a plastic or metal panel (with elastic holding flaps) or installed from behind a glass or methacrylate panel (with biadhesive) customizing the keys on the front of the unit
Degree of protection provided by the covering	IP65 (front), on condition the device is fitted to a metal panel with thickness 0.8 mm (1/32 in)
Connection method	Pico-Blade connector
Fixed screw terminal blocks for wires up to 2.5 mm² (removable screw terminal blocks for wires up to 2.5 mm² by request)	
Maximum permitted length for connection cables	
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	Incorporated secondary lithium battery (clock not available in EVJ805P9VX3)
Clock drift	≤ 60 s/month at 25 °C (77 °F)
Clock battery autonomy in the absence of a power supply	> 24 h at 25 °C (77 °F)
Clock battery charging time	24 h (the battery is charged by the power supply of the device)
Analogue inputs	2 for PTC or NTC probes (cabinet probe and needle probe)
PTC probes	Sensor type: 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	Sensor type: B3435 (10 KΩ @ 25 °C, 77 °F) Measurement field: From -40 to 105 °C (from -40 to 221 °F) Resolution: 0.1 °C (1 °F)
Digital inputs	1 dry contact (door switch)
Dry contact	Contact type: 5 VDC, 2 mA Power supply: None Protection: None

Other inputs	Input configurable for analogue input (auxiliary probe) or digital input (multi-purpose input)
Digital outputs	5 with electro-mechanical relay
Relay K1	SPST, 30 A res. @ 250 VAC
Relay K2	SPDT, 8 A res. @ 250 VAC
Relay K3	SPST, 8 A res. @ 250 VAC
Relay K4	SPST, 5 A res. @ 250 VAC
Relay K5	SPST, 5 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
Incorporated sensors:	Bluetooth Low Energy (available in EVJ815P9VX3XXV)
Communications ports	1 TTL MODBUS slave port for programming key, EVconnect app or BMS

For EVJ815P9VX3XXV According to European R&TTE Declaration of Conformity this device can be used in the following Countries: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, The Netherlands and The United Kingdom.

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

This document and the solutions contained therein are the intellectual property of EVCO and thus protected by the Italian Intellectual Property Rights Code (CPI). EVCO imposes an absolute ban on the full or partial reproduction and disclosure of the content other than with the express approval of EVCO. The customer (manufacturer, installer or end-user) assumes all responsibility for the configuration of the device. EVCO accepts no liability for any possible errors in this document and reserves the right to make any changes, at any time without prejudice to the essential functional and safety features of the equipment.