

# EVJ 800 Basic Split

## Controllers for blast chillers



### EN ENGLISH

- user interface for front installation on a plastic or metal panel or installation from behind a glass or methacrylate panel (according to the model)
- power supply 115... 230 VAC
- cabinet probe and needle probe (PTC/NTC)
- door switch input
- compressor relay 30 A res. @ 250 VAC
- sealed relays compliant with the standard EN 60079-15
- management of 0-10 V fans
- alarm buzzer
- TTL MODBUS slave port for programming key, EVconnect app, EPoCA remote monitoring system or for BMS

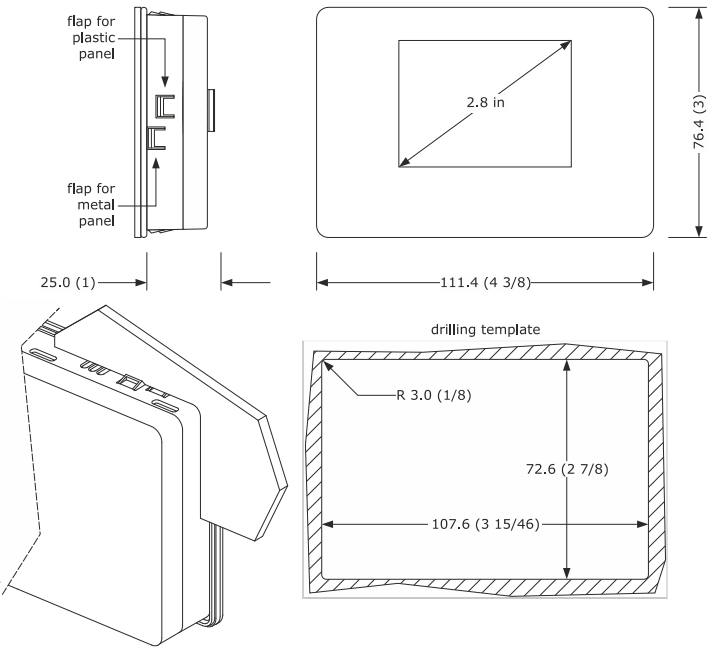
Available models	
Purchasing code	User interface installation mode
EVJS824P9	front installation
EVJS824P9EG	installation from behind

### 1 MEASUREMENTS AND INSTALLATION | Measurements in mm (inches)

#### 1.1 Models with user interface for front installation

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

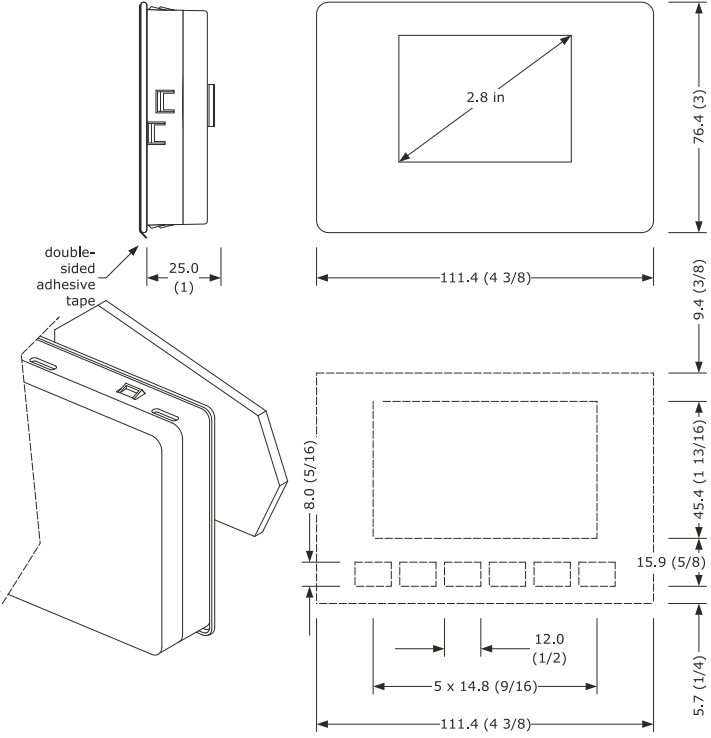
	N.B. The thickness of a metal panel must be between 0.8 and 1.5 mm (1/32 and 1/16 in), while that for a plastic panel must be between 0.8 and 3.4 mm (1/32 and 1/8 in)
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#### 1.2 Models with user interface for installation from behind

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

	N.B. <ul style="list-style-type: none"><li>- The maximum thickness of a glass panel must be 4.0 mm (3/16 in), while that for a methacrylate panel must be 2.0 mm (1/16)</li><li>- The panel and the material used to make screen printing must not contain conductive substances</li><li>- Keep the device and the panel at a temperature between 15 and 38 °C (59 and 100 °F) about an hour before the installation</li><li>- Before the installation clean the panel surface in contact with the biadhesive carefully, <u>making sure the product used to clean is suitable for the panel material</u> (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</li><li>- 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)</li></ul>
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### 1.2 Control module

To be installed on an electrical panel, on plastic spacers (not provided).

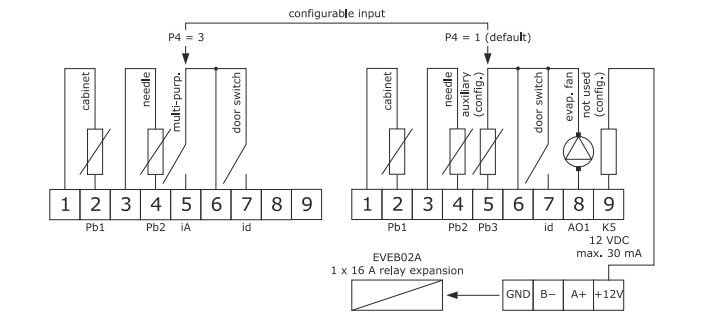
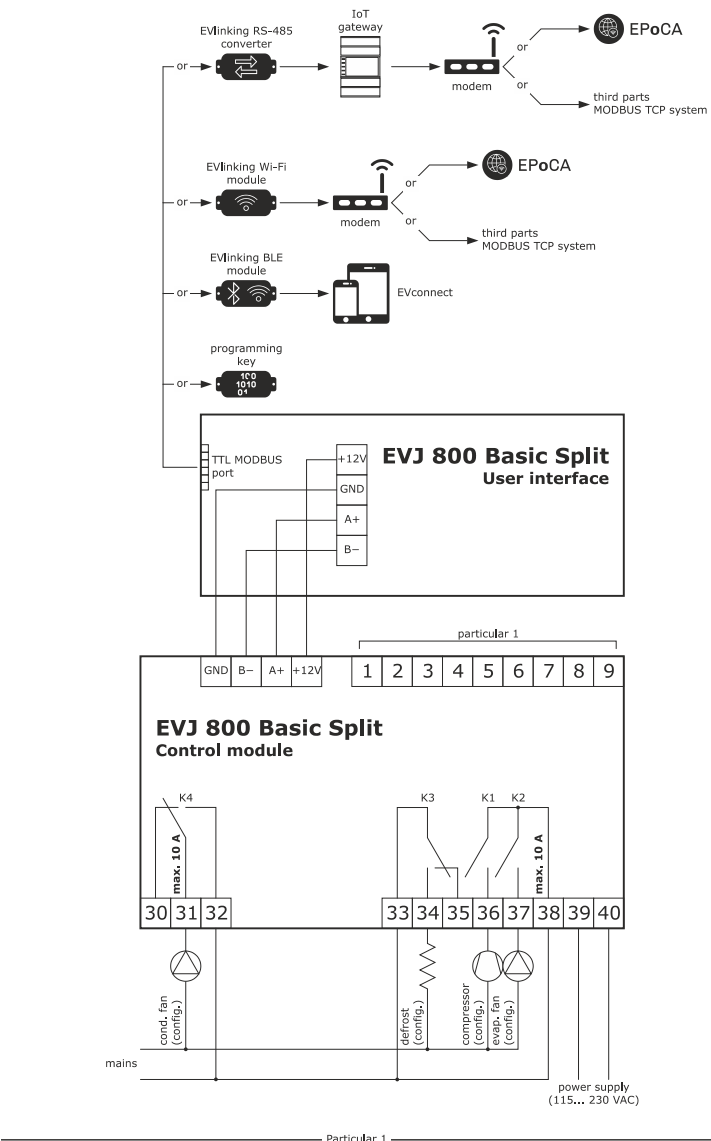
	N.B. Any metal parts must be far enough away so as not to compromise safety distances
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- INSTALLATION PRECAUTIONS
- Ensure that the working conditions are within the limits stated in the *TECHNICAL SPECIFICATIONS* section
  - Do not install the device 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. <ul style="list-style-type: none"><li>- Use cables of an adequate section for the current running through them</li><li>- To reduce any electromagnetic interference connect the power cables as far away as possible from the signal cables</li></ul>
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- 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

USE			
Consult the installer manual (code 144J800BSE104).			
4 TECHNICAL SPECIFICATIONS			
Purpose of the control device		Function controller	
Construction of the control device		Built-in electronic device	
Housing			
user interface: black, self-extinguishing		control module: open frame board	
Category of heat and fire resistance		D	
Measurements			
user interface: 111.4 x 76.4 x 25.0 mm (4 3/8 x 3 x 1 in)		control module: 66.5 x 107.5 x 31.0 mm (2 5/8 x 4 1/4 x 1 1/4 in)	
Mounting methods for the control device			
user interface: 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		control module: to be installed on an electrical panel, on plastic spacers (not provided)	
Degree of protection provided by the covering			
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: - plug-in screw terminal blocks for wires up to 2.5 mm <sup>2</sup> - Pico-Blade connector		control module: - fixed screw terminal blocks for wires up to 2.5 mm <sup>2</sup>	
Maximum permitted length for connection cables			
user-interface-control module: 10 m (32.8 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 0 to 60 °C (from 32 to 140 °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			
user interface: powered by the control module		control module: 115... 230 VAC (+10 % -15%), 50/60 Hz (±3 Hz), max. 3,2 VA isolated	
Earthing methods for the control device		none	
Rated impulse-withstand voltage		4 kV	
Over-voltage category		III	
Software class and structure		A	
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)	
Other inputs		Input configurable for analogue input (auxiliary probe) or digital input (multi-purpose input)	
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)	
0-10 V Signal:	Minimum applicable impedance:	1 kΩ	
	Resolution:	0.01 V	
K1 relay		SPST, 16 A res. @ 250 VAC	
K2 relay		SPST, 5 A res. @ 250 VAC	
K3 relay		SPDT, 8 A res. @ 250 VAC	
K4 relay		SPDT, 16 A res. @ 250 VAC	
Other outputs		1 for 12 VDC max. 30 mA	
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		built-in	
Communications ports		1 TTL MODBUS slave port for EVJKEY programming key, EVconnect app, EPoCA remote monitoring system or for BMS	

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