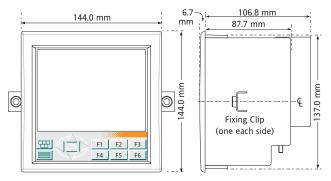
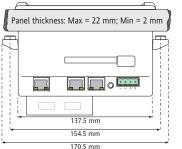
## Small frame

#### **Dimensional details**

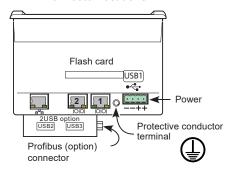




#### PANEL MOUNTING DETAILS

Cutout -138 mm x 138 mm (both -0 +1 mm) Installed panel angle: Vertical panels only. Min. Inter-unit spacing (vertical):50 mm. Minimum inter-unit spacing (horizontal): 50 mm. Note: where multiple units are mounted in close proximity with one another, steps must be taken to ensure that the resulting ambient temperature does not exceed 50 degrees Celsius.

#### **Connector locations**



#### Power connection for both sizes

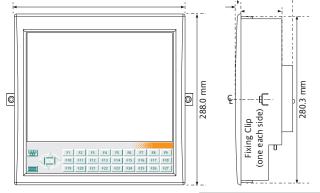


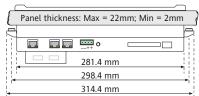
Note:

Positive pins shorted internally Negative pins shorted internally

## Large Frame

#### **Dimensional details**



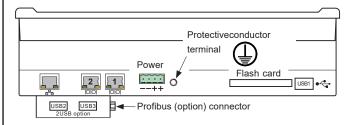


#### PANEL MOUNTING DETAILS

Cutout - 282 mm x 282 mm (both -0 +1.3 mm) Installed panel angle: Vertical panels only. Min. inter-unit spacing (vertical): 50 mm. Min. inter-unit spacing (horizontal): 50 mm. Mote: where multiple units are mounted in close proximity with one another, steps must be taken to ensure that the resulting ambient

degrees Celsius.

#### **Connector locations**



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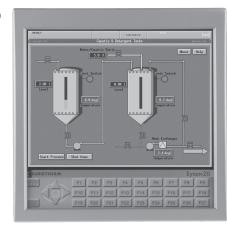
# Eurotherm by Watlow

# Installation and Wiring for Eycon™-10 and Eycon™-20

Eycon-10



Eycon-20



### What is the Eycon?

Eycon-10 and Eycon-20 are advanced Human Machine Interface (HMI) panels which offer easy to use, integrated, color, touchscreen displays. Both models offer accurate, continuous and sequential control capabilities, and have an open network architecture providing connection with the T2550 PAC, T2750 PAC and other, 3rd party, devices. Advanced features such as Batch control, Multi setpoint programmer, Data recording and Modbus communications allow the Eycon series to be used in a variety of applications from simple standalone applications to site wide system solutions. Profibus communications, USB Printer/Barcode reader and twin extra USB connectors are available as options.

HA029356ENG/10 5





### **Important Information**

#### UNPACKING THE UNIT

The instrument and any accessories should be unpacked carefully and inspected for damage. The original packing materials should be retained in case reshipment is required. If there is evidence of shipping damage, please notify the manufacturer or the carrier within 72 hours and retain the packaging for inspection by the manufacturer's and/or carrier's representative.

#### PACKAGE CONTENTS

The package contents should be checked against the order codes, using the labels on the components. Product labeling includes:

- 1. Outer packaging label. Shows the full instrument order code, instrument serial number (including status level).
- Instrument label. Shows the full instrument order code, serial number and hardware build level.

#### MANUALS REQUIRED

Handbook (HA029280) (supplied as a pdf file on CD)

Refer also to the 'Related Manuals' list in the above Handbook's contents list.

#### ALARMS

In order to comply fully with BS EN61010, all I/O and hardware alarms must be enabled.

#### **INSTALLATION & SAFETY REQUIREMENTS**

Installation requirements for EMC and for safety.

This unit conforms with EMC Directive 89/336/EEC, amended by 93/68/EEC and with the European Low Voltage Directive 73/23/EEC

This unit satisfies the emissions and immunity standards for industrial environments. It is, however, the responsibility of the installer to ensure safety and EMC compliance of any installation which includes this unit.

To ensure compliance with the European EMC directive certain installation precautions are necessary as follows:

#### General information

Installation must be carried out only by competent personnel, according to the instructions given in the product manual HA029280. The installation must comply with any relevant national and local regulations:

- a. General guidance. For general guidance refer to the Manufacturer's EMC Installation Guide (Part No. HA025464).
- b. To ensure that immunity and emission requirements are met: screened cable must be used for all communications wiring and the protective conductor terminal must be connected to a protective
- Local lightning protection must be fitted if the dc power supply is located more than 30 metres from the instrument(s) it is supplying.
- If a hazard could arise from an operator's reliance on a value displayed by the equipment, the display must give an unambiguous indication, for example, flashing alarm symbol, whenever the value is over range or under range

#### Wiring

The unit is intended for use with low voltage dc supplies. Connection of mains (line) voltages will not only damage the unit, but may cause an electrical shock hazard to be present at operator accessible surfaces.

The unit must be wired in accordance with the wiring data given in the product manual. Wiring installations must comply with all local wiring regulations. To minimize the pick up of electrical noise, communications wiring must be routed away from high current power cables.

In order to comply with the requirements of safety standard EN61010, the unit shall have one of the following as a disconnecting device, fitted within easy reach of the operator, and labeled as the disconnecting device for the equipment:

- a. A switch or circuit breaker complying with the requirements of IEC947-1 and IEC947-3.
- b. A separable coupler that can be disconnected without the use of a tool.
- c. A separable plug, without a locking device, to mate with a socket outlet in the building.

In order to provide easy 'daisy chaining', the supply voltage connector has two 0V pins (commoned together by the circuit board backplane) and two 24 (nom) pins (connected together by an internal link). The unit is therefore not suitable for direct connection of redundant power supplies.

#### Conductive pollution

Electrically conductive pollution, for example, carbon dust, water condensation, must be excluded from any cabinet in which the unit is mounted. To ensure the atmosphere is suitable, an air filter should be supplied in the air intake of the cabinet. Where condensation is likely, for example at low temperatures, a thermostatically controlled heater should be installed in the cabinet.

It should be ensured that any enclosure which houses the unit provides the ventilation/heating required to maintain the operating temperature of the unit and the humidity level of its operating environment within its specified limits.

#### MAINTAINING PRODUCT SAFETY

#### Misuse of equipment

If the equipment is used in a manner not specified in this handbook the protection provided by the equipment may be impaired.

#### Preventive Maintenance

Procedures for battery replacement and for touchscreen calibration, are included in the handbook included on the CD supplied with the unit.

The front panel can be wiped with a damp cloth to keep it clean. Mild detergents may be used to remove grease, but abrasive cleaners and aggressive organic solvents must not be used as they can remove the legends and/or damage the plastic labels.

#### SAFE USAGE OF BATTERIES

The polycarbon monofluoride (PMF)/lithium battery (type BR2330) used for data retention must be stored in a suitable manner, handled and used correctly, and disposed of safely when spent.

#### **FLASH CARDS**

The flash card must not be reformatted. Files and system folders must not be deleted. The card must not be removed from a reader without the correct removal procedure being followed. If these rules are not adhered to, the card may be damaged and the instrument malfunction.

8 TxA

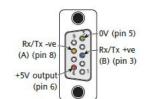
**Symbols** - Symbols which may appear on the unit, have the following meanings:



Refer to the manual for instructions

Precautions against static electrical discharge must be taken when handling this unit

#### Communications



Pin 5-wire 5-wire 3-wire Client/Server Client Server 1 RxB TxB 2 RxA TxA Common Common 3 Common 4 NC NC NC NC NC 5 NC Common Common Common 7 TxB RxB NC

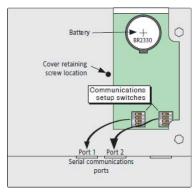
RxA

NC

Serial communications RJ45 pinout

Profibus 9-way D-type pinout

#### **Battery Details**





Battery removal detail

Battery and communications configuration switch locations (Rear view of small frame unit shown, large frame units similar)

Segment	ON (left)	OFF (right)	
4	Server	Client	
3	5-wire	3-wire	
2	120 Ohm terminating resistor fitted across pins 7 and 8	No terminating resistor across pins 7 and 8	
1	120 Ohm terminating resistor fitted across pins 1 and 2	No terminating resistor across pins 1 and 2	

#### China RoHS Compliance - EYCON-10 & EYCON-20

部件名称 Part Name	有害物质 - Hazardous Substances						
	铅 (Pb)	汞 (Hg)	हिंस (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
金属部件 Metal parts	X	0	0	О	0	0	
塑料部件 Plastic parts	О	0	0	О	0	0	
电子件 Electronic	X	0	0	О	0	0	
龍点 Contacts	0	0	0	0	0	0	
线缆和线缆附件 Cables & cabling accessories	О	0	0	О	0	0	

- 本表格依据SI/T11364的規定编制。

  O: 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
- X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。

This table is made according to SJ/T 11364.

O: indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is below the limit as stipulated in GB/T 26572.

X: indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is above the limit as stipulated in GB/T 26572.

#### Manufacturing Address

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Dardilly cedex Lyon, 69574 France

https://www.eurotherm.com

WARNING: This product can expose you to chemicals including lead and lead compounds which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to: https://www.P65Warnings.ca.gov