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**Mounting**

The EuroFlex is designed to be mounted in a IEC297 / DIN41494 rack with card frames and guides to support the card.

The card dimensions are 160 mm x 100 mm.

When mounted as specified, the EuroFlex requires at least 50 mm (2 in / 10 HP units) of rack width to accommodate the components and to allow adequate air flow.

The optional Baldor backplane BPL011-501 is recommended. This requires a rack width of 100 mm (4 in / 20 HP units).

**CAUTION!** To prevent equipment damage, ensure that all power sources have been removed from the backplane before attaching the EuroFlex.

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**Cooling**

Effective cooling for the EuroFlex is essential to achieve the maximum rated current of 5 A. The EuroFlex requires forced air cooling at 1.5 m/s or greater. The air flow must be parallel to the board surface, passing vertically from the bottom to the top of the EuroFlex.

With the EuroFlex mounted as specified, the quoted air velocity allows full rated output current at ambient temperatures up to 55 °C (131 °F).

If forced air cooling is not provided, the maximum output current must be derated to 2 A at 55 °C.
Protective earth
To satisfy safety requirements, the protective earth must be connected before any other connections are made. The Earth pins on connectors X1 and X2 are not protective earth.

24 VDC control supply and filter
EuroFlex requires a 20-30 VDC, 1 A supply to power the control electronics.

Connect the control supply at connector X9, observing the correct polarity. A fused DC supply should be provided for the EuroFlex. If other devices are to be powered from the same 24 V supply, a filter (Baldor catalog number F10014A00) should be installed to isolate the EuroFlex from the rest of the system.

Drive supply, fuses and filter
EuroFlex requires a 20-60 VDC, 305 W drive supply. Connect the positive side of the drive supply to DC1 and the 0 V side to DC2. The drive supply must incorporate a circuit breaker (or fuse) and a suitable filter (Baldor part F10015A02 is recommended).

Motor U V W outputs
Connect the motor to the U, V and W outputs on connector X2. The U, V and W outputs must be connected to their corresponding U, V or W terminal on the motor. Misconnection may result in uncontrolled motor movement.

Motor feedback input
The EuroFlex operates with incremental encoder feedback devices. The device type is configured using the supplied software, WorkBench v5. Suitable cables are available from Baldor. Connect the motor feedback signal to connector X8.

Encoder output
The encoder output can be used to transmit axis position to another controller or host positioner.

Step & direction inputs (optional)
+5 V step and direction signals can be used to provide the position reference when operating in position control mode.

The inputs are non-isolated +5 V inputs. Connect the step signal to pin 2 and the direction signal to pin 3. Connect the 0 V side of both signals to pin 1 (GND).

Step and direction signals are not required if the analog demand input is to be used as a torque or speed reference (see below).

Analog demand input (optional)
A ±10 VDC signal can be used to provide the demand reference for torque and speed control modes.

For differential operation, connect the demand signal to pins 4 and 5 of connector X3. For single ended operation, connect the positive signal to pin 4; connect the 0 V side of the signal and AIN- to pin 2 (AGND).

An analog demand signal is not required if the step and direction inputs are to be used as a position reference (see above).

Drive enable input
To enable the EuroFlex, 24 VDC (12-30 VDC) must be applied to the drive enable input.

Connect the drive enable signal to pins 2 and 3 of connector X5. Polarity is not important, as the signal is connected to an opto-isolator with an AC input.

Node ID / parameter configuration switches
The DIP switches form a 4-bit binary pattern (with switch 4 as the most significant bit), allowing the values 0-15 to be selected. This value represents the node ID that will be used by the EuroFlex for unique identification on a network.

The EuroFlex is capable of storing up to four configuration parameter sets. The value selected by the DIP switches also represents which of the parameter sets (0-3) will be used. Since there are only four parameter sets, selecting values greater than 3 will cause parameter set 0 to be selected.

The DIP switches are read at power up, so must be adjusted before applying power. When a switch is on (pressed down) the bit is active (1).