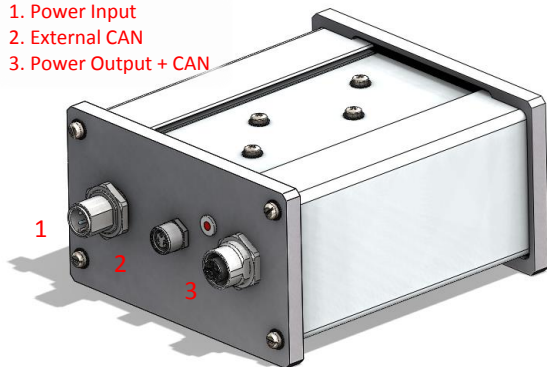


General Description

The ICB-400 is a naturally safe power supply designed to give up to 400mA of current at a stable voltage of between 9.5 – 11V while accepting a voltage of between 10-32V as an input. In addition to this, the ICB-400 provides an isolated CAN interface allowing for intrinsically safe CAN devices to be connected to unsafe devices while maintaining communication.

- 1. Power Input
- 2. External CAN
- 3. Power Output + CAN



Intended Use

The ICB-400 should be mounted in a safe zone and should not be powered up when it itself is in a hazardous zone. In order to maintain the safe use of the device, it is important that power and ground connections for connected devices only pass through the barrier.

General Specifications

- Provides intrinsically safe power
- Provides an isolated CAN connection
- CAN Maximum baud rate: 1Mb/s
- Maximum CAN Propagation delay: 475ns
- Temperature range -40°C to +50°C
- IP66

Safety Specifications

- Associated ia device, provides zone 0 rated safe power
- Should be mounted within a safe zone

Electrical Specification

- Voltage Input: 10-32V
- Maximum Supply Current: 1A
- Supply Current @10V Input: 730mA
- Supply Current @32V Input: 240mA
- Voltage Output: 9.7V Nominal (9.5-11V range)
- Output Current Max: 400mA

Wiring

Power Input (1)

Power is supplied through a Binder Male M12 Type A connector (09 3431 116 04). A wire with a matching Female connector should be plugged into it with the following connections:

Pin	Description
1	+10-32V (Power)
2	Unconnected
3	Unconnected
4	0V (Ground)

External Unsafe CAN (2)

The central connector carries CAN and is a Binder M8 Female connector (09 3418 86 03). In order to connect this up to an external CAN device it must be connected as follows:

Pin	Description
1	CAN High
3	CAN Low
4	Ground

Power Output + Safe CAN (3)

The power output and safe CAN are supplied through a Binder Female M12 Type A Connector (09 3432 116 04). A wire with a matching Male connector must be used.

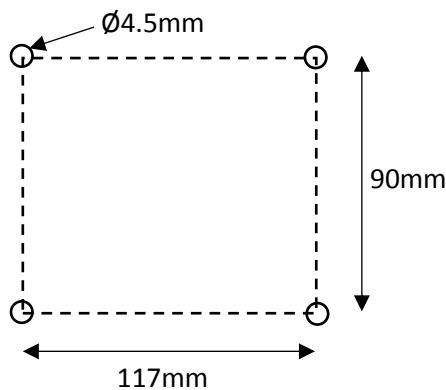
Pin	Description
1	+9.7V (Safe Power)
2	CAN High
3	CAN Low
4	0V (Ground)

Mounting




The ICB-400 comes with two flanges on the bottom, these provide four 4.5mm holes with which the device can be mounted.

Alternatively the flanges can be removed and four slidable nuts are available on the bottom rail for a variable hole configuration.

Flange Mounting



Certificate

Model No: ICB-400 Serial No: xxxxxxxxxxxxxxxx		 MechTronic Ltd. 15 Lower Wortley Road Leeds, England LS12 4RY +44 (0) 113 279 9661 www.mechtronic.ltd.uk
	[Ex ia Ga] IIB Voltage: 10 - 32Vdc Uo: 11V Io: 1.78A Baseefa16ATEX0021X IECEx BAS 16.0021X IP66 -40°C ≤ Tamb ≤ +50°C	
	 1180	WARNING - DO NOT OPEN OR DISCONNECT WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT