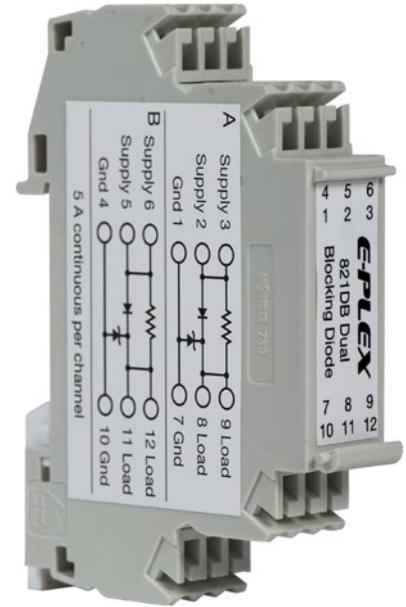


Dual Blocking Diode



Introduction

When an E-Plex power module such as an 805OPM is used to power a load and that load may also be powered from another power source, a potentially damaging back feed situation is possible. The 821BD can be used to prevent the back feed from causing any damage, whilst still allowing the E-Plex module to detect if the auxiliary supply is active.

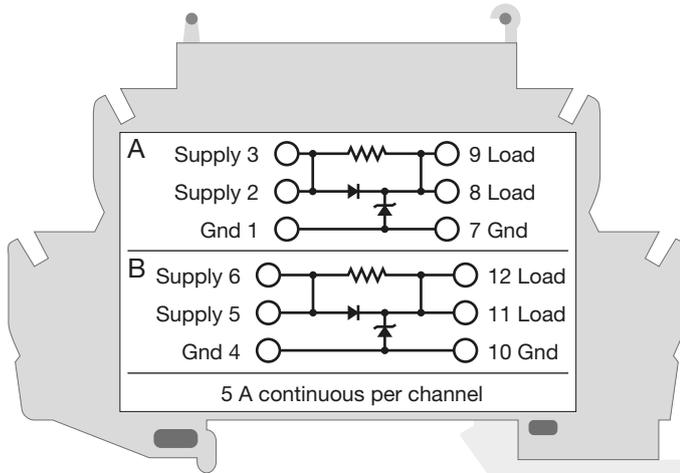
Key features

- Two independent channels.
- 5 A continuously rated.
- 20 A surge capability.
- Integrated back EMF protection diode.
- Din rail mountable.

Applications

- Controlling / monitoring bilge pumps.
- Redundant power supplies.

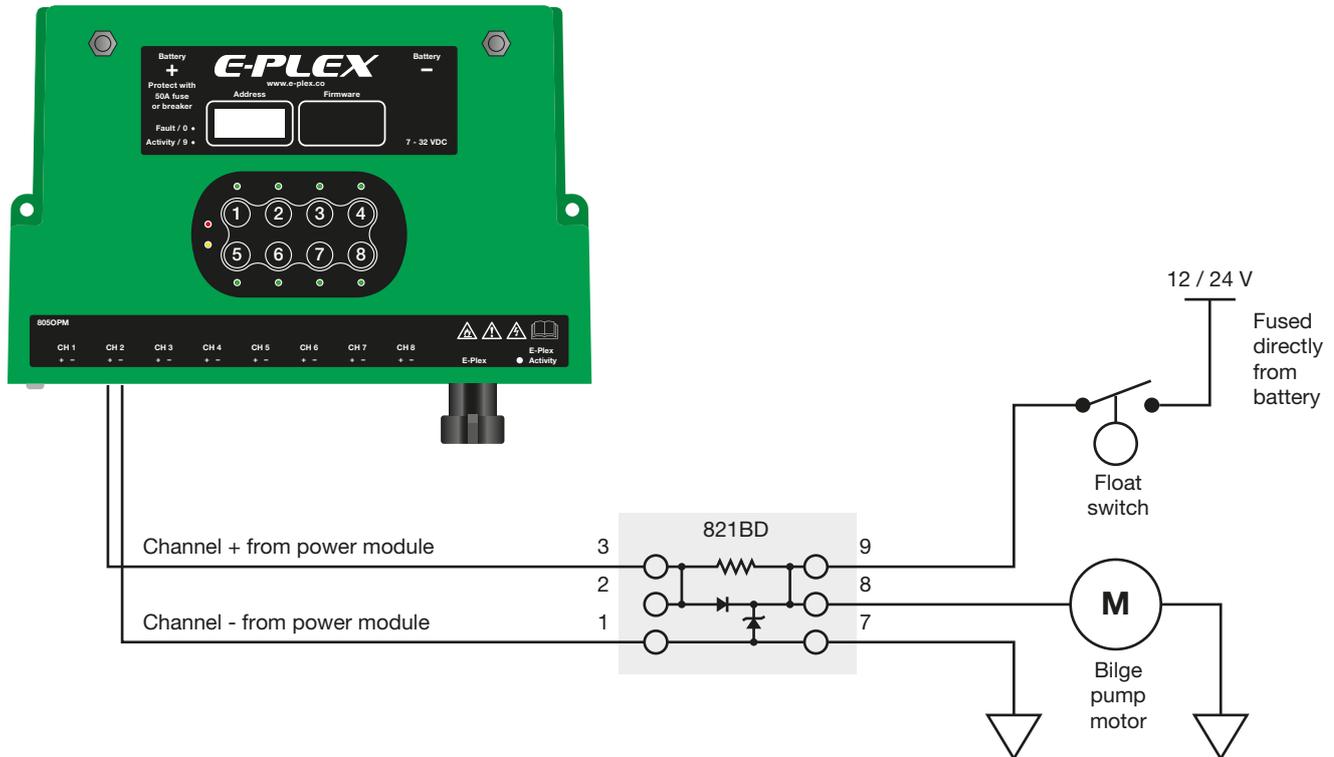
Internal Schematic



Notes:

1. A transient voltage suppressor diode is incorporated into the design to ensure back EMF voltage spikes from inductive loads are snubbed regardless of whether the power module or the auxiliary supply switches off the load.
2. Both channels may be paralleled to provide 10 A capability.

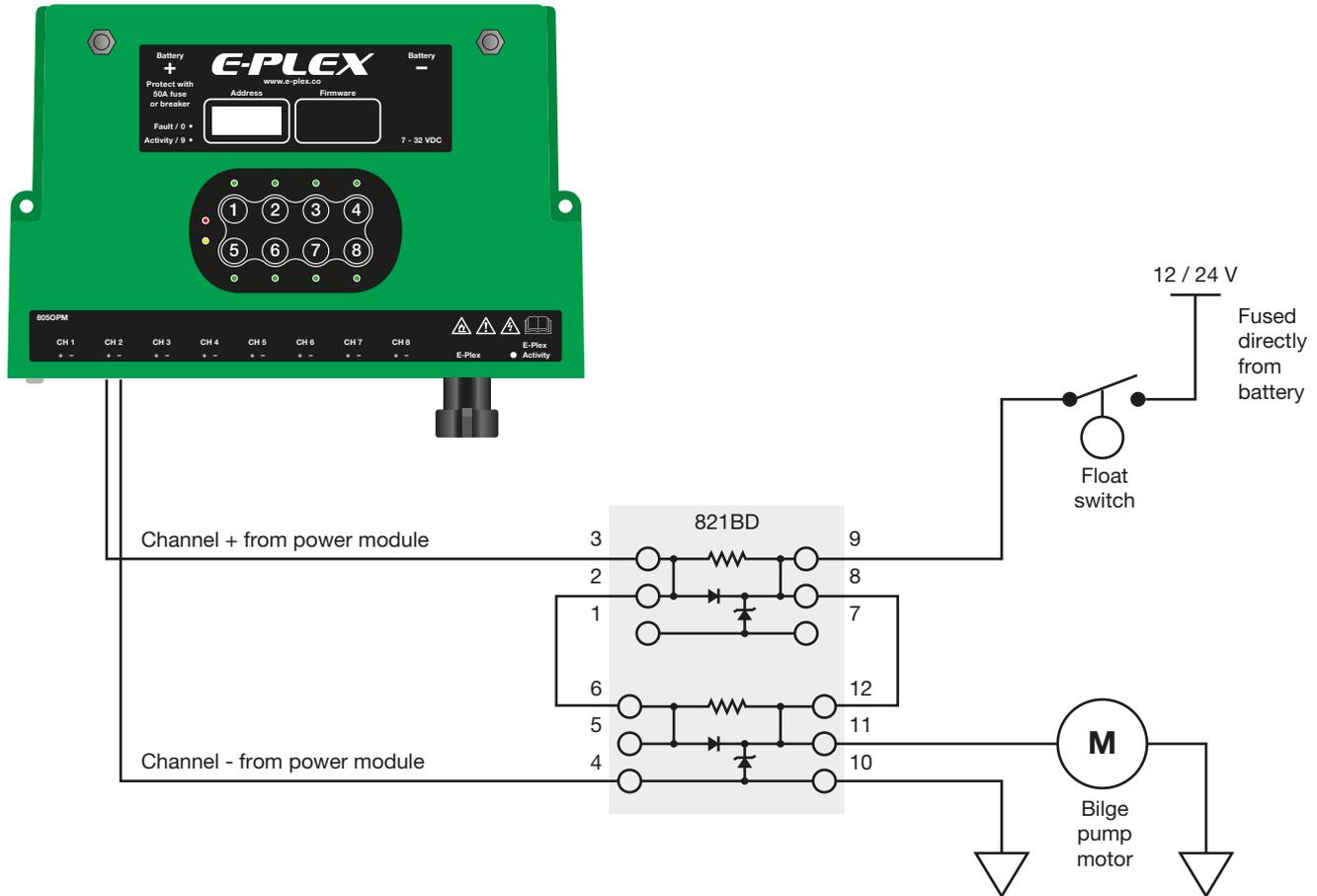
Typical wiring diagram



This example shows a single channel of the 821BD being used to power a bilge pump motor that is also supplied from a float switch.

Paralleling channels

To enable loads rated greater than 5 A, channels may be paralleled using the spare terminals.



This example shows both channels of the 821BD paralleled together to supply an 8 A continuously rated bilge pump motor that is also supplied from a float switch.

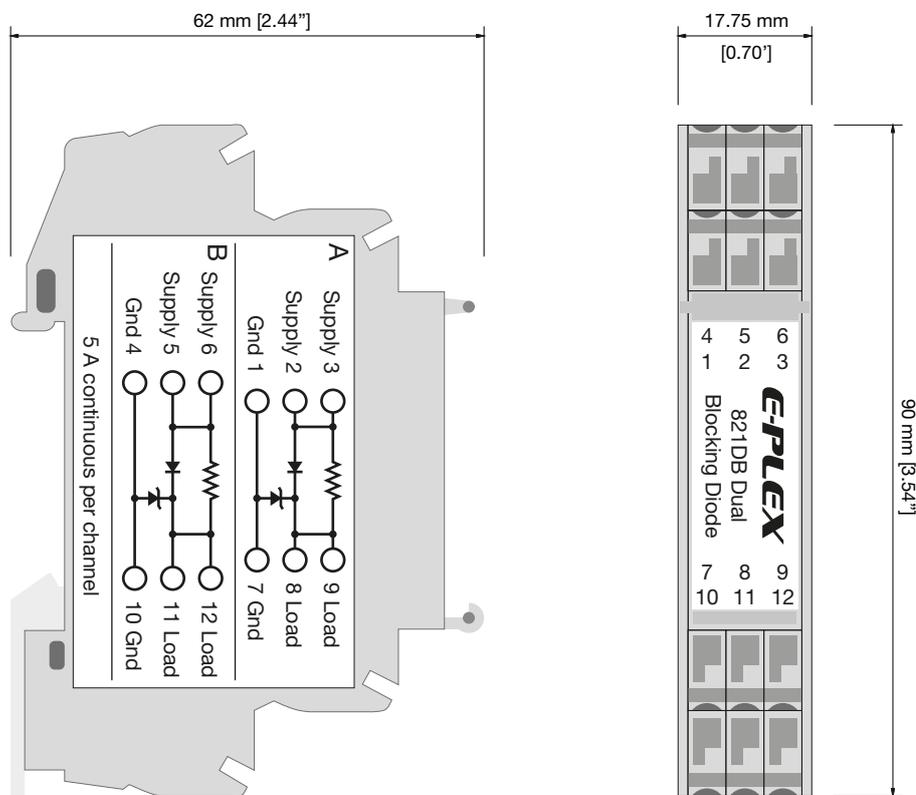
Electrical specifications

Description	Specifications
Continuous current (per channel)	5 A
Surge current (per channel)	20 A
Maximum voltage	32 V
Maximum reverse voltage	32 V
Maximum wire size	2.5 mm ²

Mechanical specifications

Description	Specifications
Operating Temperature	-20 °C to 60 °C (non freezing)
Storage Temperature	-40 °C to 85 °C
Operating Humidity	5 % to 95 % (non-condensing)
IP Rating	IP20
Weight	50 g

Dimensions



Ordering codes

Description	Ordering Code
821BD Dual blocking diode	EP-MISC-821BD



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