



# DEPRO<sup>®</sup> -FSMM/24V/5A Solid State Relay



- 24Vdc@5A max.
- Low power dissipation
- Compact, just 16.2mm wide
- Built in fuse
- Overcurrent and back-EMF protection
- cCSAus certified for Class 1 Division 2 applications

This module is the perfect power supply accessory. Solid state switches, in this case a MOSFET, offer faster switching times and longer operating life than mechanical relays. The on-board fuse eliminates the need for an additional fuse terminal, saving panel space and cost.

The fuse is a TR5 micro style. These are available with ratings up to 5A continuous and a 50A interrupting capacity. Each module comes with a 5A, slow blow fuse installed. Socket

mounting makes replacement quick and easy. When properly sized the occurrence of a fault causes the fuse to fail before the 24Vdc power supply shuts off (the user may need to select a fuse with a lower rating). The micro style fuse keeps the module size as small as possible.

The fuse cover, developed by Emphatec, secures the fuse in the socket and allows the module to meet the requirements for Class 1 Division 2 and Zone

2 certification.

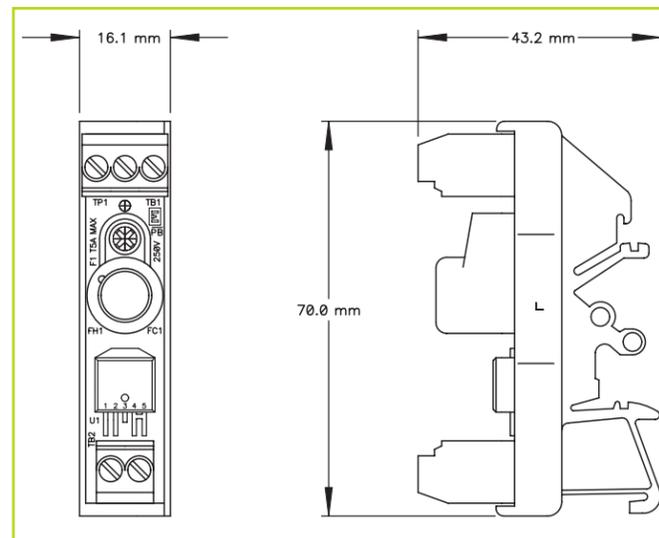
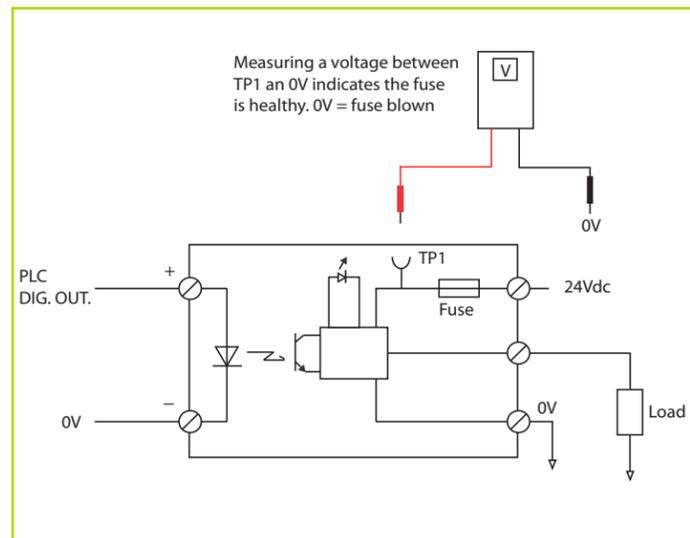
A status LED provides indication of both the input and output status. The LED illuminates if the input is energized, the fuse is healthy and the output MOSFET is conducting a current. If the fuse is blown or the load is disconnected the LED will not illuminate. If the MOSFET is in a short circuit condition the LED will illuminate when the input is not energized.



# SPECIFICATIONS

<b>Catalog number:</b>	<b>330193</b>
<b>Input (control):</b>	20-30Vdc, 3mA @ 24Vdc
<b>Output :</b>	20-30Vdc, 5A maximum Power dissipation (fuse+MOSFET):<2W
<b>Fuse:</b>	5A slow blow provided Littelfuse / Wickmann TR5 or equivalent Fuse status can be determined by measuring a voltage between TP1 and the output 0V terminal
<b>Status LED:</b>	Green indicates output is active. Illuminated when the fuse is healthy and current is flowing to the load.
<b>Input-output Isolation:</b>	1500V for 1 minute
<b>Switching time:</b>	60µs nom. turn-on 150µs nom. turn-off
<b>Overcurrent Protection:</b>	Fuse and internal electronic protection. MOSFET turns off if load current>10A for >150ms.
<b>Terminations:</b>	26 - 12AWG 0.5-0.6Nm torque,6mm stripping length
<b>Temperature:</b>	-25 to +60°C
<b>Approvals:</b>	cCSAus, Class 1 Division 2 Groups A, B, C and D, Temperature code T5 Ex nA IIC, Zone 2, AEx nA IIC

Spare fuse cover and retaining screw (package of 8): Catalog Number 330316



**WARNING**

**FOR CLASS 1 DIVISION 2 APPLICATIONS**

**EXPLOSION HAZARD:** SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS 1, DIVISION 2; DO NOT DISCONNECT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS



### Average Time Current Curves

