



PDM15 - POWER DISTRIBUTION MODULE



MoTeC's 15 output Power Distribution Module is designed to provide electronically switched power to various electrical systems in the vehicle such as motors, lights, solenoids, and electronic devices such as ECUs and data acquisition systems.

The module replaces conventional relays, fuses and circuit breakers to simplify wiring and switch requirements, while increasing reliability.

► FEATURES

- Each output is over-current, short circuit and thermal overload protected.
- Outputs programmable in 1 A steps and controllable via a combination of switch inputs, CAN messages and logic functions.
- Performs up to 200 logic operations and functions that can be used to selectively turn off systems.
- Provides full diagnostic information via CAN.

► SPECIFICATIONS

For full details, see user manual at www.motec.com/downloads.

Inputs

- 16 x switch inputs: range 0 to 51 V, resolution 0.2 V

Outputs

- 8 x 20 A outputs: 20 A continuous, 115 A transient (typical)
- 7 x 8 A outputs: 8 A continuous, 60 A transient (typical)

Communications

- 1 x CAN

Operating Voltage

- 30 V max

Environmental Protection

- Conformal coating on PCB

Physical

- 1 x 34 and 1 x 26 pin waterproof connectors, 1 x M6 stud
- Case size 107.5 x 127.5 x 38.7 mm
- Weight 260 g

► COMPATIBILITY

MoTeC ECU Models

- M84, M400, M600, M800, M880, M1 Series (package dependant)

MoTeC Dash/Logger Models

- C125, C127, C185, C187, CDL3, SDL3, ADL3, ACL
- Discontinued: SDL, ADL2, ADL

► ACCESSORIES

MoTeC UTC #61059

⇒ UTC is required, not compatible with MoTeC CAN cable.

► SOFTWARE

Latest software can be found at www.motec.com/downloads.

PDM Manager software is used for:

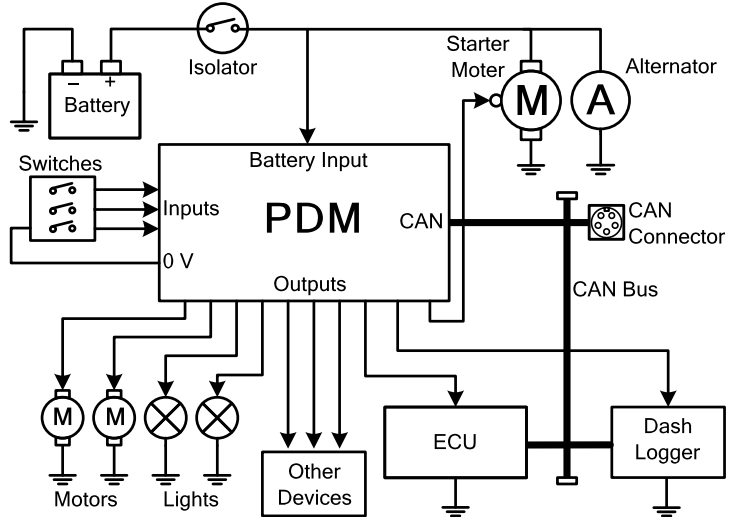
- Configuring all inputs, outputs, CAN messages and conditions
- Monitoring all channel values
- Output testing
- Firmware updating.

► WIRING

➔ The PDM is wired onto the CAN bus. Please ensure wiring is according to CAN requirements and the CAN bus has at least one 100R terminating resistor. More information can be found in the user manual at www.motec.com/downloads.

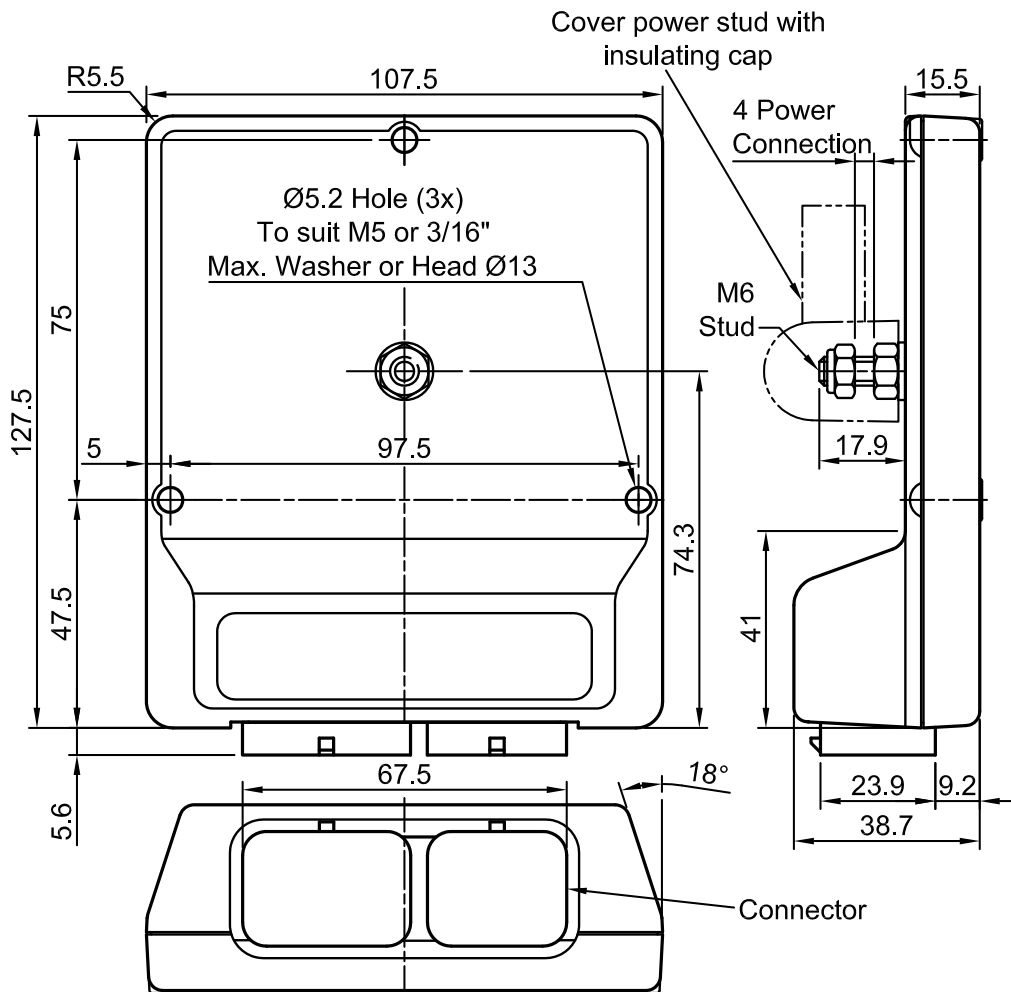
To communicate to the PC, a CAN connector must be wired into the CAN bus. To connect the PDM directly to the CAN connector, wire according to the following table.

| PDM Pin | PDM Name | CAN Connector Pin | CAN Connector Wire |
|---------|----------|-------------------|--------------------|
| B25 | CAN Lo | 4 | Green |
| B26 | CAN Hi | 5 | White |
| A28 | 0 V | 1 | Black |



► DIMENSIONS AND MOUNTING

Measurements in mm.



PINOUT

Connector A

34 pin waterproof connector

Mating connector #65044

| Pin | Name | Function |
|-----|--------|--------------------------|
| A1 | OUT1 | 20 A Output 1 (with A10) |
| A2 | OUT9 | 8 A Output 9 |
| A3 | OUT2 | 20 A Output 2 (with A12) |
| A4 | OUT10 | 8 A Output 10 |
| A5 | OUT3 | 20 A Output 3 (with A14) |
| A6 | OUT11 | 8 A Output 11 |
| A7 | OUT4 | 20 A Output 4 (with A16) |
| A8 | OUT12 | 8 A Output 12 |
| A9 | OUT5 | 20 A Output 5 (with A17) |
| A10 | OUT1 | 20 A Output 1 (with A1) |
| A11 | OUT13 | 8 A Output 13 |
| A12 | OUT2 | 20 A Output 2 (with A3) |
| A13 | OUT14 | 8 A Output 14 |
| A14 | OUT3 | 20 A Output 3 (with A5) |
| A15 | OUT15 | 8 A Output 15 |
| A16 | OUT4 | 20 A Output 4 (with A7) |
| A17 | OUT5 | 20 A Output 5 (with A9) |
| A18 | | Not used |
| A19 | DIG2 | Digital/Switch Input 2 |
| A20 | | Not used |
| A21 | DIG4 | Digital/Switch Input 4 |
| A22 | | Not used |
| A23 | DIG7 | Digital/Switch Input 7 |
| A24 | | Not used |
| A25 | | Not used |
| A26 | VBATT- | Battery Negative |
| A27 | DIG1 | Digital/Switch Input 1 |
| A28 | GND | 0 V |
| A29 | DIG3 | Digital/Switch Input 3 |
| A30 | DIG5 | Digital/Switch Input 5 |
| A31 | DIG6 | Digital/Switch Input 6 |
| A32 | DIG8 | Digital/Switch Input 8 |
| A33 | DIG9 | Digital/Switch Input 9 |
| A34 | DIG10 | Digital/Switch Input 10 |

Connector B

26 pin waterproof connector

Mating connector #65045

| Pin | Name | Function |
|-----|--------|--------------------------|
| B1 | | Not used |
| B2 | | Not used |
| B3 | OUT6 | 20 A Output 6 (with B9) |
| B4 | | Not used |
| B5 | OUT7 | 20 A Output 7 (with B11) |
| B6 | | Not used |
| B7 | OUT8 | 20 A Output 8 (with B13) |
| B8 | | Not used |
| B9 | OUT6 | 20 A Output 6 (with B3) |
| B10 | | Not used |
| B11 | OUT7 | 20 A Output 7 (with B5) |
| B12 | | Not used |
| B13 | OUT8 | 20 A Output 8 (with B7) |
| B14 | | Not used |
| B15 | DIG13 | Digital/Switch Input 13 |
| B16 | | Not used |
| B17 | DIG15 | Digital/Switch Input 15 |
| B18 | VBATT- | Battery Negative |
| B19 | | Not used |
| B20 | DIG11 | Digital/Switch Input 11 |
| B21 | DIG12 | Digital/Switch Input 12 |
| B22 | GND | 0 V |
| B23 | DIG14 | Digital/Switch Input 14 |
| B24 | DIG16 | Digital/Switch Input 16 |
| B25 | CAN Lo | CAN Low |
| B26 | CAN Hi | CAN High |

Connector C

M6 stud

Mating: eyelet and M6 nut

| Pin | Name | Function |
|-----|--------|------------------|
| C1 | VBATT+ | Battery Positive |