



PD 690 Automotive Power Protection

- Power supply input transient voltage protection
- Wrong polarity protection
- Output short-circuit protection
- LED On / Error indication
- Wide power supply range
- Wide temperature range

APPLICATION

The PD 690 is a power supply conditioner for automotive applications.

The purpose of the PD 690 is to protect electronic devices against e.g. spikes, surges, and overvoltage from the coarse power supply on trucks and other vehicles.

The module regulates input transient inputs to max. 32 V at the output. For long input transients the output is disconnected.

Output current limited to max. 11 A.

After a cool down time of typical 9 seconds the module automatically reconnects the power

Mounting position

The PD 690 must always be mounted in one of the outermost positions in the module cluster.

Do not mount it between other modules. Since PD 690 has no built-in Light-Link repeater, doing so might cause communication errors within the cluster, if a neighbour module is being removed.

SPECIFICATIONS

Power Specifications

Supply voltage nominal.....	24 VDC
Surge input voltage	Max. 200 V
Output voltage	Max. 32 V
Output current	Max. 11 A
Input fuse	15 A
Internal resistance.....	25 mΩ
Voltage drop (at 10 A load)	250 mV
Power dissipation (at 10 A load).....	2.5 W
Capacitive load.....	Not limited

Indicator

Green OK LED:

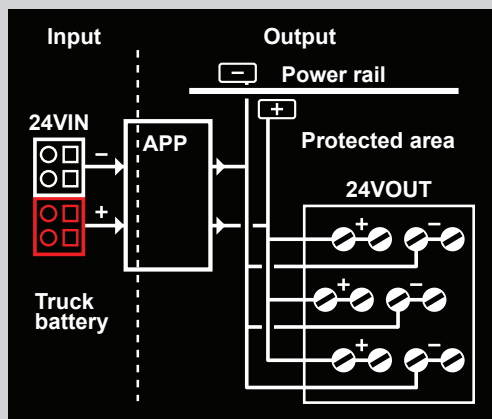
- Input voltage connected and the un-resettable fuse not blown.

Red ERROR LED:

- Output current too high.
- Overheat protection.
- Overvoltage disconnected.

Environmental Conditions

Operation temperature.....	-25 °C to +70 °C
Storage temperature.....	-40 °C to +85 °C
Relative humidity	< 95 % RH (non-cond.)
Protection class.....	IP40



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BASE MODULE BM 018

PD 600 series devices are made up of two parts:
The Terminal Base Module and the Electronics Device.

The Terminal Base Module is snap-locked directly on a DIN-Rail and interlocks with the neighbouring module to ensure stability.

Connections

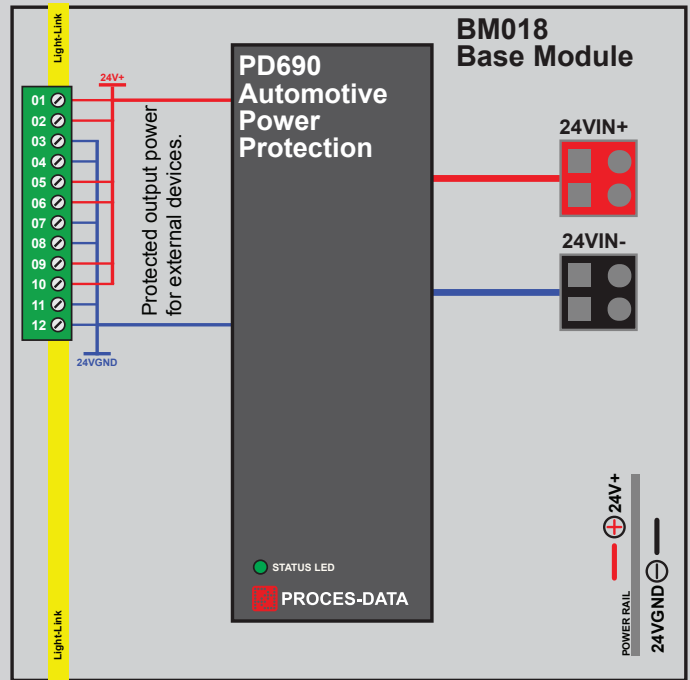
Dual high-current input connectors.
Polarity is red and black coded.

Power rail output for M36/M100 DIN rail mounted modules.

Spade connector output for supply of another DIN rail.

Power Specifications

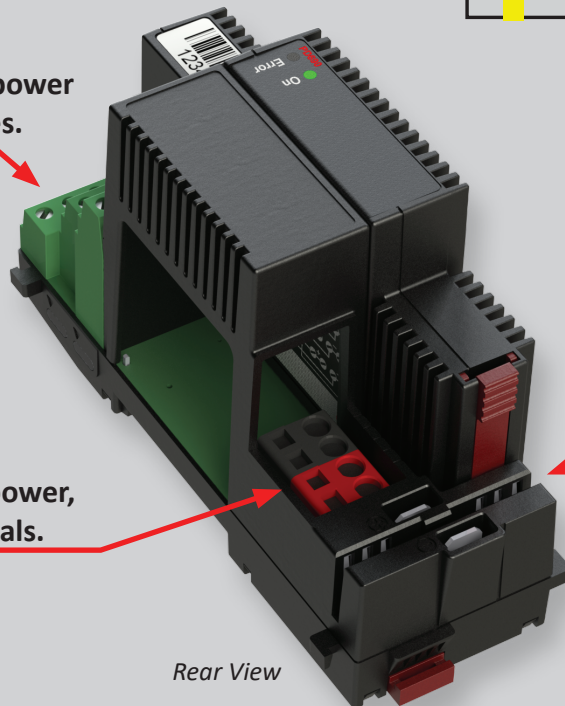
Current supplied by power rail..... Max. 5 A
Current at spade connectors Max. 10 A



Protected output power for external devices.

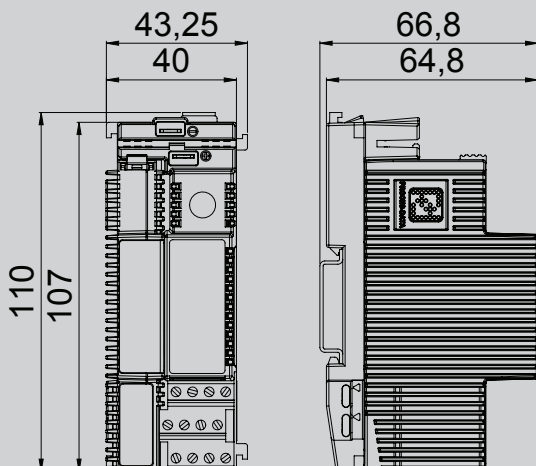
Raw input power, 2 x 2 terminals.

Protected output power for M36/M100 power rail.



Rear View

MECHANICAL (mm)



Mechanical Specifications

Dimensions (HxWxD)..... 66.8 x 43.3 x 110 mm
Weight approx..... 150 g
Vibration IEC 60068-2-6 : 2007