

Power Port 8PTC DATASHEET

The Power Port 8PTC is a premium power distribution module for electronic access control systems.

The PP8PTC Features self-healing fuses, fire trip interface and auxiliary outputs.

Applications

- Power distribution for electronic access control and security devices
- Fused over-current protection
- Automatic fire alarm emergency release of electric door locks
- Fire trip monitoring

Features

- Eight individual, self-healing fused outputs, each with status LED
- Individually field-selectable power outputs – fire power or standard power.
- Unlimited local and remote expansion options
- Auxiliary fire trip slaved relay (DPDT) with two dry contact outputs
- Non-polarised fire trip input
- Wide range of operation voltages
- N/C output for failsafe fire trip connection to extra modules or other equipment
- Drive fire relay directly from FIP voltage or onboard voltage via N/C FIP contact
- Unfused voltage output for expansion
- Reduced material list, cost and install time compared to traditional methods

Benefits

The PP8PTC reduces install time for technicians and helps ensure security system reliability by replacing the normally complex wiring task of fire trips with a simple, easy to fault find, all in one solution featuring built in, self-healing fuses to further protect expensive installations.

Technical Data

Input voltage range	0-14V DC
Fire relay coil voltage	12-28V DC (or dry contact)
Max. standard power current	8A
Max. fire power current	8A*
Max. constant current per output	2A
Fused outputs	8
Fuse type	2A Self-healing PPTC
Mounting	DIN rail
Dimensions	110 L X 75 W X 52 H (mm)
Country of origin	China

*Peak current only – resistive load. A 20% load current margin is recommended for fire power current (6.4A). Many devices, including electric locks, have a higher current on start-up and at other times; this must be accounted for in the peak current. Current ratings are valid for operating temperatures up to 24°C with a fire trip of 12VDC. Factors such as lock types, external heat and higher fire trip voltages must be considered when designing power loads.

Connections

Terminal	Description	Max Conductor Size
P1 – FT- FT+	Fire panel trip interface	2mm ²
P1 – GND & +	DC Power supply input	2mm ²
P2	Expansion Output	2mm ²
P3 1 - 8	Fused outputs	1.5mm ²
P3 A-A	Monitoring/output	1.5mm ²
P5 NC/COM/NO	Aux Dry Contacts	1.5mm ²
PR	EOL Resistor Sockets	¼ - ½ Resistors X 2

Function

Power Input. The PP8PTC module is powered by any suitable DC supply connected to the clearly marked input barrier terminals. A green power LED indicates power is available.

Fused Outputs. The eight power outputs are each individually protected by a self-healing PPTC fuse that will activate when a current greater than the fuse rating is drawn via the output. The fuses will automatically reset when the fault has cleared, allowing power to be restored to the output.

The eight outputs can be fed either directly from the power input or indirectly via the fire trip relay (for 'fire power'). This function is set via a jumper/link for each output and can be changed at any time to suit requirements.

Each output has an individual status LED. The LED will be active whenever power is available at the output. The LED will deactivate in the event of a blown fuse or if that output is set to fire power and the fire relay has tripped. Each status LED is located directly under the appropriate glass fuse to greatly aid visual confirmation of fuse status.

Fire Trip Relay. The fire trip relay may connect to the fire indication panel in two modes. It can be activated by 12 or 24VDC from the fire panel or via a voltage free, normally-closed contact at the fire panel or other device. The operation mode and voltage used is set by on-board jumpers.

When the relay is active, power will be available via the primary relay contact. This power is the input power switched via the relay and is commonly known as *fire power*. Fire power can then be used at each output. If the relay de-activates due to a fire alarm, then the fire power will no longer be available.

Fire Trip Monitoring. A secondary contact of the fire relay is used for monitoring. The status of the fire trip relay can be indicated to any security panel via an output. Suitable End of Line (EOL) resistors can be fitted to onboard sockets. No soldering is required. Alternatively, a link setting will allow the output to convert to a normally closed voltage-free contact for connection to another PP8FR module or other equipment. (See Expansion)

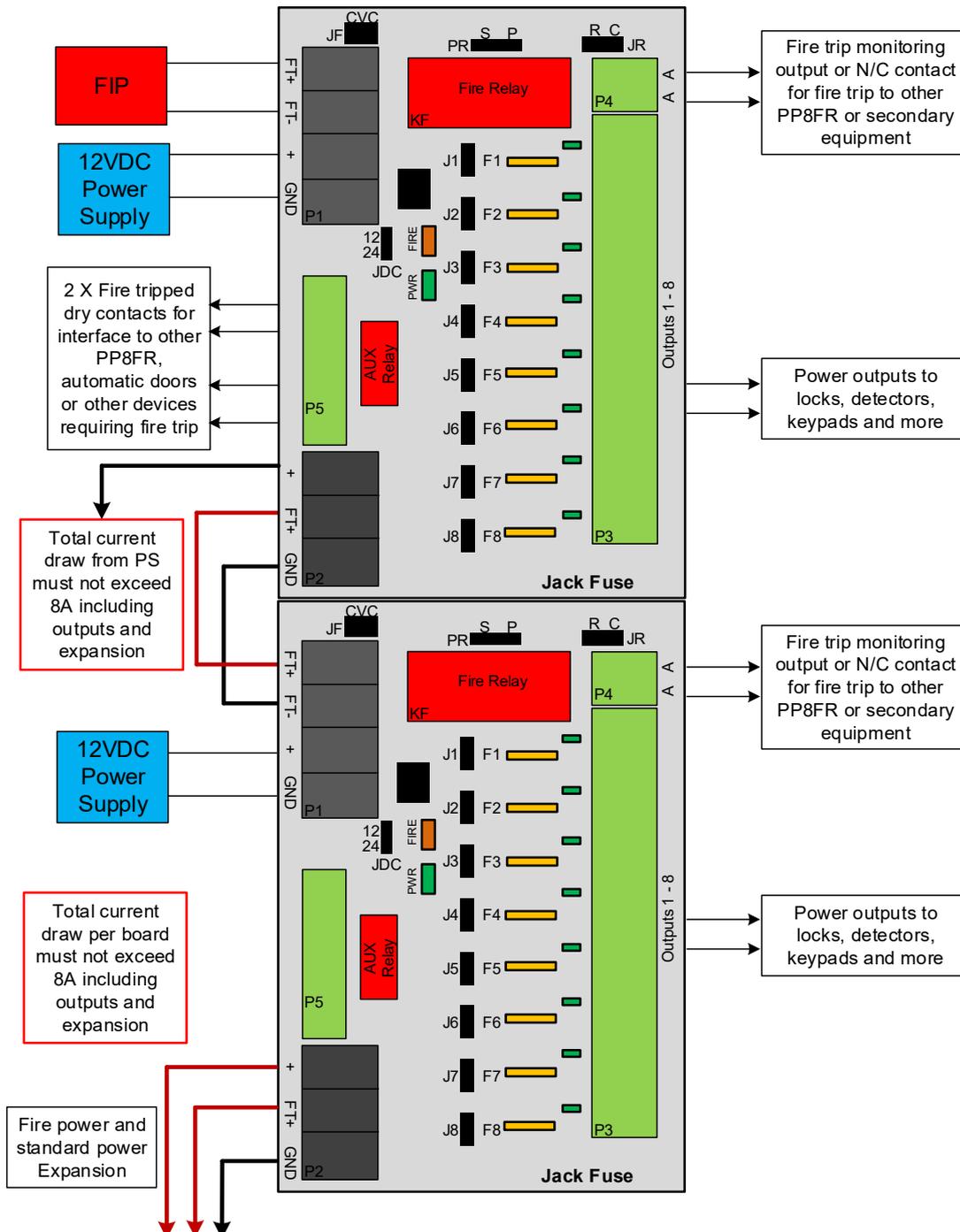
An orange LED provides visual indication of the fire relay status and will be active when the fire relay is active.

Auxiliary Outputs. Two NC/COM/NO auxiliary outputs have been added to the PP8PTC. These outputs are slaved to the fire trip and can be used to provide a fire trip signal to third party equipment such as automatic doors. The auxiliary outputs can also be used to provide a fire trip signal to other PP8FR/PP8PTC modules.

Expansion

Output terminals are provided for connection to expansion modules PP10HD/PP10MG or other equipment. The expansion output provides supply power, fire power and a common ground. Several additional power distribution modules can be fitted at any time if current limits of the fire relay, modules and power supply are not exceeded.

Additionally, the normally closed relay status output can be used to operate an additional PP8PTC either in a local panel or remotely. In this way modules can be added to suit any size access control/security system.



Mounting

The PP8FR module is supplied pre-fitted with cost effective DIN rail mount clips suitable for most DIN rail profiles.

The PP8FR is also suitable for use with popular "Snap Track" made by TE Connectivity, part number 4TK2.

Specifier Text

PP8PTC

Electric locks on any door in a fire egress path must be interfaced to the emergency evacuation system in order to unlock during an alarm. This shall be achieved via an interface relay built into a DIN rail mount power distribution module. A secondary fire interface relay contact shall be monitored for alarm activation.

Each electric lock shall be individually powered via a fused output from the fire tripped power distribution module. (Refer to AS/CA S0009:2020) The fire trip module shall have field selectable outputs that can provide either standard (non-tripped) power or fire tripped power. Self-healing fuses shall be used to help ensure system reliability and reduce service costs.

The fire trip module shall have additional dry contact outputs that may provide a fire trip interface to other equipment such as automatic doors.

Ordering Code

PP8FR	Power Port 8FR supplied with a din rail mount kit, fire relay and 8 X 1A glass fuses.
PP10MG	Power Port 10MG supplied with a din rail mount kit and 10 X 1A glass fuses
PP8PTC	Power Port 8PTC supplied with a din rail mount kit, fire relay and 8 X PPTC fuses.
PP5FR-UNI	Power Port 5FR-UNI, mounts in Gallagher and Inner Range module footprints. 5 X Self-healing fuses. Din rail mount kit optional.
PP10HD	Power Port 10HD supplied with a din rail mount kit and 10 X 1A PPTC fuses

Learning

Become a **Jack Fuse Product and Power Certified Technician**. Free training available online.

More Information: For complete installation notes, data sheets and technical support please visit www.jackfuse.com

