POWER DISTRIBUTION UNIT (EPC)

Littelfuse

NEW

IP67

IP69K

This sealed power distribution module is an internally bussed and connectorized unit, suitable for mounting in rugged commercial vehicle applications. This unit has dense concentration of high power circuits and accepts plug devices like automotive fuses, diodes and relays to protect and control complex electrical systems. An internal Printed Circuit Board (PCB) provides bussed connections to a large number of devices. You decide which fuses and which wires



Features

- 2 Individual power input circuits power fuses and relays using internal buses.
- Stand-alone relays & fuses for seperate power sources.
- Cover is tethered to the module to prevent misplacement.
- Custom configurations available.
- Module is rated to 200A max load.
- Vent plug located at the base of the unit.
- Sealed rugged enclosure (IP67/69K) protects internal circuitry from harsh environments such as high shock, vibration, as well as moisture and contaminants.

Part Number:	Description
LFLX0006Z-01	Standard Unpopulated PDM & Cover for Up to 27 x Mini Fuses Up to 9 x ISO280 Micro Relays 4 or 5 Pin* Note:*Pin 87a is not used on some relays.

Voltage: 12VDC (with 12V relays fitted)
24VDC (with 24V relays fitted)
Rating: Max Load 200A.
Power Input: Multiple sources via connector terminals.
Wire Sizes: 0.5mm² to 2.5mm²
Fuse Ratings: Max fuse ratings shown in circuit diagram.
Connectors (x4): Tyco HDSCS with AMP MCP terminals.
Base: Includes vent for pressure equalization.
Ingress Protection Rating: IP67/69K
Body Gasket: Silicone.
Body & Cover Material: Pet glass filled (UL94-V0)
Mounting: Surface Mount.
Custom Options: Please contact sales.
Temperature Rating: -40 °C to +85 °C.
Bolt Mounting Torque: 6 - 8 Nm
Notes: Connectors, fuses & relays are not included.

Internal Circuit Summary

Power input 1 supplies:

- 2 x SPST relays supply fuse protected power*.
- 1 x Fuse protected output (relay by-pass).
- 15 Mini fuses.

Power input 2 supplies:

- 3 x SPST relays supply fuse protected power*.
- 2 x Fuse protected outputs (relay by-pass).
- 5 Mini fuses.

Stand-alone circuits (independent power):

- 1 x SPST ISO280 Micro relay*.
- 2 x SPDT ISO280 Micro relays*.
- 1 x SPDT ISO280 Micro relay.
- 2 Mini fuses.

*Relay coil is connected to the common ground stud.





ACCESSORIES: TYCO HDSCS CONNECTORS

Part Number	Connector*	Poles	Terminals
1-1670901-1	J1 - Black Key	12	AMP MCP 2.8 (12pcs)
2-1670901-1	J2 - Grey Key	12	AMP MCP 2.8 (12pcs)
3-1563759-1	J3 - Green Key	18	AMP MCP 1.5k (18pcs)
1-1563759-1	J4 - Black Key	18	AMP MCP 1.5k (18pcs)



Notes: Each connector colour (key) is a different shape to ensure it only plugs into the correct male socket.

ACCESSORIES: AMP MCP 1.5k

TERMINALS: TANGED
Female
Copper Nickel / Tin plated



Part Number	Wire (AWG)	Wire (mm²)
1241379-1	-	0.2 - 0.35mm²
1241381-1	#20 - #16	0.5 - 1.0mm²
1418885-1	#16 - #15	1.0 - 1.5mm²

CABLE SEALS:
Silicone



Part Number	Cable Dia.(mm)	Colour
964971-1	1.2 - 1.6 dia.	Red
963530-1	1.4 - 1.9 dia.	Gray
964972-1	1.9 - 2.1 dia.	Yellow

CAVITY PLUG:
Silicone



Cavity Plugs	Colour
963531-1	White

Note: AMP MCP 1.5k terminals are rated to 20A max. at 20 °C ambient temperature.

ACCESSORIES: AMP MCP 2.8

TERMINALS: TANGED
Female
Copper Nickel / Tin plated



Part Number	Wire (AWG)	Wire (mm²)
1-968875-1	#20 - #16	0.5 - 1.0mm²
1-968876-1	#16 - #14	1.0 - 2.5mm²
1-968877-1	#12	2.5 - 4.0mm²

CABLE SEALS:
Silicone



Part Number	Cable Dia.(mm)	Colour
828904-1	1.2 - 2.1 dia.	Blue
828905-1	2.2 - 3.0 dia.	White

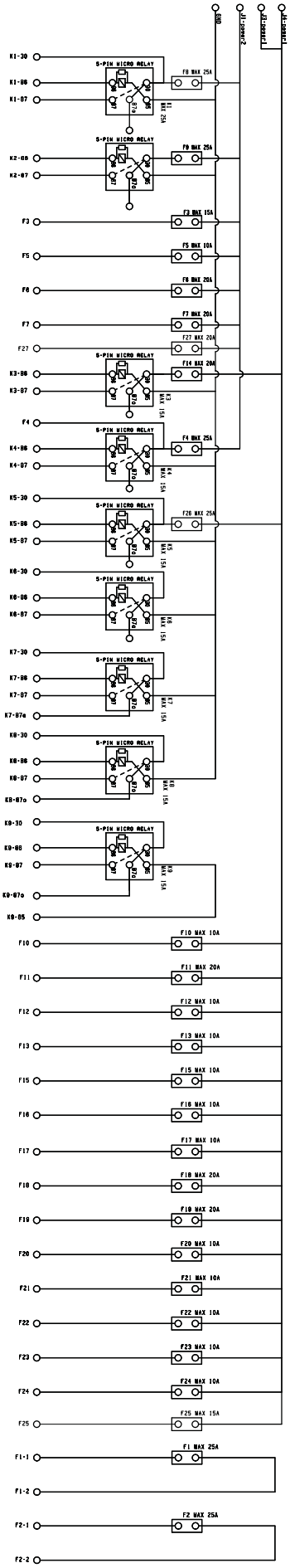
CAVITY PLUG:
Silicone



Cavity Plugs	Colour
828922-1	Clear

Note: AMP MCP 2.8 terminals are rated to 40A max. at 20 °C ambient temperature.

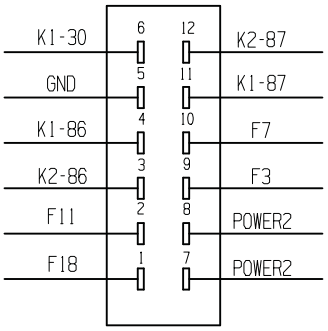
Internal Circuit Diagram



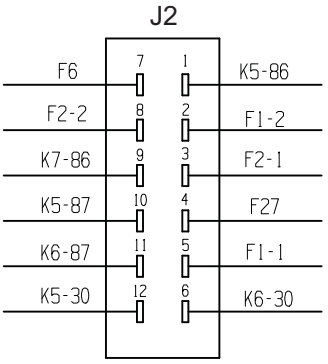
Notes:
1. All fuses must not exceed 70% of rated current.
2. Max. Main Input: 160A at 85 deg C
   Power 1 max. 70A, Power 2 max. 60A
   External current max. 30A.

Connector Wiring

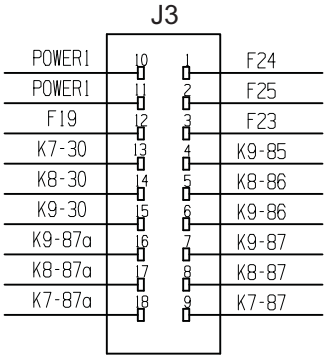
J1



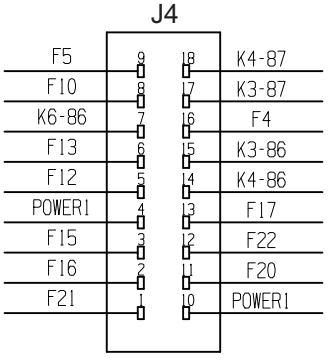
J2



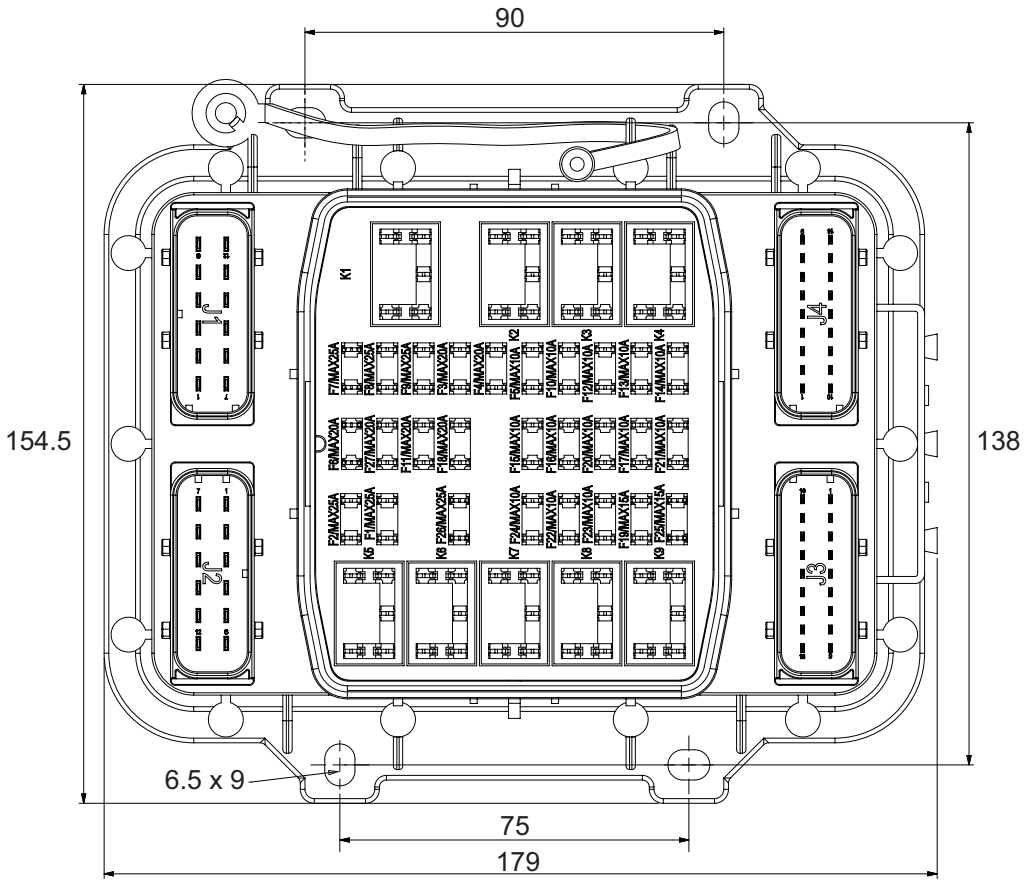
J3



J4



Dimensions



Dimensions in MM

