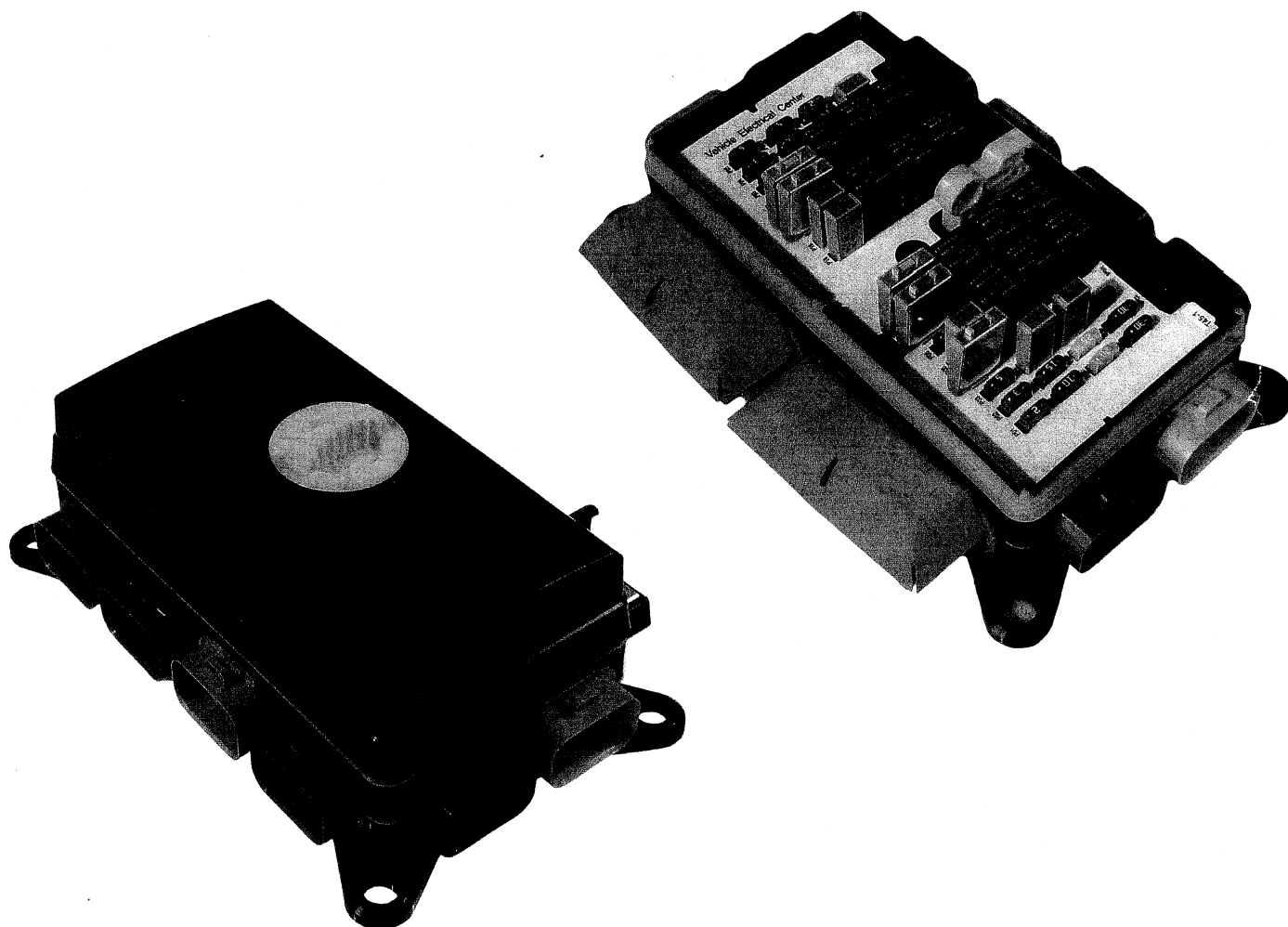


32S Series Severe Service Power Distribution Module

Power Distribution

VEC

ssDVEC



Severe Service Dual Vehicle Electrical Center (ssDVEC)

Introducing the ruggedized version of the Cooper Bussmann Dual Vehicle Electrical Center, the 'Severe Service' DVEC (ssDVEC). This version of the DVEC features unequalled performance in power distribution in an IP66 compliant enclosure. The ssDVEC is capable of operating in various environments such as those with high vibration and moisture, up to direct high pressure spray. The ssDVEC provides efficient and compact power distribution for OEMs with demanding applications in the transportation industry including construction, agriculture, heavy trucks, bus, marine and specialty vehicles.

As with all DVECs, the ssDVEC uses the patented Cooper Bussmann 'power grid' technology easily programmable to accommodate various OEM wiring requirements.

Cooper Bussmann DVECs all feature a unique color-coded and keyed connector system, and accepts common plug-in fuses, relays, circuit breakers, resistors, diodes, etc., based on the industry standard 2.8mm footprint.

Additionally the ssDVEC has these new features:

- Durable plastic housing featuring a Gortex vent
- Internal silicone gasketing between all seams and plastic to terminal interfaces
- Internal spare fuse holder and socket for fuse extraction tool

32S Series Severe Service Power Distribution Module

COOPER Bussmann

Specifications

Capacity: 400 Amps maximum rating; 30 Amps per output pin, and 100 amps per output connector; Maximum of 24 relays and/or 64 fuses, or various combinations thereof (unique design configurations may be required)

Materials: Housing and connector cavities: 94V0 rated thermoplastic
Internal power grid: tin-plated copper

Operating Temperature Ratings: -40°C to 85° C [Consult factory for higher temp versions (up to 105°C)]

Ingress Protection: IP66 compliant

Foot Torque Rating: 200 to 300 in-lbs with standard compression limiters

Connections: *Output:* Standard Cooper Bussmann VEC connectors

- 8-way, colored/keyed, sealed connectors
- 30A max per terminal
- Accepts Packard Metri-Pack 280 Series terminals (tanged/tangless)

Specifications (Cont)

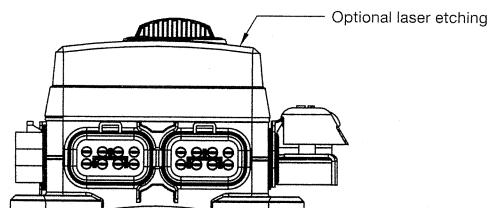
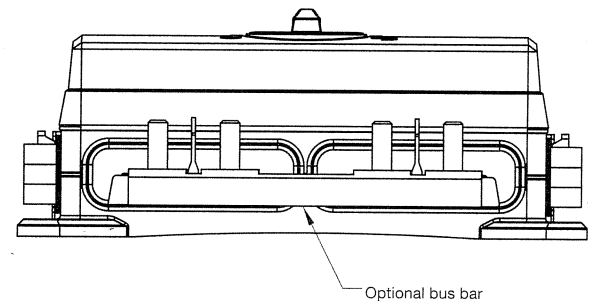
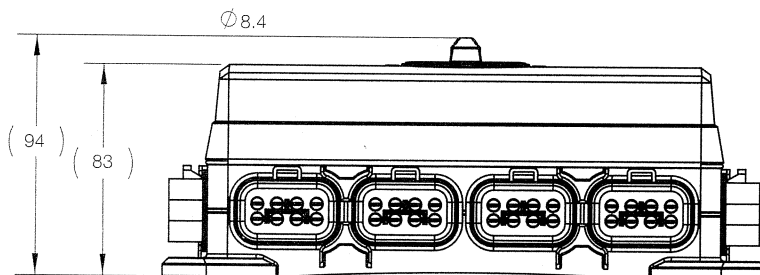
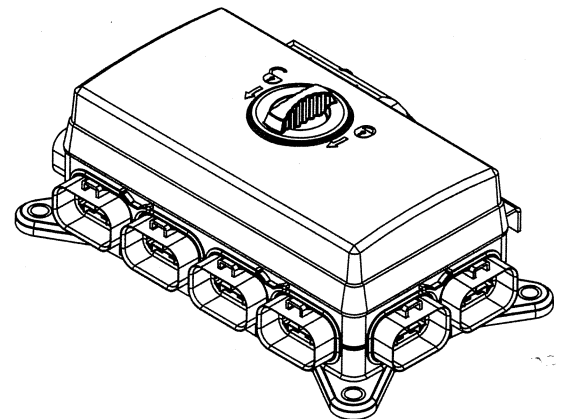
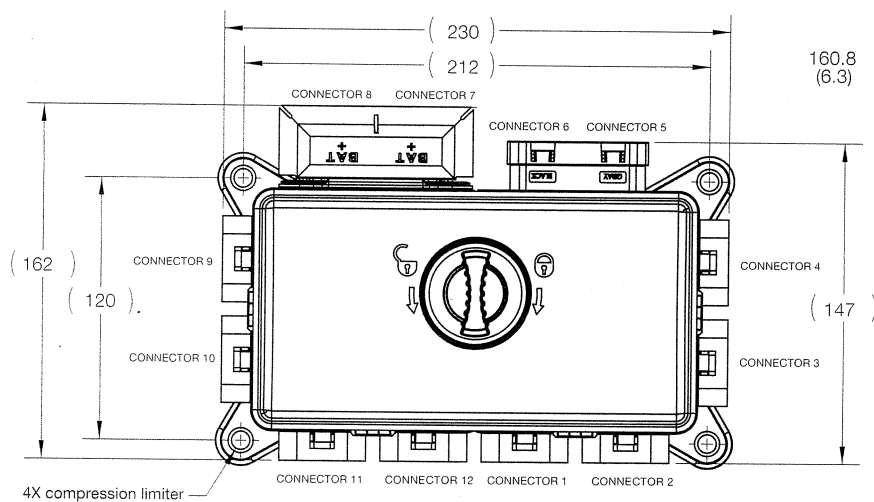
Input:

- Studded input option: supports two M8 input power studs for DC power into the VEC power grid (100A max per stud)
- Connectorized: accepts up to 4 Cooper Bussmann 32004 VEC connectors (2 terminal, colored/keyed, sealed connectors)
- 60A max per terminal, providing power to the VEC Power Grid; uses Packard 800 series terminals

Options

1. Labeling to customer specifications
2. Stuffed (with/without components including, but not limited to: fuses, relays, diodes, circuit breakers, fuse puller)
3. Customized circuit layouts, standard and custom CAN messages
4. Power Connector

Dimensions - (mm)

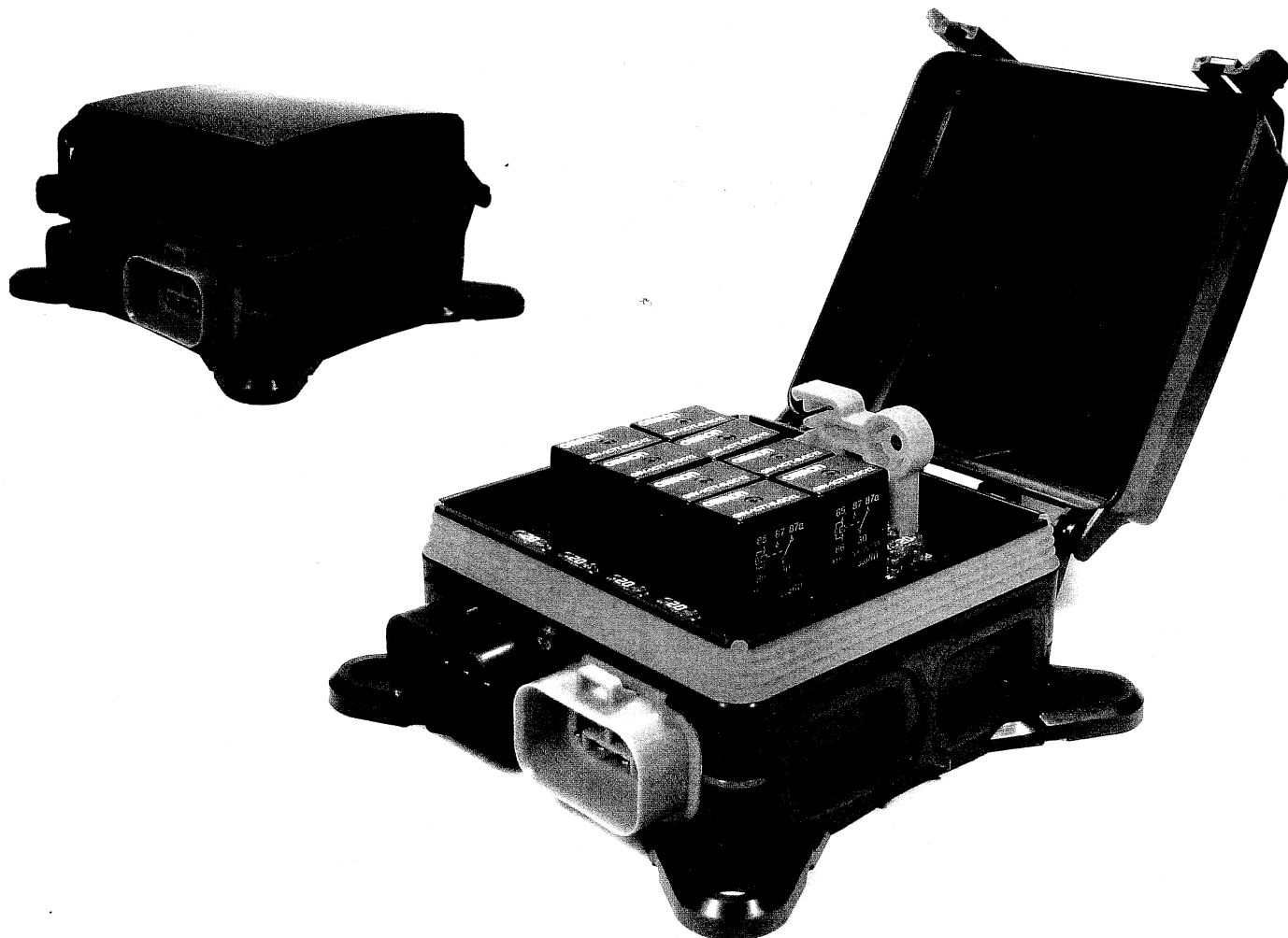


31S Series Severe Service Power Distribution Module

Power Distribution

VEC

ssVEC



Severe Service Vehicle Electrical Center (ssVEC)

Introducing the ruggedized version of the Cooper Bussmann Vehicle Electrical Center, the 'Severe Service' VEC (ssVEC). This version of the VEC features unequalled performance in power distribution in an IP66 compliant enclosure. The ssVEC is capable of operating in various environments such as those with high vibration and moisture, up to direct high pressure spray. The ssVEC provides efficient and compact power distribution for OEMs with demanding applications in the transportation industry including construction, agriculture, heavy trucks, bus, marine and specialty vehicles.

As with all VECs, the ssVEC uses the patented Cooper Bussmann 'power grid' technology that is easily programmed to accommodate various OEM wiring requirements.

Cooper Bussmann VECs all feature a unique color coded and keyed connector system, and accepts common plug-in fuses, relays, circuit breakers, resistors, diodes, etc., based on the industry standard 2.8mm footprint.

Additionally the ssVEC has these new features:

- Durable plastic housing featuring multiple venting configurations including a Gortex vent
- Internal silicone gasketing between all seams and plastic to terminal interfaces
- Internal spare fuse holder and socket for fuse extraction tool

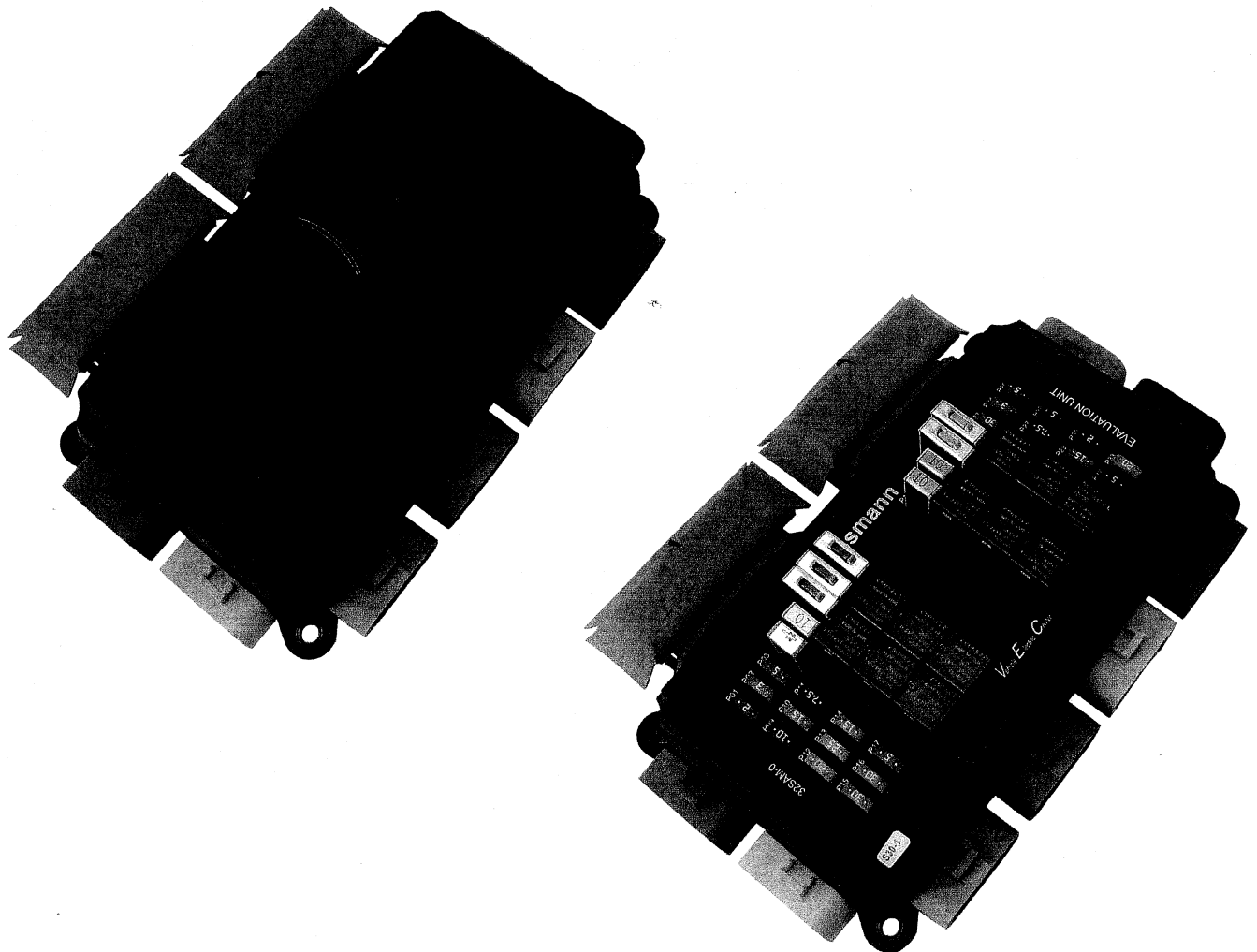
The ssVEC features various custom design versions (differing relay, fuse, breaker, etc. configurations) supporting 12V and 24V electrical systems (or combinations thereof).

Series 32000 Vehicle Electrical Centers

Power Distribution

VEC

DVEC



Series 32000 Vehicle Electrical Centers

The Cooper Bussmann Dual Vehicle Electrical Center (DVEC) is a widely used transportation industry power distribution module. The DVEC uses patented programmable 3D matrix technologies that can be easily modified to accommodate changes to an electrical system. These can be customized for each specific electrical system, but require no tooling for implementation.

The DVEC accepts automotive components including fuses, relays, circuit breakers, diodes, and other devices that have 2.8mm wide terminals on 8.1mm centerline spacing. (See page 37 for additional available components.) The larger size of the DVEC (approximately 8"x4") provides for high component density. VECs provide either 8.0mm bladed inputs or M8/M6 stud inputs. The VEC can accommodate up to 4 input connectors - 8 bladed inputs or 4 studs - and 8 output connectors with up to 16 outputs each (64 total).

The DVEC is ideal for distributed main power as well as auxiliary "add-on" applications. Current DVEC applications include Class 3-8 trucks, buses, chassis and RV, Con-Ag equipment, marine specialty vehicles, and automotive power distribution systems.

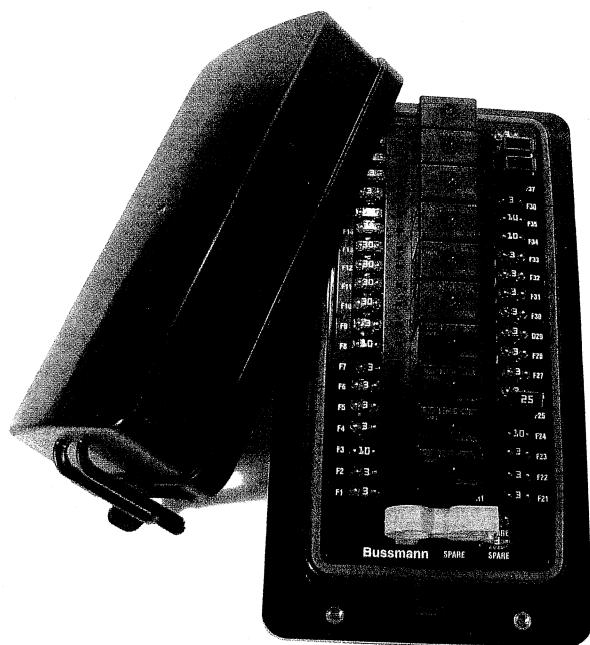
The customizable design of the DVEC enables it to incorporate many different devices and multiple design variations. Splices in the harness can also be eliminated by internally programming them into the grid matrix. The inputs (connector or stud) and outputs (connector) of the DVEC are color-coded and keyed, and provide quick installation. This makes the module easy to service. The largest benefit of these modules are the reduced lead times and zero tooling cost.

Series 15400 RFRM Rear-fed Fuse & Relay Module

Power Distribution

PDM

15400 RFRM



Cooper Bussmann Transportation Products now offers a main power distribution module capable of operating in harsh environment applications. Based on the industry standard 2.8mm (mini) footprint, the RFRM can accept plug-in fuses, relays, circuit breakers, resistors and diodes to meet numerous power management requirements. The RFRM is available with multiple internal bussing options, accommodating various OEM wiring requirements.

Specifications

Material: UL-Rated 94V0 thermoplastic, plated copper bus bar, silicone rubber gasket, EPDM – internal tether

Power Ratings: Nominal 12Vdc and 24Vdc systems, 100A per bus bar, 200A Max

Temperature Rating: -40° C to 85° C

Ingress Protection: IP66 (with use of cover and seal) ¹

Plug-in Capacity: Up to 10 micro relays and a combination of 40 fuses/circuit breakers (8.1mm CL)

Mounting: #10-32 or M5 x 0.8 available, 24 in-lbs max
Orientation mounting application intended for horizontal to vertical ²

Electrical Connectors: Output cavities (holes in back)

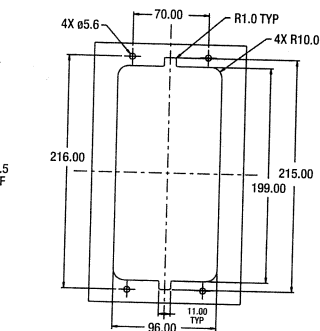
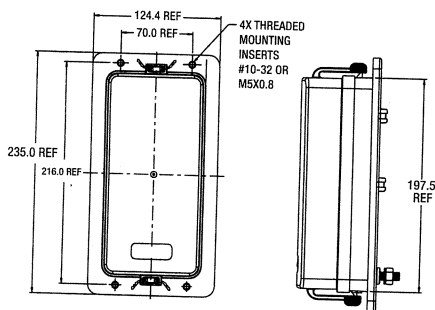
Wire Size: Accepts #12-22 AWG wire sizes ³

Terminals: Delphi Packard 280 Series Metri-Pack® sealed/tang style terminals

Cavity Plugs: Delphi Packard 280 Series cavity plug (where output wires are not used) Input Studs (for bussed version): M8 x 1.25 thread, 70 in-lbs max

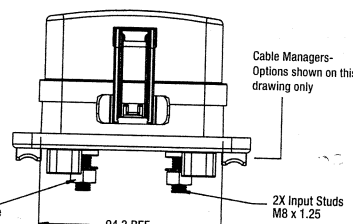
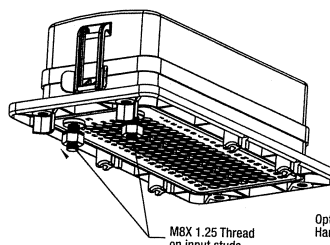
- Notes:**
1. Ingress Protection rating has been validated with approved panel mounting applications. Consult factory for testing procedures.
 2. Consult factory for any other mounting orientation.
 3. Cooper Bussmann does not supply wires, wire terminals, terminal seals, or cavity plugs.
- Consult factory for options including custom labels and replacement accessories.

Dimension - mm

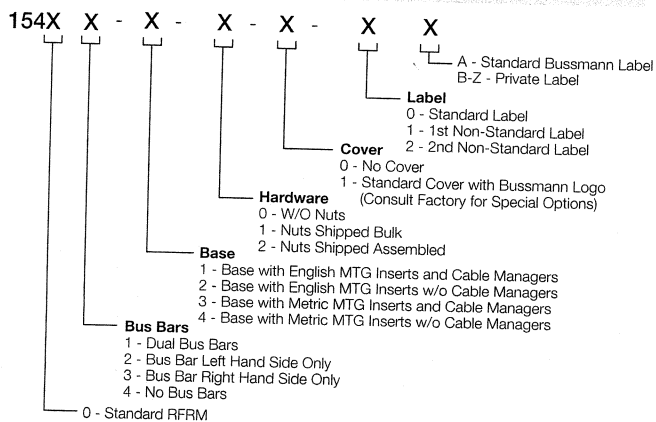


Mounting cut out dimensions above –RFRM designed to be mounted from rear of panel

Mounting cut out dimensions above –RFRM designed to be mounted from rear of panel



Part Numbering System



Notes

1. Internal tether accessory not shown – it is included with Cover Option 1.
2. Photograph above shows RFRM with optional yellow fuse puller tool. Yellow Fuse Puller (part #32013BS) tool sold separately.
3. Photograph above shows RFRM 'stuffed' with components such as fuses and relays. RFRMs are sold without components.
4. Under side of RFRM has the wire harness position labeling details molded into the part.