The Eaton Controls and Power Conversion Single Vehicle Electrical Center (VEC) is a widely used transportation industry power distribution module. The VEC 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 VEC accepts automotive components including fuses, relays, circuit breakers, diodes, and other devices that have 2.8mm wide terminals on 8.1mm centerline spacing (please see VEC Electrical Components for additional available components offered by Eaton).

The compact size of the VEC (about 4”x4”) provide for high component density. VECs provide either 8.0mm bladed inputs or M8/M6 stud inputs. The VEC can accommodate up to two input connectors - four bladed inputs or two studs - and four output connectors with up to eight outputs each (32 total). Some designs may limit the number of connectors available for use.

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

The customizable designs of the VEC enable them 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 VEC 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.
Specifications

**Input Terminal Rating:** 8.0mm blade terminals (60A max per terminal); M8/M6 input studs (100A max per terminal). 200A max total for VEC

**Output Terminal Rating:** 2.8mm blade terminals (30A max per terminal).

**Output Connector Rating:** 100A max per connector

**Materials:** Housing and connector cavities: thermoplastic; Internal power grid: tin-plated copper

**Operating Temperature Ratings:** –40°F (~–40°C) to 260°F (125°C)

**Ingress Protection:** IP55

**Mounting Torque Rating:** 24 in-lbs (2.7N-m) max.

**Termination:** Delphi Packard Metri-Pack® 280 Series terminals (sealed/unsealed & tanged/tangless) or AMP® terminals.* Delphi Packard 280 Series cavity plugs are installed where wires are not used.* Accepts #10-22 AWG wire sizes.

Options

**Cover:** Vented (VEC), Solid domed cover with gasket or no cover.

**Cover Marking:** Laser etching inside, outside, or both

**Input Style:** 8.0mm blade terminals or studs (M8/M6).

**Mounting:** External feet with mounting holes or internal mounting holes.

**Components:** Fuse, breaker, relay, etc. installation to be specified by customer.

**Severe Service:** Added environmental protection available (see ssVEC for more information). Consult factory.

**Fuse/breaker Extraction Tool:** Series 3200 Insertion/Extraction tool available

*Electrical terminals, cable seals & cavity plugs are NOT supplied by Eaton.

Each design is customer specific. Consult your sales rep today for your application.

Dimensions - mm(in)

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