

Delphi Power Pack Series

Description – Delphi's Power Pack Series is an advanced connection system designed for high current/high power applications. The series features a sealed connection with current carrying capability up to 200 amps at 105°C.

The Power Pack connection system offers a broad product portfolio with a strong global footprint. The series provides in-line or direct mating to high power devices, including:

- sealed in-line systems
- sealed right angle systems
- sealed panel mount headers, (mating to in-line or right angle connections)

Typical Applications – Delphi's Power Pack connection systems can be used for 0-600 volt AC/DC power systems for automotive, commercial on-road and off-road vehicles, hybrid vehicles and industrial applications, including:

- Electrical center power feed
- In-line for battery cable
- Front wall pass-through
- High current module interface
- Alternator/starter motor

Performance Advantages – Power Pack's one-way connectors can be engaged/disengaged by hand, thereby eliminating the need for tools, fasteners or mechanical assists. For additional connection integrity, Delphi offers an attachment feature on



Sealed one-way in-line

one-way in-line female connectors. On two and three-way in-line and right angle configurations, a connector locking collar is offered.

The two-piece female terminal features a silver-plated design that allows the terminal to withstand interface temperatures up to 155°C. Each terminal cavity is individually sealed for circuit isolation. This protects the contact areas from debris and prevents arcing and shorting between terminals. Two and three-way female connectors provide application versatility for in-line and device configurations.

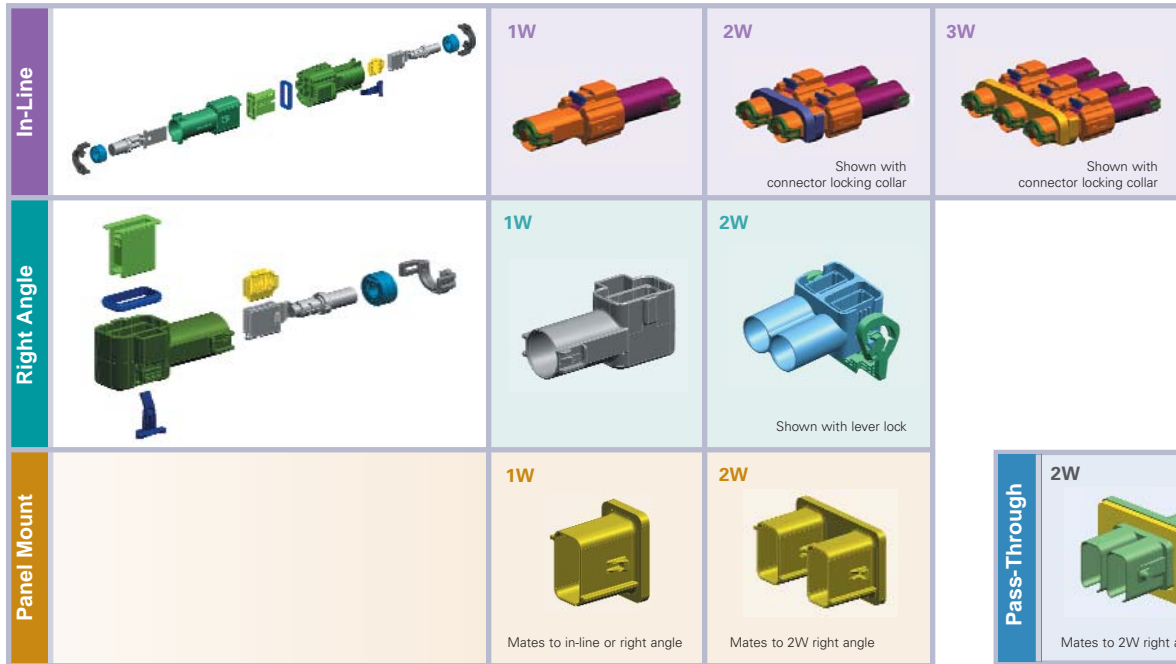
Power Pack's male connectors plug individually and are indexed and color keyed to prevent mis-plugs.

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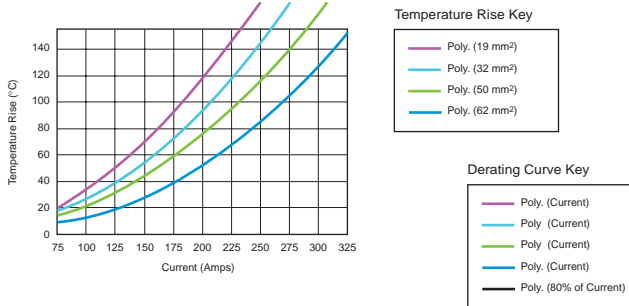
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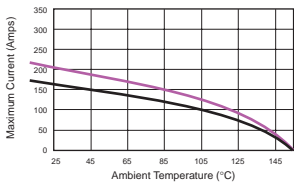
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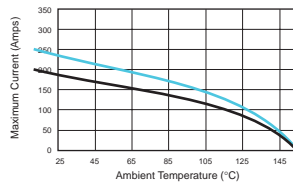
Temperature Rise Above Ambient vs. Current



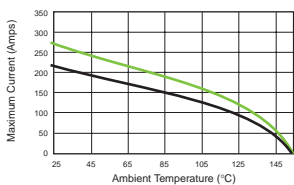
Temperature Derating Curve 19 mm²



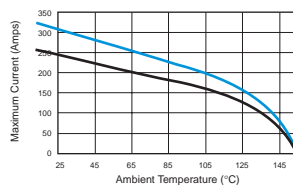
Temperature Derating Curve 32 mm²



Temperature Derating Curve 50 mm²



Temperature Derating Curve 62 mm²



The test data is based on single circuits in free space and was generated using a "Lumped Resistance" model. The data presented here does not account for all variables that would be present in an actual application. Delphi Engineering can model customer's specific applications upon request. For additional detailed product performance, contact 1-800-722-5273 or visit our website at www.delphi.com.

Application Guidelines

- Cable Range – Sealed 13 – 62 mm² (4 ga. to 00 ga.)
- Current Range 0 – 200 amps
- Interface Temperature Range -40°C to +155°C
- Resistance <0.5mΩ @ 20mV
- Voltage Drop 0.5 mV/amp
- Centerline Spacing – Sealed 25.4 mm
- Blade Width 17.7 mm
- Blade Thickness 1.63 mm
- Terminal-to-Terminal Engage Force 45 N max.
- Terminal-to-Connector Insertion Force 40 N max.
- Terminal Retention Force **Without TPA** 200 N min. **With TPA** 230 N min.
- Connection Disengage Force **With CPA** 450 N min.
- Sealing protection to IP67

Power Pack meets the performance requirements of SAE/USCAR, Class 3.

The general application guidelines above are for reference only and may not account for all the variables that would be present in an actual application. For additional detailed product performance, please contact Delphi.

For additional product information or to locate your regional Delphi representative, please visit www.delphi.com/connect or contact us directly at [1] 248.813.2334.