

# ELCON MINI POWER CONNECTORS & CABLE ASSEMBLIES

Pack more power into smaller spaces with our ELCON Mini power interconnects that feature a small, 8mm height form-factor and support higher current than similar sized solutions - up to 40 Amps per contact, and rated for 400 Volts AC or DC.

These interconnects provide confidence in system performance with their low resistance, highly reliable interface. Features include positive metal latch retention, optional coding contacts for sense/detect functionality, use of industry-proven crimp contacts and excellent price to performance ratio.

We offer a broad, versatile portfolio of our ELCON Mini power interconnects including press fit attach options and original solder tail parts, multiple position sizes, right-angle or vertical mount, as well as sequenced and touch-proof contacts. Our ELCON Mini power cable assemblies are offered in standard or high-flex designs for easier routability, metal latch or plastic pull-tab types, and are highly customizable to better fit tight design requirements.

# **Typical Applications**

- Power distribution
- Power supplies
- Data centers
- Wireless
- High Performance Computing (HPC)
- Storage

- Servers
- · Switches & routers
- Industrial electronic equipment cabinets
- Telecom base stations
- Factory automation
- Medial diagnostic equipment

### **Electrical**

- Up to 40A per contact
- Voltage rating: 400V AC or DC
- Contact resistance: 0.3 milliohms max

## Mechanical

- Metal latch retention supporting pull forces up to 100N
- Durability: 50 mating cycles

### **Materials**

- Board connectors: LCP glass filled, color black, UL 94V-0
- Power Contacts: Copper Alloy, silver plated
- Optional coding contacts (2-position): Copper Alloy, selective gold plated
- Operating Temperature range: -40°C to 130°C

### **Specifications**

- Product Specifications: 108-19346 (2-position), 108-128027 (3-position), 108-19429 (4-position)
- Application Specifications: 114-19110 (2-position), 114-129029 (3-position), 114-32039 (4-position)

# 2-Position



Unique integrated coding contact option allows different electronic functions such as sense and detect to be designed into the PDU electronics with activation on full insertion of the cable connector

# **3-Position**



Sequenced pin lengths for protective earth grounding, and touch-proof contacts for added safety.

# 4-Position



Shielded version available in addition to the standard unshielded design, and also offers a right-angle shielded cable back shell.





# **Key Features & Benefits**

- Support high current up to 40A per contact and a 400V rating with a costeffective stamped contact design
- Small, 8mm height form-factor that is roughly the size of a space-saving HDMI connector
- Offered in 2-, 3-, 4- and 6- (2x3) position configurations broader, more versatile portfolio than the competition
- Connector available in both vertical and right-angle mounts as well as press fit and through hole
- Low resistance, highly reliable interface
- · Positive metal latch retention
- Pull tab for power I/O applications\*
- Coding contacts for sense/detect functionality\*
- Touch-proof contacts and third pin for protective grounding\*
- Press-fit attach or solder tail parts\*
- Cable assemblies offered in standard or high-flex designs for easier routability, and are highly customizable
- Support 14-10 AWG cable sizes (2.5mm<sup>2</sup> to 6mm<sup>2</sup>)

\*Optional features. May not be available in all configurations

# **ELCON Mini Power Interconnects**

### **PCB-Mounted Headers**

TE Part Number	Positions	Vertical or Right Angle	PCB Attach	Additional Description	
1982295-1	2	Right Angle	Solder	With coding contacts	
1982295-2	2	Right Angle	Solder	Without coding contact	
2042274-1	2	Vertical	Solder	With coding contacts	
2042274-2	2	Vertical	Solder	Without coding contact	
2042274-6	2	Vertical	Press Fit	Without coding contact	
2204529-1	3	Right Angle	Solder	Touch-proof power (2) and ground (1) contacts	
2204529-2	3	Right Angle	Solder	Standard contacts	
2204581-1	3	Right Angle	Press Fit	Touch-proof power (2) and ground (1) contacts	
2204581-2	3	Right Angle	Press Fit	Standard contacts	
2204585-1	3	Vertical	Press Fit	Power (2) and ground (1) contacts	
2204585-2	3	Vertical	Solder	Power (2) and ground (1) contacts	
2204585-3	3	Vertical	Press Fit	Standard contacts	
2204585-4	3	Vertical	Solder	Standard contacts	
2204585-5*	3	Vertical	Press Fit	Touch-proof power (2) and ground (1) contacts	
2204585-6*	3	Vertical	Solder	Touch-proof power (2) and ground (1) contacts	
2204535-1	Stacked (2x3)	Right Angle	Solder	Touch-proof power and ground contacts	
2173132-1	4	Vertical	Solder	Unshielded	
2173132-2	4	Vertical	Press Fit	Unshielded	
2173211-1	4	Vertical	Solder	Shielded	
2173211-2	4	Vertical	Press Fit	Shielded	

<sup>\*</sup>Part is not yet tooled

# **Standard Cable Assemblies (double-ended)**

TE Part Number	Positions	Pull Tab	Configuration	Length (mm)	AWG
2304886-1	3	Extended pull tab	Vertical	250	12
2304889-1	4	None	Vertical	250	10
2304890-1	4	None	Right angle	250	14
2304883-1	2	Shirt pull tab	Vertical	250	10

Above are standard part numbers that are available for general sale or samples. We can work with you on customized assemblies that fit your needs - contact a TE representative to learn more.