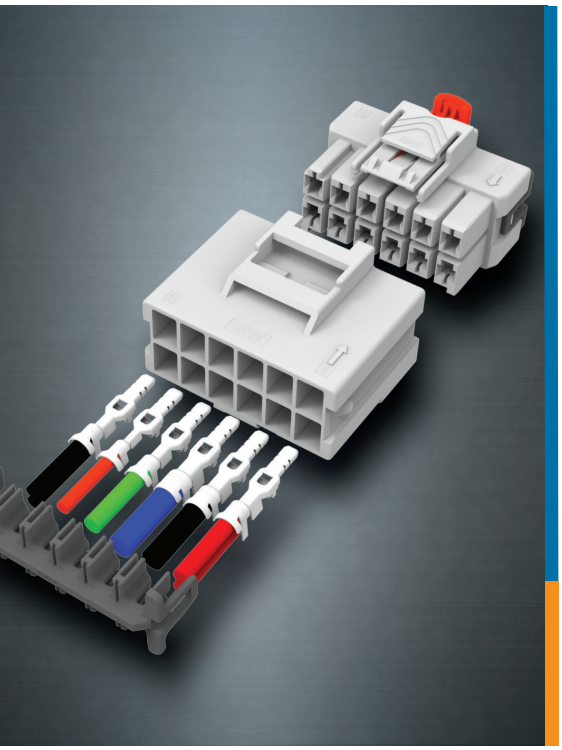


POWER TRIPLE LOCK CONNECTORS

Quick Reference Guide

TE Connectivity (TE) POWER TRIPLE LOCK connector system offers high performance with a functional design. From the audible lock to the many added customer benefits, the POWER TRIPLE LOCK connector system has been specifically developed for better power and signal applications. For 3-in-1 reliability, the system offers 3 enhanced methods of connectivity, making your design connections better in every way. It locks in three ways. Cap (or header) and plug latch together. The CPA-connector position assurance-device locks the cap (or header) and plug together. The TPA-terminal position assurance-device helps assure terminals are fully seated and remain that way. Three material options support standard 105°C, high temperature 150°C and glow wire applications. Four keying options, multiple colors and snagless design features help assure fast, accurate connections on the assembly line. Up to 15 positions are offered on 6mm spacing.

The POWER TRIPLE LOCK connector has been developed for improved power and signal applications. The connector system is ergonomically designed to minimize repetitive fatigue while providing many added customer benefits for performance assurance.

For complete 3 in 1 reliability, the benefits include:

- Audible 'lock' latch provides positive feedback when Cap & Plug are mated, while the ribs surrounding the latch prevent wires from becoming snagged underneath the latch.
- Optional Connector Position Assurance (CPA) ensures that, once engaged, the POWER TRIPLE LOCK connector cannot be mistakenly disengaged
- Optional Terminal Position Assurance (TPA) ensures that contacts are fully seated within the housing and provides an added measure against contact backout

The POWER TRIPLE LOCK connector is available in three levels of housing materials with keying/color code to prevent mis-mating on the assembly line:

Standard 105°C: Natural, Purple, Blue, Yellow

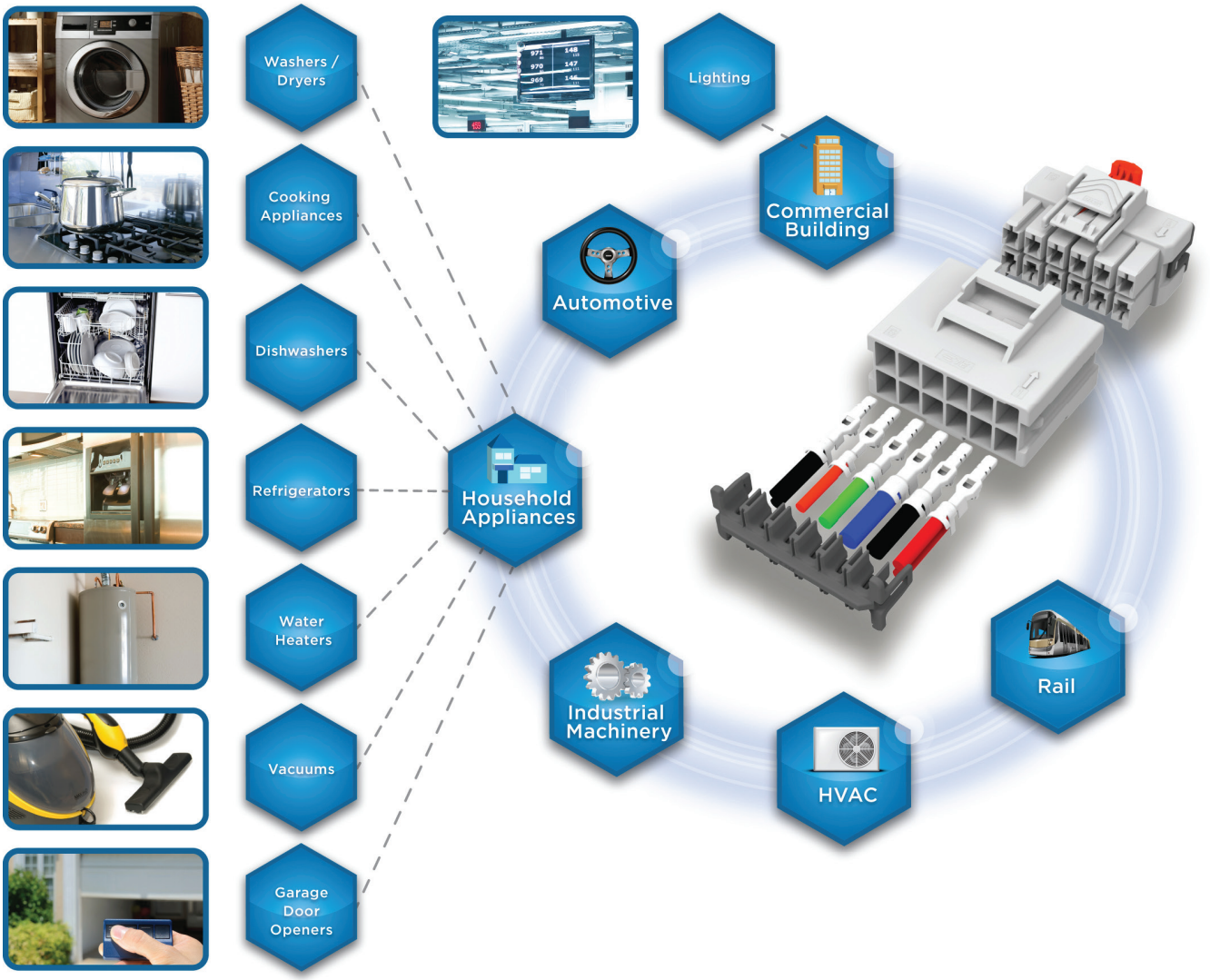
High temperature 150°C: Light Gray, Red, Black, Natural

Glow Wire: Dark Gray, Brown, Green, Orange

With a centerline space of 6.0mm, the reduced size of the POWER TRIPLE LOCK connector offers high performance with a functional design. POWER TRIPLE LOCK connectors have a low mating force and low insertion force.

The POWER TRIPLE LOCK connector has an extensive family line, ranging from panel mount caps to board mount headers in vertical and right angle styles to meet your everyday design needs.

POWER TRIPLE LOCK
Connector System



ELECTRICAL
- Voltage rating: 600 VAC or VDC
- Current rating: Up to 20 A

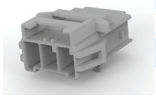
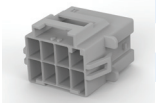
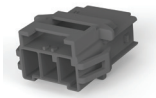
MECHANICAL
- Position sizes:
- Single row: 2, 3, 4, 5
- Dual row: 2x3, 2x4, 2x5, and 2x6
- Matrix: 3x3, 3x4, 3x5
- Centerline spacing: 6.0 mm
- Row-to-row spacing: 8.1 mm
- Operating temperature:
- -55 to 105°C standard and Glow Wire material
- -55 to 150°C high temp material

SPECIFICATIONS
- Product specification: 108-106118
- Application specification: 114-106118
- Product specification (headers): 108-32090
- Application specification (headers): 114-32136

CONTACT WIRE SIZES
- 12 AWG (3.3mm^2)
- 14 AWG (2.1mm^2)
- 16-19, 2x22AWG (1.30–0.65mm^2, 2x 0.34mm^2)
- 18 AWG (0.82 mm^2)
- 20-22 AWG (0.34–0.56 mm^2)
- 2x18 AWG (0.82mm^2)
- 2x20 AWG (0.56mm^2)

MATERIALS
- Housings: UL 94V-0
  - Standard (105°C)—PBT Glass Filled
  - High temperature (150°C)—Nylon
  - Glow wire (750°C no flame) per IEC 60335-1—Nylon Glass Filled
- Contacts: Tin-plated copper alloy

STANDARDS
- UL recognized: E28476
- Select caps, plugs, contacts and headers are certified by VDE per IEC 61984 in Certificate 40045889

CAP							
Product Image	Part Number	Material	Style	Size	Number of Positions	Temp Rating (°C)	Color
	1-1971772-2	Std. Temp.	Panel Mount	1 x 2	2	105	Natural
	1-1971772-3	Std. Temp.	Panel Mount	1 x 3	3	105	Natural
	1-1971772-4	Std. Temp.	Panel Mount	1 x 4	4	105	Natural
	1-1971772-7	Std. Temp.	Panel Mount	1 x 5	5	105	Natural
	1-1971775-3	Std. Temp.	Panel Mount	2 x 3	6	105	Natural
	1-1971775-4	Std. Temp.	Panel Mount	2 x 4	8	105	Natural
	1-1971775-5	Std. Temp.	Panel Mount	2 x 5	10	105	Natural
	1-1971775-6	Std. Temp.	Panel Mount	2 x 6	12	105	Natural
	1-1971875-3	Std. Temp.	Panel Mount	3 x 3	9	105	Natural
	1-1971875-4	Std. Temp.	Panel Mount	3 x 4	12	105	Natural
	1-1971875-7	Std. Temp.	Panel Mount	3 x 5	15	105	Natural
	5-1971772-2	High Temp.	Panel Mount	1 x 2	2	150	Light Gray
	5-1971772-3	High Temp.	Panel Mount	1 x 3	3	150	Light Gray
	5-1971772-4	High Temp.	Panel Mount	1 x 4	4	150	Light Gray
	5-1971772-7	High Temp.	Panel Mount	1 x 5	5	150	Light Gray
	5-1971775-3	High Temp.	Panel Mount	2 x 3	6	150	Light Gray
	5-1971775-4	High Temp.	Panel Mount	2 x 4	8	150	Light Gray
	5-1971775-5	High Temp.	Panel Mount	2 x 5	10	150	Light Gray
	5-1971775-6	High Temp.	Panel Mount	2 x 6	12	150	Light Gray
	5-1971875-3	High Temp.	Panel Mount	3 x 3	9	150	Light Gray
	5-1971875-4	High Temp.	Panel Mount	3 x 4	12	150	Light Gray
	5-1971875-7	High Temp.	Panel Mount	3 x 5	15	150	Light Gray
	5-2232263-2	Glow Wire	Panel Mount	1 x 2	2	105	Dark Gray
	5-2232263-3	Glow Wire	Panel Mount	1 x 3	3	105	Dark Gray
	5-2232263-4	Glow Wire	Panel Mount	1 x 4	4	105	Dark Gray
	5-2232263-7	Glow Wire	Panel Mount	1 x 5	5	105	Dark Gray
	5-2232264-3	Glow Wire	Panel Mount	2 x 3	6	105	Dark Gray
	5-2232264-4	Glow Wire	Panel Mount	2 x 4	8	105	Dark Gray
	5-2232264-5	Glow Wire	Panel Mount	2 x 5	10	105	Dark Gray
	5-2232264-6	Glow Wire	Panel Mount	2 x 6	12	105	Dark Gray
	5-2232356-3	Glow Wire	Panel Mount	3 x 3	9	105	Dark Gray
	5-2232356-4	Glow Wire	Panel Mount	3 x 4	12	105	Dark Gray
	5-2232356-7	Glow Wire	Panel Mount	3 x 5	15	105	Dark Gray

Note: Cap and plug part numbers listed above are for keying option A. Caps and plugs also available in keying options B, C, and D

PLUG							
Product Image	Part Number	Material	Style	Size	Number of Positions	Temp Rating (°C)	Color
	1-1971773-2	Std. Temp.	Plug Housing	1 x 2	2	105	Natural
	1-1971773-3	Std. Temp.	Plug Housing	1 x 3	3	105	Natural
	1-1971773-4	Std. Temp.	Plug Housing	1 x 4	4	105	Natural
	1-1971773-7	Std. Temp.	Plug Housing	1 x 5	5	105	Natural
	1-1971776-3	Std. Temp.	Plug Housing	2 x 3	6	105	Natural
	1-1971776-4	Std. Temp.	Plug Housing	2 x 4	8	105	Natural
	1-1971776-5	Std. Temp.	Plug Housing	2 x 5	10	105	Natural
	1-1971776-6	Std. Temp.	Plug Housing	2 x 6	12	105	Natural
	1-1971876-3	Std. Temp.	Plug Housing	3 x 3	9	105	Natural
	1-1971876-4	Std. Temp.	Plug Housing	3 x 4	12	105	Natural
	1-1971876-7	Std. Temp.	Plug Housing	3 x 5	15	105	Natural
	9-1971773-2	High Temp.	Plug Housing	1 x 2	2	150	Light Gray
	5-1971773-3	High Temp.	Plug Housing	1 x 3	3	150	Light Gray
	5-1971773-4	High Temp.	Plug Housing	1 x 4	4	150	Light Gray
	5-1971773-7	High Temp.	Plug Housing	1 x 5	5	150	Light Gray
	5-1971776-3	High Temp.	Plug Housing	2 x 3	6	150	Light Gray
	5-1971776-4	High Temp.	Plug Housing	2 x 4	8	150	Light Gray
	5-1971776-5	High Temp.	Plug Housing	2 x 5	10	150	Light Gray
	5-1971776-6	High Temp.	Plug Housing	2 x 6	12	150	Light Gray
	5-1971876-3	High Temp.	Plug Housing	3 x 3	9	150	Light Gray
	5-1971876-4	High Temp.	Plug Housing	3 x 4	12	150	Light Gray
	5-1971876-7	High Temp.	Plug Housing	3 x 5	15	150	Light Gray
	5-2232265-2	Glow Wire	Plug Housing	1 x 2	2	105	Dark Gray
	5-2232265-3	Glow Wire	Plug Housing	1 x 3	3	105	Dark Gray
	5-2232265-4	Glow Wire	Plug Housing	1 x 4	4	105	Dark Gray
	5-2232265-7	Glow Wire	Plug Housing	1 x 5	5	105	Dark Gray
	5-2232266-3	Glow Wire	Plug Housing	2 x 3	6	105	Dark Gray
	5-2232266-4	Glow Wire	Plug Housing	2 x 4	8	105	Dark Gray
	5-2232266-5	Glow Wire	Plug Housing	2 x 5	10	105	Dark Gray
	5-2232266-6	Glow Wire	Plug Housing	2 x 6	12	105	Dark Gray
	5-2232357-3	Glow Wire	Plug Housing	3 x 3	9	105	Dark Gray
	5-2232357-4	Glow Wire	Plug Housing	3 x 4	12	105	Dark Gray
	5-2232357-7	Glow Wire	Plug Housing	3 x 5	15	105	Dark Gray

Note: Cap and plug part numbers listed above are for keying option A. Caps and plugs are also available in keying options B, C, and D.
Glow Wire and High Temp key A and B caps and plugs are certified by VDE per IEC 61984 in Certificate 40045889.

HEADER

Product Image	Part Number	Material	Style	Size	Number of Positions	Temp Rating (°C)	Color
	1969688-2	Std. Temp.	PC Board Mount	1 x 2	2	105	Natural
	1969688-3	Std. Temp.	PC Board Mount	1 x 3	3	105	Natural
	1969688-4	Std. Temp.	PC Board Mount	1 x 4	4	105	Natural
	1969688-5	Std. Temp.	PC Board Mount	1 x 5	5	105	Natural
	1969694-2	Std. Temp.	R/A PCB Mount*	1 x 2	2	105	Natural
	1969694-3	Std. Temp.	R/A PCB Mount*	1 x 3	3	105	Natural
	1969694-4	Std. Temp.	R/A PCB Mount*	1 x 4	4	105	Natural
	1969694-5	Std. Temp.	R/A PCB Mount*	1 x 5	5	105	Natural
	1-1969688-2	High Temp.	PC Board Mount	1 x 2	2	150	Light Gray
	1-1969688-3	High Temp.	PC Board Mount	1 x 3	3	150	Light Gray
	1-1969688-4	High Temp.	PC Board Mount	1 x 4	4	150	Light Gray
	1-1969688-5	High Temp.	PC Board Mount	1 x 5	5	150	Light Gray
	1-1969694-2	High Temp.	R/A PCB Mount*	1 x 2	2	150	Light Gray
	1-1969694-3	High Temp.	R/A PCB Mount*	1 x 3	3	150	Light Gray
	1-1969694-4	High Temp.	R/A PCB Mount*	1 x 4	4	150	Light Gray
	1-1969694-5	High Temp.	R/A PCB Mount*	1 x 5	5	150	Light Gray

TPA

Product Image	Part Number	For Use With	Style	Size	Number of Positions	Temp Rating (°C)	Color
	1971777-2	Std. Temp., High Temp., Glow Wire	Locking Plate	1 x 2	2	150	Black
	1971777-3	Std. Temp., High Temp., Glow Wire	Locking Plate	1 x 3	3	150	Black
	1971777-4	Std. Temp., High Temp., Glow Wire	Locking Plate	1 x 4	4	150	Black
	1971777-5	Std. Temp., High Temp., Glow Wire	Locking Plate	1 x 5	5	150	Black
	1971778-3	Std. Temp., High Temp., Glow Wire	Locking Plate	2 x 3	6	150	Black
	1971778-4	Std. Temp., High Temp., Glow Wire	Locking Plate	2 x 4	8	150	Black
	1971778-5	Std. Temp., High Temp., Glow Wire	Locking Plate	2 x 5	10	150	Black
	1971778-6	Std. Temp., High Temp., Glow Wire	Locking Plate	2 x 6	12	150	Black

CPA

Product Image	Part Number	For Use With	Style	Size	Number of Positions	Temp Rating (°C)	Color
	1971789-1	Std. Temp., High Temp., Glow Wire	Connector Position Assurance	NA	NA	150	Red

Note: Cap and plug part numbers listed above are for keying option A. Caps and plugs also available in keying options B, C, and D. Std. Temp and High Temp Headers are certified by VDE per IEC 61984 in Certificate 40045889.

*R/A (Right angle) version mounts parallel to the surface of the PC board and contains a retention feature.

Receptacles, Tabs and Tools

					Applicators			
					US/EMEA only		HDE	
Part Number	Type	Style	Wire Size	Temp Rating (°C)	Atlantic Style	Pacific Style	AP Only	Hand Tool
1971779-1	Receptacle	Std. Receptacle	12AWG	105	2151741-1	2-2151741-1	1552992-2	2217268-1
1971781-1**	Receptacle	Std. Receptacle	14AWG	105	2151742-1	2-2151742-1	1552993-2	2217266-1
1971783-1**	Receptacle	Std. Receptacle	16-19, 2x22AWG	105	2151743-1	2-2151743-1	1552994-2	2217208-1
2238066-1	Receptacle	Std. Receptacle	18AWG	105	2151743-1	2-2151743-1	1552994-2	2217208-1
1971785-1**	Receptacle	Std. Receptacle	20-22AWG	105	2151744-1	2-2151744-1	1552995-2	2217267-1
1971787-1**	Receptacle	Std. Receptacle	2x18AWG	105	2151745-1	2-2151745-1	1552996-2	2217266-1
1971237-1**	Receptacle	Std. Receptacle	2x20AWG	105	2151746-1	2-2151746-1	1552511-2	2217267-1
1971780-1	Tab	Std. Tab	12AWG	105	2151741-1	2-2151741-1	1552992-2	2217268-1
1971782-1**	Tab	Std. Tab	14AWG	105	2151742-1	2-2151742-1	1552993-2	2217266-1
1971784-1**	Tab	Std. Tab	16-19, 2x22AWG	105	2151743-1	2-2151743-1	1552994-2	2217208-1
2238067-1	Tab	Std.. Tab	18AWG	105	2151743-1	2-2151743-1	1552994-2	2217208-1
1971786-1**	Tab	Std. Tab	20-22AWG	105	2151744-1	2-2151744-1	1552995-2	2217267-1
1971788-1**	Tab	Std. Tab	2x18AWG	105	2151745-1	2-2151745-1	1552996-2	2217266-1
1971238-1**	Tab	Std. Tab	2x20AWG	105	2151746-1	2-2151746-1	1552511-2	2217267-1
1971779-2	Receptacle	HT 150°C Receptacle	12AWG	150	2151741-1	2-2151741-1	1552992-2	2217268-1
1971781-2**	Receptacle	HT 150°C Receptacle	14AWG	150	2151742-1	2-2151742-1	1552993-2	2217266-1
1971783-2**	Receptacle	HT 150°C Receptacle	16-19, 2x22AWG	150	2151743-1	2-2151743-1	1552994-2	2217208-1
2238066-2**	Receptacle	HT 150°C Receptacle	18AWG	150	2151743-1	2-2151743-1	1552994-2	2217208-1
1971785-2**	Receptacle	HT 150°C Receptacle	20-22AWG	150	2151744-1	2-2151744-1	1552995-2	2217267-1
1971787-2**	Receptacle	HT 150°C Receptacle	2x18AWG	150	2151745-1	2-2151745-1	1552996-2	2217266-1
1971237-2**	Receptacle	HT 150°C Receptacle	2x20AWG	150	2151746-1	2-2151746-1	1552511-2	2217267-1
1971780-2	Tab	HT 150°C Tab	12AWG	150	2151741-1	2-2151741-1	1552992-2	2217268-1
1971782-2**	Tab	HT 150°C Tab	14AWG	150	2151742-1	2-2151742-1	1552993-2	2217266-1
1971784-2**	Tab	HT 150°C Tab	16-19, 2x22AWG	150	2151743-1	2-2151743-1	1552994-2	2217208-1
2238067-2**	Tab	HT 150°C Tab	18AWG	150	2151743-1	2-2151743-1	1552994-2	2217208-1
1971786-2**	Tab	HT 150°C Tab	20-22AWG	150	2151744-1	2-2151744-1	1552995-2	2217267-1
1971788-2**	Tab	HT 150°C Tab	2x18AWG	150	2151745-1	2-2151745-1	1552996-2	2217266-1
1971238-2**	Tab	HT 150°C Tab	2x20AWG	150	2151746-1	2-2151746-1	1552511-2	2217267-1

**Select contacts are certified by VDE per IEC 61984 in Certificate 40045889.

THE MAKE FIRST, BREAK LAST POWER TRIPLE LOCK CONNECTOR SYSTEM

The make first, break last (MFBL) POWER TRIPLE LOCK connector is designed for applications where there are specific grounding requirements. It allows the ground to be established prior to the power connections being made, and the ground is maintained until after the power connections are broken.

This 6.0 mm centerline, POWER TRIPLE LOCK connector offers three positions. It has a new cap, plug, ground tab and receptacle while utilizing other components from the standard POWER TRIPLE LOCK connector family. It provides the secure connection and easy assembly of the POWER TRIPLE LOCK connector family.

TECHNICAL DETAILS

Electrical

- Voltage Rating: 600 VAC/VDC
- Current Rating: Up to 12 amps maximum

Mechanical

- 3 positions, wire-to-panel (or wire-to-wire)
- Centerline pitch: 6.0 mm (.236 in)

Specifications

- Product specification: 108-106147
- Application specification: 114-106147

Materials

- Housings: Thermoplastic meeting glow wire test (750°C no flame) per IEC 60335-1, 5th edition
- Contacts: Tin plated copper alloy
- Operating temperature: -55°C to 105°C

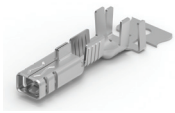
Contacts

- New receptacle 2232723-1 (19-16 AWG [.65-1.3 mm^2])
- New extended length ground tab 2232724-1 (19-16 AWG [.65-1.3 mm^2])
- Existing standard length tab 1971784-1 (19-16 AWG [.65-1.3 mm^2])

HOUSINGS

Product Image	Part Number	Type	Style
	5-2232362-3	Plug housing	3 position
	5-2232353-3	Cap housing	3 position

CONTACTS

Product Image	Part Number	Type	Wire Gauge
	2232723-1	Receptacle Use in all three positions of plug housing	19-16 AWG [.65-1.3 mm^2]
	2232724-1	Ground Tab Use in center position of cap housing	19-16 AWG [.65-1.3 mm^2]
	1971784-1	Tab Use in two positions on either side of cap housing	19-16 AWG [.65-1.3 mm^2]

OPTIONAL ACCESSORIES

Product Image	Part Number	Type
	1971777-3	Terminal Position Assurance
	1971789-1	Connector Position Assurance

FREQUENTLY ASKED QUESTIONS

Q1. What are the operating temperature requirements?

The POWER TRIPLE LOCK connector offers all V-0 materials, with standard product made from a PBT material, rated at 105°C. For high temperature applications, like cooking, materials are available for 150°C.

Q2. What is the benefit of choosing glow wire housings?

The POWER TRIPLE LOCK connector offers glow wire housings that allow manufacturers of home appliances to comply with the IEC 60335-1 standard.

Q3. What are the current and voltage requirements for your application?

The POWER TRIPLE LOCK connector has a maximum current rating of 20 amps per line and is rated for 600 VAC or VDC. Refer to product specification 108-106118 (plugs/caps) / 108-32090 (headers) for de-rating chart.

Q4. What are the wire size requirements?

The POWER TRIPLE LOCK connector can accommodate single wire ranges from 12 AWG to 22 AWG, and double wires from 2X18 AWG to 2X22 AWG.

Q5. In what circuit count is the POWER TRIPLE LOCK connector offered?

The POWER TRIPLE LOCK connector is available from 2 to 15 positions, with both free hanging and panel mount housings; the printed circuit header version from 2 to 5 positions.

Q6. Do I need to use the Connector Position Assurance (CPA) device and the Terminal Position Assurance (TPA) device?

The CPA and TPA devices are offered for this POWER TRIPLE LOCK connector as options. Many customers are now asking for these devices in some or all of their applications as added security to help ensure the connector halves remain together once mated and ensure contact retention in each circuit cavity.

Q7. Do you offer Terminal Position Assurance (TPA) devices for Matrix (3 row) housings?

Yes. The Matrix housings are designed to accept 1 single row and 1 dual row TPA.

Q8. What connector keying options are offered for the Power Triple Lock connector?

The POWER TRIPLE LOCK connector is available in 4 keying options for all connector ranges. This means that the same position size connector can be used in different harnesses, but with different keying to prevent mismating and different colors to facilitate identification.

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te.com

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单击下面可查看定价，库存，交付和生命周期等信息

>>TE Connectivity(泰科)