HVAC VIRTUAL SAMPLE KIT

POWER CONNECTS

Our power connect solutions are designed for applications requiring up to 20 Amps of power and offer versatility to serve as signal connections with a larger pitch as well. These connections adhere to stringent UL 94 V0 and IEC Glow Wire requirements, helping ensure safety and reliability. Typical applications encompass powering motors, main power supplies, lighting systems, and providing power to high-power electronics, catering to diverse needs within HVAC systems.

	Subsystems	Outdoor Unit Heat Pump or Air Conditioning Unit	Indoor Unit Mini-Split Unit
	Control System	**YES**	**YES**
	Motors/Compressors	**YES**	**YES**
	Valves/Solenoids	NO	
	User Interface		NO
	Sensing	NO	NO

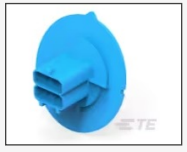
Power Versa-Lock Connectors

The Power Versa-Lock connector system is a high-performance, wire-to-wire power solution featuring perimeter and wire seals that deliver IP67 rated ingress protection against water and dust. These locking connectors offer enhanced reliability with four points of contact between tab and receptacle contacts and a mounting clip to reduce movement in high-vibration applications.

WTW Wire-to-Wire · WTP Wire-to-Panel · IP Rated · Flame Resistance · TPA Terminal Position Assurance · Color and Keying

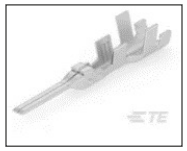
CAP HOUSINGS

6 Cap Housing, 2x3 Key A, GWT
1-2381596-6

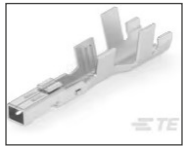


6 Cap Housing Twist and lock, 2x3 Key A, GWT
1-2381608-6

CONTACTS



16-14 AWG Tin Plated, Brass Tab
2329910-1



16-14 AWG Tin Plated, Copper Alloy Receptacle
2329913-1

BACK COVERS

3P Protective Cover, Red Back Cover 3P
2334614-3

1P Protective Cover, Red Back Cover 1P
2334614-1

INTERFACE SEALS

3P Interface Seal, 1x3
2325347-3

1P Interface Seal, 1x1
2325347-1

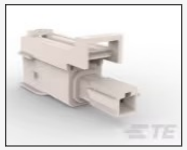
Power Versa-Lock Connectors

CAP HOUSINGS

1 Cap Housing, Free Hanging, 1x1 Key A
1-2345729-1

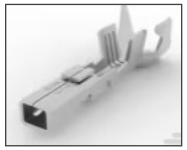
PLUG HOUSINGS

6 Plug Housing, 2x3 Key A, GWT
1-2381595-6



1 Plug Housing, 1x1 Key A
1-2345728-1

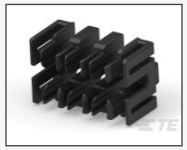
CONTACTS



16-14 AWG Tin Plated, Copper Alloy Receptacle
2329916-1

20-18 AWG Tin Plated, Copper Alloy Receptacle
2329912-1

TERMINAL POSITION ASSURANCE (TPA)



6P TPA, Black 2x3
2337218-6

1P TPA, Black 1x1
2329016-1

GANG WIRE SEALS

3P Gang Wire Seal, 1x3
1-2325349-3

1P Gang Wire Seal, 1x1
2325349-1

POWER TRIPLE LOCK Connectors

The POWER TRIPLE LOCK connector system delivers consistent, reliable power and signal connections with multiple integrated locking features. The connector was designed to address a wide range of appliance industry concerns, including contact retention, incomplete mating, wire entanglement, and ergonomics.

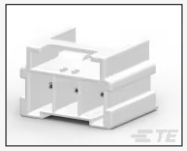
CAP HOUSINGS

10P Panel Mount Cap Housing, 2x5 Key A Natural
1-1971775-5

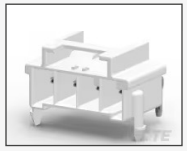
PLUG HOUSINGS

10P Plug Housing, 2x5 Key A Natural
1-1971776-5

HEADERS

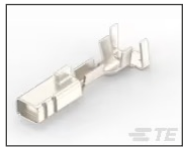


3P Vertical Standard Temperature Header, 1x3 Key A Natural
1969688-3

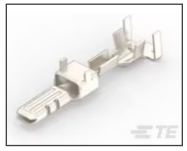


4P Right Angle Standard Temperature Header, 1x3 Key A Natural
1969694-4

CONTACTS



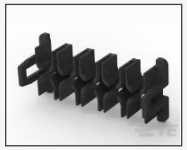
24-20 AWG Tin Plated Phosphor Bronze Receptacle
1971785-1



24-20 AWG Tin Plated Brass Tab
1971786-1

POWER TRIPLE LOCK Connectors

TERMINAL POSITION ASSURANCE (TPA)



10P TPA, Black 2x5
1971778-5

CONNECTOR POSITION ASSURANCE (CPA)

CPA, Red
1971789-1

Universal MATE-N-LOK connectors

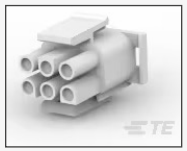
The Universal MATE-N-LOK connector system is an industry standard for achieving reliable, power connections while also maintaining design flexibility. The housings feature polarization, positive locking, and rear cavity identification for easy, error resistant assembly and they accept both pin and socket contacts.

WTW Wire-to-Wire
WTB Wire-to-Board
WTP Wire-to-Panel
Flame Resistance
TPA Terminal Position Assurance
IP Rated
Color and Keying

CAP HOUSINGS

6P Cap Housing, Natural
1-480705-0

PLUG HOUSINGS



6P Plug Housing, Natural
1-480704-0

HEADERS

6P Vertical Pin Header Assembly, Natural
350431-4

6P Vertical Socket Header Assembly, Natural
350762-4

CONTACTS

24-18 AWG Tin Plated Brass Socket Contact
350851-1

24-18 AWG, Locking Lance, Pin Contact
350561-2

INTERFACE SEAL

6P Interface Seal
794275-1

WIRE SEAL

6P Wire Seal
794276-1

MID POWER SIGNAL CONNECTORS

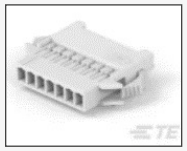
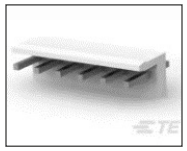
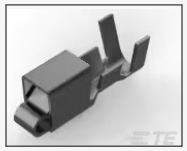
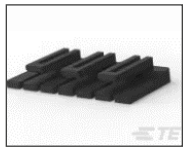
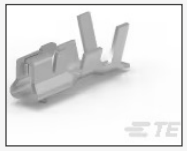
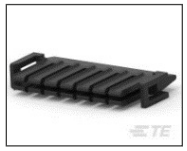
Presenting our mid power signal connect solutions, tailored for signal or low-power wire-to-wire or wire-to-board connections in HVAC and mid-power applications. These robust connectors provide high density within limited space, can withstand high vibrations and meet rigorous UL 94 V0 and IEC glow wire test (GWT) requirements. They are commonly utilized for control systems, HVAC fan motors and compressors.

	Subsystems	Outdoor Unit Heat Pump or Air Conditioning Unit	Indoor Unit Mini-Split Unit
	Control System	**YES**	**YES**
	Motors/Compressors	**YES**	NO
	Valves/Solenoids	NO	
	User Interface		NO
	Sensing	NO	NO

Economy Power Connectors

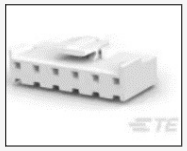
The Economy Power product line features wire-to-board connectors for compact power systems requiring a large current carrying capacity. The original Economy Power (EP) connectors are rated for 7.5A and 250VAC, while the more advanced Economy Power II (EP II) connectors support up to 11A and 600VAC on the same standard 3.96mm pitch design. The connection is secured with an audible locking latch and optional terminal position assurance (TPA) devices.

WTB Wire-to-Board · TPA Terminal Position Assurance · Flame Resistance · Color and Keying

CAP HOUSINGS	HEADERS	CONTACTS	TERMINAL POSITION ASSURANCE (TPA)
 7P Cap Housing, Economy Power 2.5, Panel Mount 1969590-7	 6P Plug Header Vertical 5.08mm centerline 1744037-6	 22-18 AWG Tin Plated Locking Lance Receptacle Contact 1123721-1	 7P TPA Locking Plate, Retainer, Black 1969443-7
	 6P Right Angle Header Plug, UL 94V-0, 5.08mm centerline 1744048-6	 26-22 AWG Tin Plated, Receptacle Contact 2110989-1	 14P TPA Dual Row Retainer, Black 1-1969541-4

Economy Power Connectors

PLUG HOUSINGS



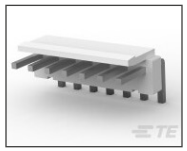
6P Plug Housing, 5.08mm centerline
1744036-6

7P Plug Housing, Economy Power 3.69mm, UL 94V-0
1-1123722-7

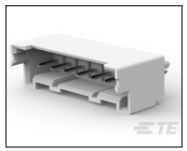
7P Plug Housing, 1 Row, GWT
1744417-7

HEADERS

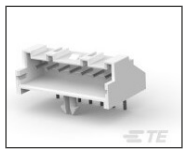
7P Plug Header Vertical, 3.96mm centerline
1-1123723-7



7P Right Angle, PCB Mount Header, 3.96mm centerline
647676-7



7P PCB Mount Header, Vertical, 2.5mm centerline
2132230-7



7P PCB Mount Header, Right Angle, 2.5mm centerline
1744426-7

10P PCB Mount Dual Header, Right Angle, 2.5mm centerline
1-1969572-0

CONTACTS

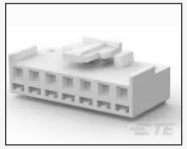
26-22 AWG Tin Plated, Pin Contact
2238007-1 26-22 AWG Tin Plated, Pin Contact
2238007-1

Economy Power II Connectors

Economy Power II (EP II) connectors are based on the 3.96mm standard pitch but offer higher current and voltage rating than many comparable offerings. Recently added models include glow wire tested (GWT) materials and new discrete terminal position assurance (TPA) devices. These connectors can deliver power to your circuit board (PCB).

WTB Wire-to-Board · TPA Terminal Position Assurance · Flame Resistance · Color and Keying

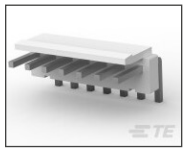
PLUG HOUSINGS



7P Plug Housing, Natural
2132781-7

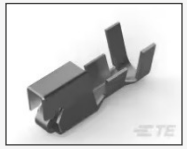
HEADERS

7P Plug Header Vertical, 3.96mm centerline
1-1123723-7



7P Right Angle, PCB Mount Header, 3.96mm centerline
647676-7

CONTACTS



22-18 AWG Tin Plated, Lanceless Receptacle
1744144-1

TERMINAL POSITION ASSURANCE (TPA)

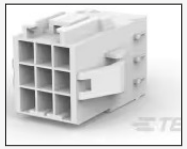
12P TPA Breakaway Retainer, 3.96mm centerline
1-2132782-2

Power Double Lock Connectors

Power Double Lock connectors are soft shell connectors engineered with multiple locking mechanisms to provide secure connections in wire-to-wire, wire-to-board, and panel mount systems. These connectors are an excellent choice for applications exposed to vibration, including HVAC systems, washing machines, refrigerators, and motors. The key feature of the Power Double Lock connector is the double locking plate that help prevent partial mating of contacts.

WTW Wire-to-Wire · WTB Wire-to-Board · WTP Wire-to-Panel · Flame Resistance · TPA Terminal Position Assurance · Color and Keying

CAP HOUSINGS

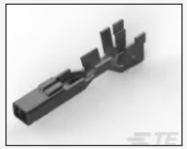


9P Cap Housing, 3.96mm centerline
177911-1

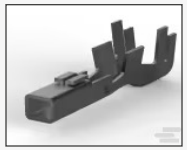
HEADERS

12P Vertical Header, 3.96mm centerline
179843-1

CONTACTS

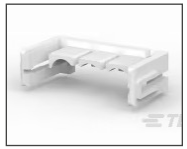


26-22 AWG, Tin Plated Receptacle Contact
177914-1



20-16 AWG, Tin Plated Pin Contact
177915-1

TERMINAL POSITION ASSURANCE (TPA)



3P TPA, Latching, Locking & Retention
177919-1

PLUG HOUSINGS

9P Plug Housing, Natural
177903-1

VAL-U-LOK Connectors

The VAL-U-LOK product line features 4.20mm pitch wire-to-wire, wire-to-board, and panel mount connectors developed to help achieve manufacturing savings without sacrificing performance. Standard connectors have a 9A maximum current rating intended for low power applications. For higher power systems, TE offers high current products supporting up to 13A. Optional terminal position assurance (TPA) available for simpler assembly. TE also offers VAL-U-LOK PLUS connectors with an integrated TPA.

WTW Wire-to-Wire · WTB Wire-to-Board · WTP Wire-to-Panel · Flame Resistance · TPA Terminal Position Assurance · Color and Keying

CAP HOUSINGS

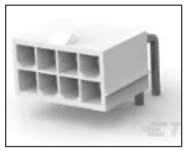
7P Plug Housing, Natural
2132781-7

PLUG HOUSINGS

8P Plug Housing, 4.2mm Centerline
1969597-8

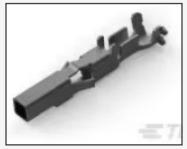
HEADERS

8P Vertical Header Without Pegs, with Drain Holes, GW
1586768-8



8P Right Angle Header, Without Pegs UL 94V-2
1586863-8

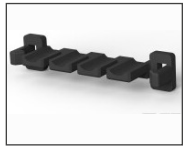
CONTACTS



26-22 AWG, Tin Plated Socket Contact Receptacle
2238019-1

26-22 AWG, Tin Plated Pin Contact
2238018-1

TERMINAL POSITION ASSURANCE (TPA)



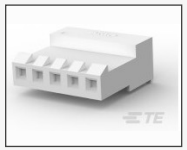
4P TPA
1969608-4

MTA 156 Connectors

Reduce labor, lower costs, and simplify assembly processes with TE's MTA connector system. MTA connectors support mass termination of wires, allowing for less labor-intensive assembly and a lower applied cost. These stackable wire-to-board and wire-to-wire connectors use insulation displacement contacts (IDC) that allow for wire termination without stripping or crimping.

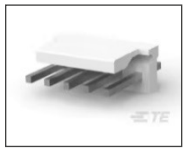
WTW Wire-to-Wire · WTB Wire-to-Board · Flame Resistance · IDC Insulation Displacement Connector

PLUG CONNECTOR

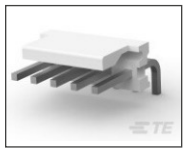


5P Connector Assembly, UL 94V-2, Wire-to-Board
3-640429-5

HEADERS



5P Vertical Header, Friction lock with tin plated square posts
640445-5



5P Right Angle, Friction lock, Front bend with tin plated square posts
640389-5

GRACE INERTIA 6.5 Connectors

Connectors capable of withstanding glow wire testing and features an inertia locking mechanism.

Flame Resistance

Wire-to-Board

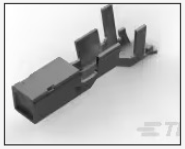
PLUG HOUSING

3P Plug Housing Natural, 6.5mm Centerline
1747047-1

HEADER

3P Header, 6.5mm Centerline Natural
1747049-1

CONTACT



20-16 AWG Power Key Connector Receptacle, Tin plated contact
1376347-1

GRACE INERTIA 2.5mm Connectors

GRACE INERTIA 2.5mm pitch connectors are designed to facilitate a more stable, durable, and easy-to-assemble connection. An inertia locking mechanism can help prevent defects caused by half mating. Optional terminal position assurance (TPA) devices help ensure contacts are seated in the housing and protect against contact back-out. Low insertion force (LIF) contacts with a lanceless design provide more ergonomic assembly and help prevent tangled wires, improving safety and efficiency during operation.

WTW Wire-to-Wire

WTB Wire-to-Board

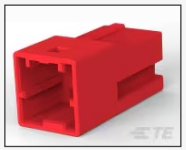
LIF Low Insertion Force

Flame Resistance

TPA Terminal Position Assurance

Color and Keying

CAP HOUSINGS

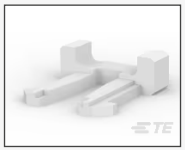


2P Cap Housing, 1 Row, Red
1-1903391-2

PLUG HOUSINGS

2P Plug Housing, 1 Row, Red
1-1903388-2

CONTACT



2P Double Lock Plate, Connector Hardware Accessory
917698-1

RECEPTACLE TERMINAL

22-20 AWG Locking Lance Pin Contact
917764-1

LOW POWER SIGNAL CONNECTORS

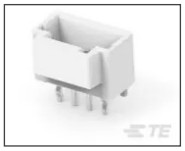
Introducing our low power signal connectors, the excellent solution for HVAC systems requiring reliable wire-to-wire or wire-to-board connections for signal or low-power applications. Engineered for high density within limited space constraints, these connectors meet stringent UL 94 V0 and IEC glow wire test (GWT) requirements, providing safety and reliability. Commonly utilized in various HVAC components such as sensors, data transmission, displays, user interfaces, and powering small motors and actuators, our connectors can offer dependable performance in critical applications.

	Subsystems	Outdoor Unit Heat Pump or Air Conditioning Unit	Indoor Unit Mini-Split Unit
	Control System	**YES**	**YES**
	Motors/Compressors	**YES**	**YES**
	Valves/Solenoids	**YES**	
	User Interface		**YES**
	Sensing	**YES**	**YES**

2.0mm Signal GRACE INERTIA Connectors

The compact 2.0mm Signal GRACE INERTIA connectors help improve manufacturing efficiency with features to prevent assembly errors and to support automated production. To reduce assembly errors, these connectors feature an inertia locking mechanism for reliability, an anti-snag latch to prevent breakage due to tangled wires, and color and keyed connector options to avoid mis-mating.

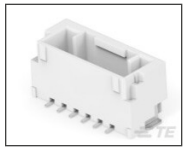
- WTW — Wire-to-Wire
- WTP — Wire-to-Panel
- Color and Keying
- Flame Resistance
- TPA — Terminal Position Assurance
- IDC — Insulation Displacement Connector

PLUG HOUSINGS	HEADER	CONTACT
		
4P Plug Housing, Key A, 1 Row, Natural 1-2350224-4	4P PCB Mount Header, Key A, Natural 1-2232826-4	22-28 AWG, Receptacle Terminal Tin plated, Phosphor Bronze 2350223-1

Signal GRACE INERTIA 1.5 Connectors

Wire-to-Board small pitch connector available in right angle and vertical. Available in single row, vertical for dual row, and high locking strength. Inertial locking mechanism with low profile header assembly for single row or potting version for dual row. Terminal position assurance (TPA) devices to secure contacts in a mated position.

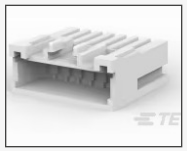
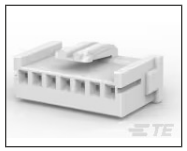
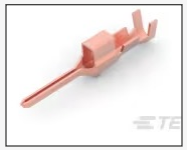
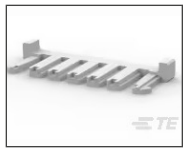
WTW Wire-to-Wire · WTB Wire-to-Board · Flame Resistance · TPA Terminal Position Assurance · Color and Keying · IDC Insulation Displacement Connector

PLUG HOUSINGS	HEADERS	CONTACT	TERMINAL POSITION ASSURANCE (TPA)
 6P Plug Housing, 1 Row, Crimp Version, Natural 2382946-6	 6P PCB Mount Header Vertical, 1.5mm Centerline 2360547-6	 24-28 AWG, Locking Lance Contact Retention, Tin Plated Receptacle 2371403-2	 6P TPA, Protective Cover, Black 2383410-6

2.5mm Signal Double Lock Connectors

2.5mm pitch Signal Double Lock (SDL) connectors offer design flexibility to create compact, durable connections in low power and signal applications. The product line includes many optional features to protect against defects during manufacture and product end-use. These features include a double lock plate to provide complete mating during assembly, a high-profile header for use on printed circuit boards (PCB) with conformal coatings, and IP67 rated sealed connectors for reliable performance in high humidity and wet environments.

WTW Wire-to-Wire · WTB Wire-to-Board · WTP Wire-to-Panel · Flame Resistance · TPA Terminal Position Assurance · IP Rated · Color and Keying

PLUG HOUSINGS	HEADERS	CONTACT	TERMINAL POSITION ASSURANCE (TPA)
 7P Cap Housing, 1 Row, Mating Retention, Natural 316091-1	 7P Plug Housing, 1 Row, Crimp, Natural 917691-1	 26-22 AWG Socket Contact, Tin Plated, Locking Lance Contact Retention 917684-1  26-22 AWG Pin, Locking Lance Contact Retention, Tin Plated 917765-1	 7P Double Lock Plate, Natural 917703-1

Micro MATE-N-LOK Connectors

Micro MATE-N-LOK connectors contain a positive latching mechanism to help prevent unmating and have many optional features, including a choice of contact type, material flammability rating, and housing configuration. Pin and receptacle contacts are available with tin or gold plating. Housings and headers have multiple flammability options and low-profile versions (<4.7mm vertical height) for space limited designs. Printed circuit board (PCB) headers are offered in vertical or right-angle orientations with either surface or through hole board mounting.

WTW Wire-to-Wire | WTB Wire-to-Board | WTP Wire-to-Panel | Flame Resistance

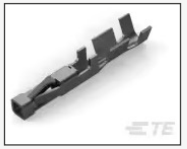
CAP HOUSINGS

8P Cap housing, UL 94V-0, Dual Row, Free Hanging, 3mm Centerline
794616-8

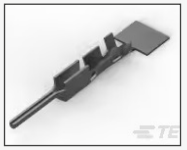
PLUG HOUSINGS

8P Plug Housing, Dual Row, 3mm Centerline
794617-8

CONTACTS



24-20 AWG Locking Lance contact Retention Receptacle, Snap-In
794606-1



24-20 AWG, Pin Contact, Crimp Snap, Tin Plated
1-794608-0

Economy Power 2.5 Connectors

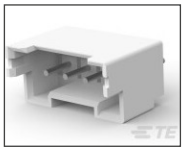
Compact Economy Power 2.5 connectors are designed for easy assembly of space limited low power and signal systems. The connectors feature polarization tabs to help prevent post misalignment, audible positive latching to provide complete mating, and low insertion force (LIF) contacts for ergonomic assembly. Additional EP 2.5 product options further simplify the assembly process, including packaging to support automated board assembly and terminal position assurance (TPA) devices to secure contacts in a mated position.

WTW Wire-to-Wire | WTB Wire-to-Board | LIF Low Insertion Force | Flame Resistance | TPA Terminal Position Assurance | Color and Keying

PLUG HOUSINGS

4P Plug Housing, Crimp, 1 Row, Mating Retention, Glow Wire, Natural
1744417-4

HEADER

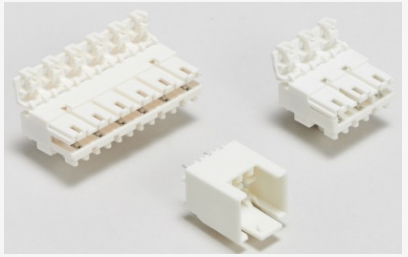


4P PCB Mount Header, Vertical, Fully shrouded, Through Hole - Solder
1744439-4

CONTACT

24-20 AWG Socket Contact, Tin Plated, Phosphor Bronze, Receptacle
1744423-1

RAST CONNECTORS



RAST connectors are useful for high-volume assembly, particularly in HVAC systems, although an initial investment in tooling is required. Their standardized design allows interoperability among manufacturers adhering to the RAST standard, which can lead to seamless integration into HVAC equipment. Keying and polarization features help ensure error-proof connections, even with multiple connectors of the same size, enhancing reliability and safety in HVAC applications. With a comprehensive portfolio covering both signal and power connectors, RAST connectors provide versatility for various HVAC system components, facilitating efficient assembly and operation.

	Subsystems	Outdoor Unit Heat Pump or Air Conditioning Unit	Indoor Unit Mini-Split Unit
	Control System	**YES**	**YES**
	Motors/Compressors	**YES**	**YES**
	Valves/Solenoids	**YES**	
	User Interface		**YES**
	Sensing	**YES**	**YES**

AMP DUOPLUG II Connector System

Compact insulation displacement contact (IDC) termination offers a space-efficient alternative to RAST 5 connectors.

IDC
Insulation Displacement Connector

WTW
Wire-to-Wire

WTB
Wire-to-Board

CONNECTOR SYSTEM

6P, Connector, 1 Row, 2.5mm centerline, Wire-to-Board
3-1534796-6

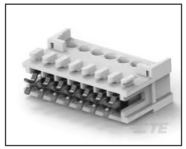
3P, PCB Locking Wire-To-Wire, Insulation Displacement, PA 6 GF, Fully Loaded
1-1740501-3

Monoplug 2.5 Connectors

Monoplug 2.5 connectors meeting RAST standards are insulation displacement contact (IDC) products engineered for easy assembly of complex wire-to-board systems. The connectors feature a through hole design that supports daisy chain, pass through or bus applications, while also eliminating the need for a separate cover.

WTB Wire-to-Board · Flame Resistance · Color and Keying · IDC Insulation Displacement Connector

CONNECTOR SYSTEM



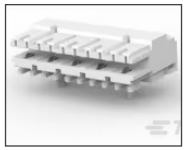
7P, Connector, 1 Row, 2.5mm centerline, Wire-to-Board, PA 66 GF
1-2232892-7

AMP DUOPLUG Power Connector System

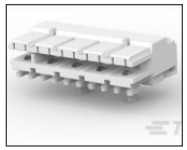
AMP DUOPLUG power connectors are insulation displacement contact (IDC) connectors for safe, fast production of wire harnesses in printed circuit board (PCB) applications. The connectors meet the RAST 2.5 standard and include configurations for direct PCB edge mounting and indirect mounting with RAST 2.5 PCB headers. They feature a twisted contact that secures the connection with high contact force, while maintaining a low mating force.

WTB Wire-to-Board · Flame Resistance · Color and Keying · IDC Insulation Displacement Connector

CONNECTOR SYSTEM



5P, Connector, Wire-to-Board, Insulation displacement, 1 Row, PA 6, Fully Loaded
1534415-5



5P, Connector, PCB Wire-to-Board, Insulation displacement, 1 Row, PA 6, Fully Loaded
1740533-5

Monoplug Power Connectors

Compact connector system with a high current rating.

WTB Wire-to-Board · Flame Resistance · Color and Keying · IDC Insulation Displacement Connector

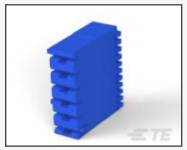
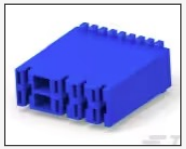
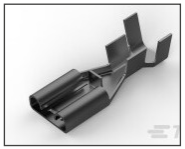
CONNECTOR SYSTEM

5P Connector, Wire-To-Board, Insulation Displacement, 1 Row
2325926-5

Positive Lock RAST 5 Connector System

These receptacles offer ergonomic assembly and secure connections due to a positive locking feature that allows for both low insertion force (LIF) and high retention force. The system mates with 6.35 x 0.81 mm tabs containing detent holes that engage the positive locking mechanism.

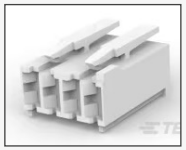
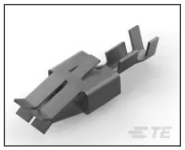
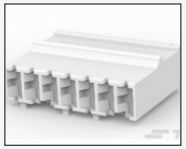
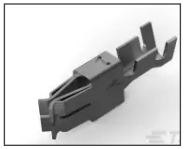
WTW Wire-to-Wire | WTB Wire-to-Board | Flame Resistance | Color and Keying | LIF Low Insertion Force

HOUSING		CONTACT	
	6P Receptacle Housing, Wire-To-Wire, 1 Row, RAST 5 IDC Connectors 521208-1		22-18 AWG, Socket Contact, 240 VAC/VDC, Crimp, Discrete Wire, Tin Plating 1217378-2
	5P Receptacle Housing, 1 Row Wire-to-Wire, Mating Retention 521267-1		16-12 AWG, Socket Contact, 240 VAC/VDC, Tin Plating, Contact Base Material Brass 1217095-2

AMP Standard Timer Connector System

The AMP standard timer wire-to-board connector system includes crimp power timer contacts that mate with terminal housings and printed circuit board (PCB) headers designed according to RAST 5 standards. These end-to-end stackable connectors support high density PCB designs and high current applications – up to 16A.

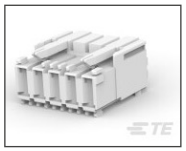
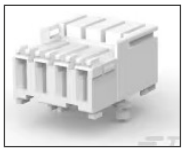
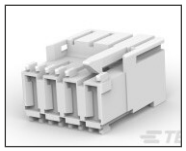
WTB Wire-to-Board | Flame Resistance | Color and Keying | TPA Terminal Position Assurance

HOUSING		CONTACT	
	4P Housing, Plug, Wire-To-Board, 1 Row, Mating Retention with exterior locking 1241965-4		20-17 AWG, Standard Timer Terminal, Locking Lance, F-Crimp, 6.3 contact size 964201-1
	7P Receptacle, Housing, Wire-To-Wire, 1 Row, Mating Retention, Interior & Secondary Locking 1241964-7		17-13 AWG, Standard Power Timer Terminal, Locking Lance, F-Crimp, 6.3 contact size 964203-1

AMP Multifitting Mark II Connectors

These printed circuit board (PCB) connectors were engineered to meet the requirements of advanced in-line mating technology and are available in both direct and indirect mating configurations. The connector system features a standard exterior locking device with optional interior locking versions available.

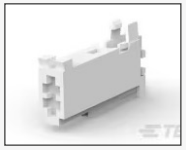
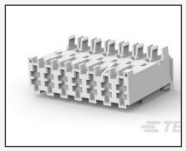
WTB Wire-to-Board | Flame Resistance | Color and Keying | IDC Insulation Displacement Connector

CONNECTOR		
 5P Connector, Polarization Mating Alignment, 10 AMP, Insulation displacement, Exterior locking 1534072-5	 4P Connector, Polarization Mating Alignment, 10 AMP, Insulation displacement, Interior locking 1534077-4	 4P Connector, Keyed Mating Alignment, 10 AMP, Insulation displacement, Exterior locking 1534073-4

AMP MONO-SHAPE Connectors

AMP MONO-SHAPE products are insulation displacement contact (IDC) wire-to-board connectors meeting the RAST 5 standard. These 5mm pitch printed circuit board (PCB) connectors are engineered to offer design flexibility without requiring multiple application tooling solutions.

WTB Wire-to-Board | Flame Resistance | Color and Keying | IDC Insulation Displacement Connector

CONNECTOR	
 1P Connector Assembly, Receptacle, , Polarization Mating Alignment, Insulation Displacement 1-282086-7	 6P Connector Assembly, Insulation Displacement, Wire-to-Board, 220 VAC/VDC 1-282046-1
 4P Connector Assembly, Receptacle, Polarization Mating Alignment, Insulation Displacement 1-282004-1	 7P Connector Assembly, Wire-To-Board, Insulation Displacement, LIF up 10A 293143-1

MAGNET WIRE SOLUTIONS

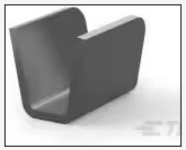
Our magnet wire solutions provide a convenient alternative to manual soldering or welding, eliminating the need to remove insulation. They're excellent for connecting magnet wire to magnet wire and/or stranded wire. In compressors, maintaining a seal between the motor and the external power supply is vital. Our electrical pass-through cluster block connector system helps ensure this seal, offering hermetic protection. Explore TE's solderless magnet wire solutions for enhanced performance in both internal and external connections to compressors.

	Subsystems	Outdoor Unit Heat Pump or Air Conditioning Unit	Indoor Unit Mini-Split Unit
	Control System	NO	NO
	Motors/Compressors	YES	YES
	Valves/Solenoids	YES	
	User Interface		NO
	Sensing	NO	NO

AMPLIVAR Terminals & Splices

AMPLIVAR terminals and splices are magnet wire connectors featuring crimp barrels with sharp edged serrations that pierce magnet wire insulation without wire stripping. This unique crimp results in a solderless and airtight connection without the contaminants, cold solder points, weld burns and wire embrittlement associated with thermal termination. Terminals are available in a variety of styles, including ring tongue and FASTON straight, flag or stator receptacles.

SPLICE



3 Splice Capacity, Pigtail splice, 3000-7000 CMA Wire Size
62308-2

RECEPTACLE

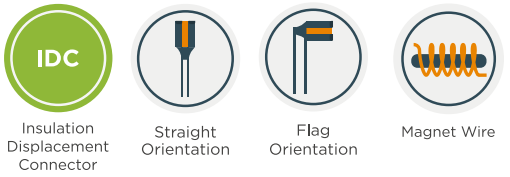
20-17 AWG, .25 in, Flag FASTON Receptacle
1742881-1

RING TERMINAL

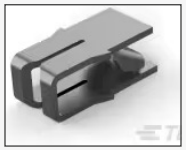
20-16 AWG, Closed Ring Tongue Terminal, Open Barrel, Straight, Tin, Uninsulated
60322-2

MAG-MATE Terminals

MAG-MATE terminals use insulation displacement contact technology for high-speed termination of copper or aluminum magnet wire without wire stripping, soldering or welding. The termination system includes the IDC terminal and a compatible plastic cavity that is either integrated into the coil body or part of a separate housing. MAG-MATE terminals are designed for fully or semi-automated assembly to provide uniform, gas-tight connections at low applied cost.



MAG-MATE TERMINAL



20-18 AWG, Poke-In, Twisted, Size 2, Tin Plated, Insulation Displacement
63658-1

POKE-IN TAB

18-14 AWG, Poke-In Tab, Flag, Crimp / Insulation Displacement
63458-1

LEAF TERMINAL

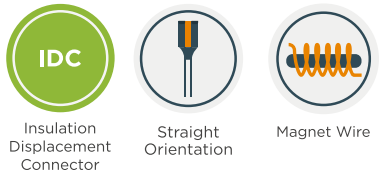
22-20 AWG, Leaf Terminal, Twisted, Insulation Displacement
928770-2

LEAF TERMINAL

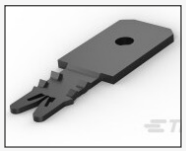
24-22 AWG solder Post, Size 2, Insulation Displacement, Dimple mating
63659-1

SIAMEZE Terminals

SIAMEZE insulation displacement contact terminals bring high-speed, solderless magnet wire termination to space constrained, small motor systems. The IDC terminal features a moving beam contact to fit a wide range of magnet wire sizes in a single terminal. SIAMEZE terminals can be applied with automated or manual assembly to achieve stable, gas-tight connections of either copper or aluminum magnet wire, without the need for pre-stripping.



TAB TERMINAL



34-18 AWG Tab .25 in Width, Straight, Insulation Displacement
1601002-2

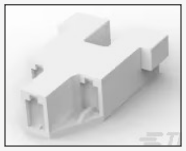
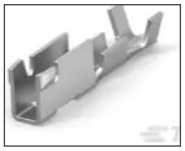
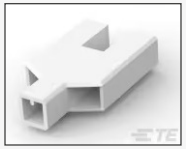
34-18 AWG, Solder Post, 1.5mm Mating Tab, Insulation Displacement
2-1601063-2

WIRE-TO-WIRE TERMINAL

20 AWG, Wire-To-Wire Terminal, Straight, Insulation Displacement
4-1601237-1

Hermetic Cluster Block

Cluster blocks provide manufacturers of air conditioning and refrigeration products with a low-cost, fully insulated, electrical quick-connect to mate with hermetic compressor header pins. They feature high impact resistance to shock and abuse, and long-life performance in the presence of oils and refrigerants. Since the connectors accept pins from only one side, the danger of reversing polarity at the time of installation is minimized.

HOUSING	RECEPTACLE
 20-16 AWG, 3 Circuits, 2.3mm Cluster Block Housing 171370-3	 Receptacle Cluster Pin 0.19 dia 1599105-1
 22-10 AWG, 3 Circuits, 2.29mm Cluster Block Housing 880631-5	

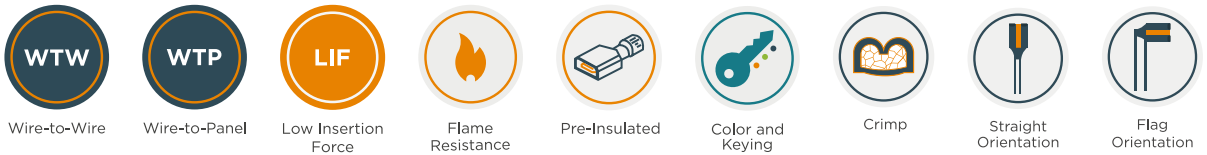
QUICK CONNECTS

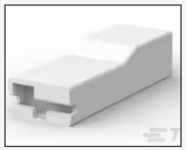
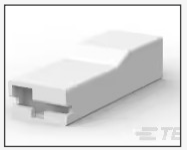
Quick connects provide efficient solutions for discrete wire-to-wire and wire-to-board connections in HVAC systems. With standardized tab and receptacle designs, they allow easy component replacement in the field using standard tools or none at all. These connectors are primarily utilized for power applications such as connections to motors, capacitors, and contactors, for reliable and convenient electrical connections in HVAC setups.

	Subsystems	Outdoor Unit Heat Pump or Air Conditioning Unit	Indoor Unit Mini-Split Unit
	Control System	**YES**	**YES**
	Motors/Compressors	**YES**	**YES**
	Valves/Solenoids	**YES**	
	User Interface		**YES**
	Sensing	**NO**	**YES**

FASTON Terminals

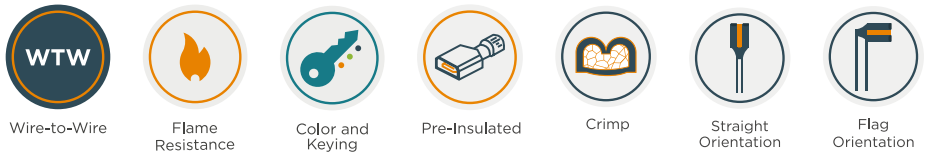
These advantages have made our FASTON quick connects the industry leader in the appliance and automotive industries. The same advantages continue to attract more users. With over 60 years of experience providing quick connects to our customers, we constantly strive to introduce new and improved products to add to our quick connect family.



HOUSING	RECEPTACLE TERMINAL	TAB TERMINAL
		
1P Receptacle Housing, Straight, UL 94V-0 280232-6	22-18 AWG, Receptacle, Straight, F-Crimp, Open Barrel 42640-2	PCB Terminals, Tab, Mating Tab Width 0.25 in, Through Hole - Solder, Tin Plating 63824-1

Ultra-Fast FASTON Receptacles and Tabs

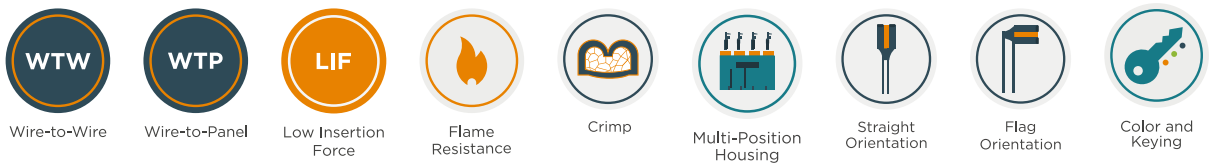
Ultra-Fast fully insulated FASTON receptacles and tabs offer the advantage of a completely protected terminal and a closed barrel wire crimp with comparable electromechanical performance to open barrel “F” crimp FASTON terminals. The user-friendly design combines easy mating with rounded corners. The terminals are offered as straight receptacles, flag receptacles, and tabs.

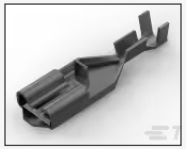
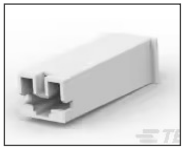


RECEPTACLE	TAB
 22 – 18 AWG, Receptacle, F-Crimp, Straight, Brass 2-520183-2	 22 – 18 AWG, Tab, F-Crimp, Straight, Brass 2-520102-2

Positive Lock Receptacles and Housings

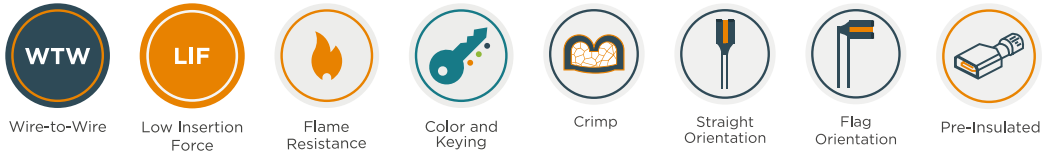
Positive Lock terminals and housings are differentiated by their low insertion force (LIF) locking receptacles that offer easy assembly and reliable tab mating. The Positive Lock receptacle achieves high retention force while maintaining LIF by securely locking onto a hole in the mating tab. They provide the assembler with an audible and mechanical “snap” when the terminal is correctly seated, enabling proper assembly - even in hard-to-reach places.



RECEPTACLE	HOUSING
 22-18 AWG, Receptacle, Straight, Brass, 0.25 in mating tab width 170327-1	 1P, Crimp Terminal Housing, Straight, UL 94V-2, Contact Mating Retention 172076-1

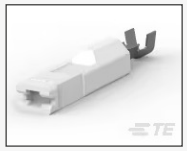
Ultra-Pod FASTON Pre-Insulated Terminals

Ultra-Pod pre-insulated FASTON terminals offer efficient one-step application of fully insulated wire-to-wire connections. The integrated plastic carrier can eliminate secondary insulation operations and is compatible with both bench and high-speed automatic termination equipment. The insulation protects the terminals against shock and short hazards and is rated for up to 600V. The terminals feature a low insertion force (LIF) design that provides easier tab insertion, reduces operator fatigue, and improves assembly efficiency. The insulation and contacts for Ultra-Pod terminals are available in a variety of materials to meet application specific safety and electrical requirements.

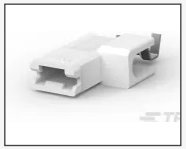


Wire-to-Wire | Low Insertion Force | Flame Resistance | Color and Keying | Crimp | Straight Orientation | Flag Orientation | Pre-Insulated

RECEPTACLE



22-18 AWG, Receptacle, Straight, Brass, Mating tab width 0.11 in
521436-2



22-18 AWG, Receptacle, Flag, Brass, Mating tab width 0.25 in
521411-2

Open Barrel Ring Tongue

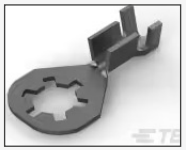
The open barrel ring tongue terminal is a versatile grounding solution designed for secure connections. It features terminal blocks with 2D/F crimp for enhanced conductivity and anti-rotational features ensuring stable connections. With stud-retaining capability, it offers added stability for various applications, providing a reliable grounding solution for your needs.

Straight Orientation

RING TONGUE TERMINAL

18-14 AWG, Open barrel, straight, tin, Uninsulated, Stud Size 8
41332

10-6 AWG, Open barrel, straight, tin, Uninsulated, Stud Size 10
61352-1



18-14 AWG, Open barrel, straight, tin, uninsulated, Stud Size 10, Anti-rotational
61795-1

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