

# POWERING MOTORS, CONNECTING SOLUTIONS

# SOLDERLESS MAGNET WIRE SOLUTIONS FOR ELECTRIC MOTORS

For engineers seeking to streamline electric motor manufacturing, TE Connectivity (TE) provides a lineup of solderless magnet wire solutions and cost-effective tooling options tailored for copper and / or aluminum magnet wire. Rev up your motor manufacturing by requesting FREE magnet wire samples.



AMPLIVAR TERMINALS



CLUSTER BLOCK TERMINALS



MAG-MATE TERMINALS



SIAMEZE TERMINALS

# **DISCOVER MAGNET WIRE COMPONENT SOLUTIONS - TRY BEFORE YOU BUY!**

Experience the cutting-edge possibilities of magnet wire component solutions firsthand with our free samples - explore, innovate, and elevate your projects today.

# **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.









Crimp

Straight

aight Fla ntation Orienta

F**l**ag Orientation

Magnet Wire

#### **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

# **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.



Force





Magnet Wire



Multi-Position

#### HOUSING



20-16 AWG, 3 Circuits, 2.3mm Cluster Block Housing 171370-3



22-10 AWG, 3 Circuits, 2.29mm Cluster Block Housing 880631-5

#### RECEPTACLE



Receptacle Cluster Pin 0.19 dia 1599105-1

#### **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.









Displacement

Str Orie

Flag Orientation

Magnet Wire

#### **POKE-IN 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

#### **POST 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.



Insulation Displacement Connector



Straight Orientation



Magnet Wir

#### 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

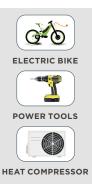
# WIRE-TO-WIRE TERMINAL



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

# SOLDERLESS MOTOR SOLUTIONS





Learn more about our solderless magnet wire solutions and how they can help improve efficiency during eletric motor manufacturing. These three case studies use the examples of electric bikes, power tools and heat compressors to show versatility of solderless magnet wire terminals and splices.

**LEARN MORE** ▶

# APPLICATION TOOLING FOR MAGNET WIRE PROCESSING



#### **MAGNET EQUIPMENT WIRE**

Our magnet wire termination machines efficiently handle a variety of products, offering a wide range of configurations for MAG-MATE and AMPLIVAR splices and terminals. Automatic precision adjustment functionality ensures enhanced efficiency.

LEARN MORE ▶



#### **AMPLIVAR PRODUCT TERMINATOR**

Our AMPLIVAR 5A and AMPLIVAR 5E terminators efficiently crimp magnet wire and pigtail AMPLIVAR splices and direct connect AMPLIVAR contact terminals. No insulation stripping is needed. Just place the wires, press the foot switch, and the machine automatically crimps, shears, and advances to the next splice or contact.

**LEARN MORE** ▶

### **Connect With Us**

We make it easy to connect with our experts and are ready to provide all the support you need. Visit the <u>HVAC contact us page</u> to chat with a Product Information Specialist.

# te.com/hvac-solutions

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