

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.



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.



Straight Orientation

Orientation

Magnet Wire

SPLICE RECEPTACLE **RING TERMINAL** 20-17 AWG, .25 20-16 AWG, Closed 3 Splice Capacity, Pigtail splice, in, Flag FASTON Ring Tongue 3000-7000 CMA Receptacle Terminal, Open 1742881-1 Barrel, Straight, Wire Size 62308-2 Tin, Uninsulated 60322-2

Hermetic Cluster Block

Cluster blocks provide manufacturers of air conditioning and refrigeration products with a lowcost, fully insulated, electrical guick-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



Low Insertion Force

Resistance

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.



Connector





Magnet Wire

POKE-IN TERMINAL



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



POKE-IN TAB

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

LEAF TERMINAL

Flag

Orientation



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

POST TERMINAL



24-22 AWG Solder Post, Size 2, Insulation Displacement, **Dimple Mating** <u>63659-1</u>

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 <u>1601002-2</u>



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 <u>4-1601237-1</u>

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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