

# Terminations

## Color-Keyed®

**Color-Keyed®**, solderless compression connectors for power cables. Proper termination of power cables are very important to ensure safety and reliability, particularly in a hazardous environment. Thomas & Betts Color-Keyed® Terminals offers highest quality with unique color coding to ensure faster and reliable crimping with its matching dies and tools.



Wide range of copper tube lugs, splices and installation tools

In a hazardous environment like Offshore Platforms, Rigs or Petrochemical Plants, having a proper crimp at the power terminals is of prime importance. An improper or loose crimping will have less secure connection, improper contact between cables and terminals and may result in sparks. Under continuous use, it may overheat the joint

and may even cause fire. Thomas & Betts understands this and therefore designs the terminals with colored bands with clear indication of crimping location and specific type of dies to be used. For best result, Thomas & Betts designed a wide range of ergonomic crimping tools, both manual and hydraulic to meet wide range of crimping need.

- Copper terminal with 98% conductivity, made from seamless tubing.
- Colored stripes and engraving to indicate selection of Dies and location for crimping.
- Tin plated for excellent corrosion resistance (Other options, Silver, Lead).
- Chamfered barrels for easy cable entry.
- Full range of straight, 45 deg and 90 deg terminals.
- Unique Stacked Terminals for applications having space constraints.
- Wide range of conductor compatibility, from # 8AWG to 1000 kcmil.



## Blackburn

Thomas & Betts introduces a method of compression to replace exothermic welding and its associated disadvantages. This compression method is designed to provide quick, reliable connections for grid grounding at significantly lower installed costs because compression connectors install in less time, in any weather, and are unaffected by moisture, reducing downtime. In addition, our compression connectors for grid grounding require no special training for installation. They are made of high-conductivity wrought and cast copper, and are used for connecting and tapping cross grid, loop lines and ground rods for direct burial or concrete embedded ground grid systems.

The Thomas & Betts compression system uses standard electrical connector installation tools.

The connectors conform to the following IEEE Standard 837 requirements:

- 350° C current cycling
- Freeze-thaw test
- Accelerated aging — nitric acid/salt spray
- Mechanical, tensile and electromagnetic force (EMF) criteria
- Install in any weather — cut downtime
- Enhance safety
- Easy to install — no special training



## Furse

### ESP SL X Series - Surge protection in hazardous environments

Lightning and switching overvoltages present significant disruption, degradation and damage to modern electronic systems, leading to uneconomic downtime. More importantly, overvoltages or surges present a safety risk, particularly in hazardous environments. Available for working voltages of up to 15 and 30 volts, the ESP SL X series offer industry leading enhanced protection against overvoltages with minimal system interference. The ESP SL X series are specifically suitable for twisted pair signalling applications to protect equipment within hazardous environments. Furse, a world leading manufacturer of lightning protection, also provide a comprehensive protection range for all systems including mains power, data, signal and telecommunications.

- Very low let-through voltage (enhanced protection to BS EN 62305) between all lines – Full Mode protection
- Full mode design capable of handling partial lightning currents as well as allowing continual operation of protected equipment
- Designed for use in hazardous environments (for the protection of Intrinsically Safe circuits) with negligible self-capacitance and self-inductance
- Repeated protection in lightning intense environments
- Ultra slim 7mm width ideal for compact protection of large numbers of lines (e.g. process control installations)
- Two stage removable protection module with simple quick release mechanism allowing partial removal for easy line commissioning and maintenance as well as full removal for protection replacement
- Very low (1Ω) in-line resistance allows resistance critical applications (e.g. alarm loops) to be protected
- High (750mA) maximum running current
- High bandwidth enables higher frequency (high traffic or bit rate) data communications
- Screen terminal enables easy connection of cable screen to earth
- Suitable for earthed or isolated screen systems
- Strong, flame retardant, ABS housing
- Built-in innovative DIN rail foot with locking feature for simple positioning and clip-on mounting to top hat DIN rails
- 4mm<sup>2</sup> terminals allow for larger cross section wiring, stranded wires terminated with ferrules or fitting two wires into a single terminal
- Convenient earthing through DIN foot and/or earth terminal

