

BUS BAR INSULATION OPTIONS

INSULATED BUS BAR SYSTEMS

are commonly used in switchgear, switchboards, busway (or bus duct) installations, and many other systems. Similar to switchgear solid insulated system (SIS), insulated copper and aluminum bus bars are manufactured from solid aluminum or copper conductors, which have a solid insulating medium between each phase conductor and ground.

DESIGNED TO OPERATE

at phase potential, insulated bus bars are the power component of choice in applications ranging from transformer bushing connections to underground mining power distribution. The use of insulated copper conductors can enhance your design by minimizing circuit footprints and reducing turning radii, while eliminating creepage and clearance issues, resulting in more watts with less space.

INSULATION OPTIONS

Air Insulated - Conductors are bare or electroplated and are supported by standoff insulators, while the phases are separated by air only. These installations work best where space is not an issue and cost may be a factor.

Insulation Coated - Conductors are covered in a solid insulating medium consisting of a thermoplastic or thermoset material. Solid insulated bus bar is recommended for increased safety, reliability and performance.

Film Insulated - Mylar (PET), Teonex (PEN), Nomex, or Kapton film, with optional Epoxy-Glass Board (FR4/G10) insulators.

Heat Shrink & Tubing - Polyolefin, LVIT, BPTM, BBIT, BBIA, NuSleeve

YOUR INSTALLATION WILL BENEFIT

- **Safety** - By reducing chance of harm to personnel.
- **Reliability** - By reducing chances of flashover and short circuits that cause damage to equipment and create costly outages. Ex: Reduction in fault events as a result of wildlife crossing the phases.
- **Protection** - Of conductors in industrial facilities with high amounts of trace materials like oils, sawdust, moisture, and caustic materials.
- **Reduced Impedance** - From surface corrosion and defects.

BECAUSE OF THE HIGH-AMPACITY,

low-voltage drop and the resilience to environmental factors, insulated bus bars are widely used in feeders to large motors in the following applications:

- Chemical Processing Plants
- Mining Equipment
- Drilling Operations
- Pipeline Pumping
- Light Rail Transit
- Pulp and Paper Plants
- Machine / Welding Equipment

