Air Insulated Options (AIS) STANDOFF INSULATORS

Molded for high-strength, Storm Standoff Insulators are made from fiberglass-reinforced thermo-set polyester, a bonded material with higher moisture and heat tolerance than plastic insulators. This material also offers greater mechanical strength to enable electrical installers to crank up closer height tolerances than with porcelain insulators, making Storm’s standoff insulators more suitable for ground bar and perimeter grounding applications.

Flame retardant and track resistant glass reinforced thermoset polyester molding compound recognized for current carrying devices under UL Material Recognition Number E 80533(N) and UL File E84767. They combine high mechanical strength with high arc resistance and dielectric properties at elevated temperatures and humidity. These shatter resistant insulators meet the most exacting standards for a variety of applications.

Insulator Types:
- **Type 1** for panel and switch boards / indoor use up to 600 volts
- **Type 2** light duty / indoor use up to 600 volts
- **Type 3** bus-type apparatus for indoor use up to 2500 volts
- **Type 4 & 5** center post for indoor use from 1500-5000 volts
- **Type 6** 5 to 15 kV standoff insulator

Physical and Electrical Properties

- **Tensile strength** is the amount of stress that the insulator will withstand when pressure is applied pulling straight up on the bolt in the insert.
- **Cantilever strength** is the amount of weight an insulator will support when something is hung on an insulator that is mounted on the wall.
- **Compression strength** is the amount of weight an insulator will support in a direct vertical application of pressure.
- **Dielectric strength** is another term for insulating properties.
- **Arc resistance** is expressed as the number of seconds that a material resists the formation of a surface-conducting path when subjected to an intermittently occurring arc of high voltage, low current characteristics.
- **A standoff insulator’s height** determines the distance that will separate a source of voltage from ground or other components. Since an electric current will jump across a gap, the greater the voltage, the greater the distance required for safety.
- **Thread size and insert material**. Standoff insulators come with threaded metal inserts for mounting onto walls or cabinets. Several different thread sizes are offered for each size insulator, to accommodate a wide variety of applications and attachment bolts. The most popular metal for inserts is aluminum, because it doesn’t rust. Steel inserts are generally used only for applications requiring a high torque on mounting bolts.

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