Standards, Approval Codes, and Certifications

CE

The CE Mark cannot and must not, be applied to electronic components of which cables, cord-sets and connectors are a part. The latest rules for CE marking in accordance with the low-Voltage Directive (73/23/EEC-July 1997) State that electronic components are exempted from the scope of application of the Low-Voltage directive. Instead, manufacturers of equipment must comply with the appropriate EC directives applicable to the machine and electrical subsystems as a whole for CE compliance.

CSE

Canadian Government run laboratory that tests products to ensure conformity to set of standard tests as defined by this body. Similar to UL standards in the United States.

DIN 43560

Defines the mechanical geometry and other characteristics of the rectangular style of connectors most frequently found on hydraulic and pneumatic valves in the fluid power industry.

IP 40

Protection against solid bodies larger than 1mm. No liquid protection defined.

IP 65

Dust tight. Protection against water spray from all directions at 43PSI through a 12mm nozzle.

IP 67

Dust tight. Protection against the effects of immersion in water for 30 minutes at a depth of 1 meter.

IP 68

Dust tight. Protection against the effects of the indefinite immersion in water at a pressure specified by the manufacturer. The manufacturer's specifications must be known if a valid comparison is to be made.

NEC

National Electrical Code - Although the NEC covers wire and cable installed in factories, office buildings, etc. as well as cable which pass through any floor, wall ceiling or which travel in ducts, plenums and other air handling spaces, each individual municipality, city, county or state can decide whether or not they wish to adopt the NEC as governing law.

NFPA

National Fire Protection Association

UL

Underwriters Laboratory recognition marks indicate that UL has approved the product as a UL recognized component.

NEMA

National Electrical Manufacturers Association - Defines the degree of the protection in the actual test specifications.

NEMA 1- Enclosures are intended for use primarily to provide a degree of protection in the actual test specifications.

NEMA 3 - Enclosures are intended for outdoor use primarily to provide a degree of protection against windblown dust, rain, sleet and external ice formation.

NEMA 4 - Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, sleet splashing water, hosedown and external ice formation.

NEMA 6 - Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during occasional temporary submersion at a limited depth.

NEMA 6P - Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during prolonged submersion at a limited depth.

Underwriters Laboratory recognition marks indicate that UL has approved the product as a UL recognized component.