

Approvals Update

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Class 1 Division 2 Approvals

Class 1 Div. 2 (UL 1604)

Class 1 Div. 2 "Electrical Equipment for Use in Class I and II, Division 2, and Class III Hazardous (Classified) Locations" standards apply to equipment, circuits, or components intended for use in hazardous locations.

Hazardous Location

A hazardous location is an area where a fire and/or explosion hazard may exist due to flammable gasses or vapors, flammable liquids, combustible dust, or ignitable fibers. The area is classified in accordance with properties of the material responsible for the potential hazard and with the likelihood of the hazard actually being present.

Class

The term class is used to provide a general definition of the physical characteristics of the hazardous materials that we are dealing with. Class I includes gasses, vapors and liquids that can be present in explosive or ignitable mixtures. For example gasoline, as either a vapor or liquid, is ignitable and/or explosive; therefore, it is a Class I material.

Divisions

Divisions are used to evaluate the possibility of the hazardous material being present at a particular location in ignitable mixtures.

A Class I, Div. 2 location is where volatile flammable liquids, flammable gases or vapors exist, and are normally

confined within closed containers. It also applies where ignitable concentrations of gases, vapors or liquids are adjacent to a Class I, Div. 1 location, and ignitable concentrations might be occasionally communicated. Equipment intended for use in a Class I, Div. 2 area is usually of the nonincendive, non-sparking, purged/presurized, hermetically sealed, or sealed device type.

A nonincendive component is a component having contacts for making or breaking an incendive circuit and the contacting mechanism is constructed so that the component is incapable of igniting the specified flammable gas or vapor-air mixture. The housing of a nonincendive component is not intended to exclude the flammable atmosphere, or contain an explosion. A non-sparking apparatus has no normally arcing parts or thermal effects capable of ignition. Examples of normally arcing parts are relays, circuit breakers, adjustable resistors, switches, non-latching type connectors, and motor brushes.

Products

IDEC is pleased to announce that the following products are Class 1 Div. 2 approved for hazardous locations: PS5R slim line power supplies, HG1X operator interfaces, HG4F, 3F, and 2F operator interfaces, the IDEC SmartRelay family and the MicroSmart family of PLCs.



PS5R Slim Line Power Supplies



HG1X Series Character Displays



HG2F/3F/4F Operator Interfaces



FL1A/B/C Series of IDEC SmartRelays



FC4A MicroSmart PLC Series



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