

ISOLATED SWITCHES



Intrinsically Safe Single and Multiple Channel Inputs

Hazardous locations are classified by the National Electrical Code according to the level of hazard that may exist in the area. A hazardous location is designated by its class, group and division. Class and group specify the type of hazardous substance that may

exist in the classified location. The division indicates the conditions under which the hazardous substance may be present.

	<p>CLASS I Locations in which flammable gases or vapors may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.</p>		<p>CLASS II Locations which are hazardous because of the presence of combustible dust.</p>
	<p>GROUP A Atmospheres containing acetylene.</p>		<p>GROUP E Atmospheres containing metal dust including aluminum, magnesium and their commercial alloys and other metals of similarly hazardous characteristics.</p>
	<p>GROUP B Atmospheres containing hydrogen, gases or vapors of equivalent hazard, such as manufactured gas.</p>		<p>GROUP F Atmospheres containing carbon black, coal or coke dust.</p>
	<p>GROUP C Atmospheres containing ethyl-ether vapors, ethylene or cyclopropane.</p>		<p>GROUP G Atmospheres containing flour, starch or grain dusts.</p>
	<p>GROUP D Atmospheres containing gasoline, hexane, naphtha, benzene, butane, propane, alcohol, acetone, benzol, lacquer solvent vapors or natural gas.</p>		<p>CLASS III Locations which are hazardous because of the presence of easily ignitable fibers or flyings, but in which such fibers or flyings are not likely to be in suspension in air in quantities sufficient to produce ignitable mixtures.</p>
	<p>DIVISION I Locations in which hazardous concentrations in the air exist continuously, intermittently or periodically under normal operating conditions.</p>		<p>DIVISION II Locations in which hazardous concentrations are handled, processed or used but are normally confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown.</p>

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The DE series of Isolated Switches have been tested and approved for listing under Underwriters Laboratories (UL) *UL913 Intrinsically Safe Apparatus and Associated Apparatus*. The input(s) to these switches have been approved for use in all classes, groups and divisions of hazardous locations.