

PURGING AND PRESSURISING SYSTEM

A normal apparatus which needs to be explosion protected, is placed in a cabinet which is purged with air or inert gas such as Nitrogen and then a positive pressure is built up, which will be maintained during operation. This positive pressure prevents ingress of explosive gas and vapour into the enclosure. Depending on the application and requirements there are two methods called Leakage compensation and Constant Purging method, which can be deployed for Pressurisation systems.

Standards:

IS7389 (Part 1) Specification for Pressurised enclosures of electrical apparatus for use in explosive atmosphere

IS11064 Guide for construction and use of Rooms or Buildings protected by Pressurisation for installation of electrical apparatus for explosive atmosphere

NFPA 496 Purged and Pressurized enclosures for electrical equipments

ISA S12.4 Instrument Purging for reduction of Hazardous area location



Purged Panel - Fixed system

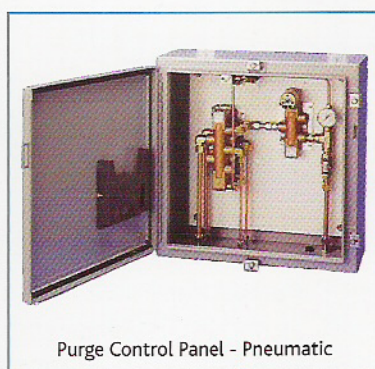
TYPE X Purging - Reduces the Hazardous location from Div 1 to unclassified. An interlock must be provided to sense drop in positive pressure inside the cabinet and to control the electrical power

TYPE Y Purging - Reduces the Hazardous location from Div 1 to Div 2. It's not mandatory to control the electrical power if the positive pressure fails but an Audio & Visual alarm must be initiated

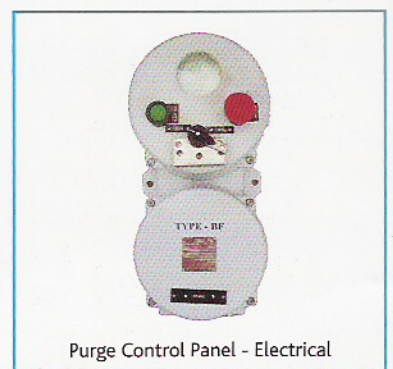
TYPE Z Purging - Reduces the Hazardous location from Div 2 to unclassified. It's not mandatory to control the electrical power if the positive pressure fails but an Audio & Visual alarm must be initiated



Purged Panel - Portable System



Purge Control Panel - Pneumatic



Purge Control Panel - Electrical