

Motor Pressurization System

IECEX & ATEX Certified Purging and Pressurization System for Large Electrical Machines.

D779 MOTOR SYSTEMS

Features

- + **Simple Order Code**
One model number defines Control Unit (CU) and Relief Valve (RLV)
- + **User Selectable Settings(* default)**
Pre-set selectable purge flow rates (1000 and *1500)
1 -99* minute purge time (-0/+3 seconds tolerance)
Suits a wide variety of machine frames sizes
- + **Clear Visual Status Indication**
Local indicators for "Alarm/Pressurized" and "Purging"
- + **Continuous Operation through Closed Loop Automatic Pressurization System (CLAPS)**
Eliminates spurious trips on start-up or load change
- + **316L Stainless Steel enclosure & fittings**
Excellent resistance to corrosion for harsh environments
- + **Full Compliance with Standards**
Direct purge flow measurement at Relief Valve exhaust orifice
- + **Global Approvals**
IECEX & ATEX certified Ex [pxb] to IEC/EN 60079-2 for gas and dust applications.
INMETRO certified Ex [pxb] to ABNT NBR IEC 60079-2, for gas and dust applications.



Operation

The Motor Purging and Pressurization control system has been designed for use on large electrical machines located in a hazardous location.

The system delivers a high purge rate for a given duration (as defined by machine designer and Notified Body) prior to start-up, to purge any potentially explosive gases from the machine. After purge, the system automatically switches to leakage compensation mode for normal operation. The Closed Loop Automatic Pressurization System (CLAPS) automatically compensate for pressure variations in the machine during start-up or through temperature variations during operation. The system enables the machine to continuously operate at a set over-pressure, saving considerable time during test and commissioning, and simplifying normal operation.

Components

The system comprises the Control Unit (CU) and the Relief Valve (RLV). The Control Unit contains the pneumatic logic to monitor and control air flow, pressure and purge timing, and provides the system outputs. The RLV measures purge flow at the outlet and provides over-pressure protection for the machine through a patented magnetically-set exhaust valve with integrated spark arrestor.

Explosion Protection

Hazardous Area classification:

IECEX, INMETRO Zone 1, Group IIC T6 Gb
IECEX, INMETRO Zone 21, Group IIC T95°C Db

ATEX Category 2 G, Zone 1, Group IIC T6 Gb
ATEX Category 2 D, Zone 21, Group IIIC T95°C Db

Ambient Temperature: -20°C to +55°C (4°F to 131°F)

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