

ATEX Approved EExia Intrinsically Safe Coil Unit

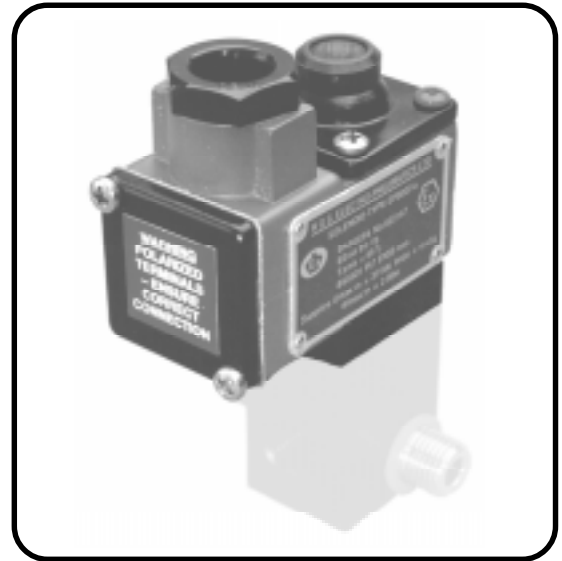


Description

Intrinsically safe coil suitable for Zones 0, 1 and 2, manufactured in accordance with the requirements of the European harmonised standards EN60079-0:2006 and EN60079-11:2007. Covered by Certificate of Conformity Bas01ATEX1391X category EExia IIC T6.

Features

- M20 x 1.5 Conduit entry. (Cable diameter 6 - 8mm)
- Connection by 2-pole 2.5mm² terminal strip.
- Protection class IP65 according to ENBS60529 : 1992.
- Continuously rated.
- Maximum permitted voltage variation $\pm 10\%$.
- Maximum Ambient Temperature $+65^{\circ}\text{C}$.
- Low Power consumption.
- ATEX, FM US, FM Canadian, IECEx approvals available.
- Operates with a wide range of barriers and galvanic isolators.



Product Code :

A V 6 3 6 0 A 0 0 B A

Intrinsic Safety

Intrinsic safety is the safest form of protection for electrical equipment operating in potentially hazardous atmospheres. Intrinsic safety (IS) is based on the principle of restricting the electrical energy available in hazardous area circuits such that any sparks or hot surfaces that may occur as a result of electrical faults are too weak to cause ignition.

An intrinsically safe system consists of a certified IS interface which passes signals to and from the process (hazardous area) but limits the energy (that is voltage and current) that can reach the hazardous area under fault conditions.

The interface is usually mounted in the safe area and can be either a shunt diode safety barrier or a galvanic isolator.

In the hazardous area 'simple' or 'non-energy storing devices' (switches thermocouples & LED's) can be used without certification but 'Energy-storing' equipment such as solenoid valves must be designed so as to prevent this energy escaping and of necessity need to be of sufficiently low power to operate within the constraints of the power of the IS signal.

Hazardous Area Solenoid Valve

The RGS EP000/ia solenoid coil is approved for this duty and is certified safe for all classified areas of hazard and gasses when installed in accordance with an approved system. The coil is protected by diodes which suppresses the inductance, effectively to zero, and there is no capacitive characteristics in the coil either.

The coil assembly, which is encapsulated, forms a compact solenoid actuator to interchange with the standard (non-hazardous duty) coil fitted to the 3 and 4 way spool valves.

The IS coil because of its low wattage requires that the spring load and travel of the armature be closely controlled and for this reason each solenoid has an inbuilt adjustable jet which is factory set so as to control the operating characteristics of the coil. Where the IS solenoid actuator is fitted to the spool valve, the jet in the end cap which is required for the normal coil, is removed.

