HY-ALERTA™ 1600 Intrinsically Safe Area Hydrogen Monitor

Description

H2scan's HY-ALERTA™ 1600 Intrinsically Safe Area Hydrogen Monitor provides hydrogen-specific leak detection and measurement for hydrogen concentrations as low as 4000 ppm and can be scaled to any concentration up to 5% hydrogen by volume, a range representing 10% to 125% of hydrogen's low flammability limit. The monitor is designed for either ceiling or wall mount and has an RS422 capability that extends an intrinsically safe interface from the sensor to the controller to several hundred feet. H2scan's hydrogen-specific sensor technology has no cross sensitivity to other combustible gases, thus eliminating false positive alarms and ensuring safety system reliability.

Performance

Hydrogen Sensitivity Range:
- 0.4% to 5% hydrogen by volume
- 10% to 125% hydrogen lower flammable limit

Accuracy: ± (0.03 x indication + 0.2) percent hydrogen by volume
Typical Response Time: T90 of 60 sec maximum
Ingress Protection: IP64 capable
Calibration Interval: 90 days
Product Life Expectancy: 10 years

Interface Options

Power Barrier Input Voltage: 24 VDC nominal
Power Barrier Input Voltage Range: 20 VDC to 28 VDC
Intrinsically Safe Sensor Input Voltage: 10 VDC
Sensor Input Voltage Range: 5 VDC to 28 VDC
Input Power: 10 W
Analog Output: 4 mA to 20 mA
Serial Communication: RS422

Operating Conditions

Operating Humidity: 0% to 95% RH
Operating Temperature Range: -20ºC to 40ºC
Storage Temperature Range: -40ºC to 50ºC
Calibration Background Gas: Air

Included Accessories

Intrinsically Safe Power Barrier
Armored Power / Analog Cable: 4 m
Calibration Cup

Optional Accessories

Single Channel Intrinsically Safe Analog Output Barrier (with or without relays)
Single Channel Intrinsically Safe RS422 Serial Interface Barrier
Serial Interface Cable: 4 m (custom lengths available)
Armored Power / Analog Cable (custom lengths available)

Dimensions

Total Length: 8.1 in.
Total Width: 4.4 in.
Depth: 1.6 in.

Certification

CE 0359 Ex
II 1 G, Ex ia II H2, d+d IIB T3
II 2 G, Ex ib II H2, ib d IIB T3
ITS07ATEX25634X

Figure 1 shows the hazardous area designations for this apparatus. Note that the sensor probe tip is rated for Category 1 (Zone 0) and the electronics assembly is rated for Category 2 (Zone 1).

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Specifications subject to change without prior notice.
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