v1

PRODUCT SPEC SHEET SMART 3-R CATALYTIC

AGS CONTROLS
A Division of American Gas Safety



SMART3-R is developed to detect different gases in non classified areas, as machinery rooms and laboratories. An catalytic sensor is used to detect combustible and flammable gases, due to the optimal performance in these applications. 4 smart LEDs illuminate the transparent ring to describe the detector status and an internal buzzer is activated in alarm and fault conditions. The SMART3-R gas detector has a standard 12-24 Vdc power supply, but a 120 Vac version can be supplied. The gas detector has three relay outputs, an RS485 serial communication and an analogue 4-20 mA output (not in 120 Vac version).
The polycarbonate case has a global size of 130 x 130 x 74 mm. The box has 2 entries with M20 cable glands. On the sides there are pre-formed guides that can be drilled to add up to 6 M16 cable glands. The gas detector can be equipped with a remote head connected with a RJ12 6P6C cable.

Sensor	
Application	Machinery rooms, laboratories and non-classified areas
Sensing element	Catalytic Sensor
Predicted life sensor	7 - 10 years
Gas detected	CH4 [0-100% LEL], LPG [0-100% LEL], C4H10 [0-100% LEL], Petrol Vapors [0-100% LEL], C3H8 [0-100 % LEL]

Electrical data	
Power supply	12-24 Vdc or 90-240Vac
Signal output	3 relays; RS485 serial output, 4-20 mA analogue output (only for 12-24 Vdc version)
Dissipated power	60 mA at 24Vdc
Relays contact rating	1.0 A at 30 Vdc
Optical indications	4 smart LED
Acoustic indications	Buzzer 63 dB @1mt
Remote head cable	RJ12 6P6C

Environmental conditions	
Storage temperature	32 / +68°F up to 6 months
Operating temperature	-22 / +122°F
Operating humidity	15 / 90% RH non condensing

Compliance	
EMC	EN 61000-6-3:2007 + A1:201; EN 50270:2015
Electrical safety (90-240 Vac version)	EN 61010-1: 2010 / A1: 2019
Refrigeration Standards	EN 378-3; EN 14624; EN 50676; IEC 60335-2-40 Annex LL; ISO 5149-3; F-Gas Regulation

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External case	
Material	Polycarbonate
Dimensions	Box: 4.72 x 4.72 x 2 in Cover: 5.11 x 5.11 x .86 in Remote head box: 4.17 x 4.17 x 1.81 in Maximum length of remote head’s cable: 196 in
Weight	Detector: 1 lb Remote head: 10.5oz
Cable entry	2 entries with M20 cable glands 6 optional entries for M16 cable glands
IP Grade	IP42

Product codes	
S4590ME	Methane gas detector (0 - 100% LEL), 4-20 mA 12-24 Vdc
S4590GP	LPG gas detector (0 - 100% LEL), 4-20mA 12-24 Vdc
S4590PR	Propane gas detector (0 - 100% LEL), 4-20mA 12-24 Vdc
S4590BU	Butane gas detector (0 - 100% LEL), 4-20mA 12-24 Vdc
S4590VB	Petrol Vapours gas detector (0 - 100% LEL), 4-20mA 12-24 Vdc

Add “-220” to get the 120Vac version
Add “-RH” to get the version with remote head
Add “-220-RH” to get the 120 Vac version with remote head

Mechanical drawings



