

SMART3H-FM LITE

SMART3H-FM LITE has a flush mount housing and is developed to detect refrigerant gases and carbon dioxide in hotels and commercial buildings. The product technology is cost-effective and integrates an infrared sensor for gas detection. An RGB LED placed on the side of the sensor describes the detector status. An internal buzzer is activated when the alarm thresholds are reached or when the detector is in fault.

The SMART3H-FM detector is developed in two versions: one powered at 12-24 Vdc and one at 90-240 Vac. Each version has an RS485 serial output and two relays.



Sensor

Application	Hotel, residential and commercial
Sensing element	Infrared
Predicted sensor life	>5 years
Gas detected	R32, R1234YF, R1234ZE, R454A, R454B, R454C, R452B, R134A, R410A, R404A, R407C, CO ₂
Fullscale	0-20% LFL 0-5000 ppm
Alarm thresholds	5 e 10% LFL 1000 e 2000 ppm

Electrical data

Power supply	12-24 Vdc or 90-240 Vac
Signal output	2 relays; RS485 serial output
Power consumption	44 mA at 24Vdc
Relays contact rating	1.0 A at 30Vdc
Optical indications	1 LED RGB
Acoustic indications	Buzzer 70 dB
Hall effect sensor	Yes, for buzzer silence and calibration

External case

Material	Polycarbonate
Dimensions	Flush mount box: 75.85 x 54.1 x 23.75 mm External mask: 118 x 118 x 13.5 mm
Weight	200 g
IP Grade	IP42

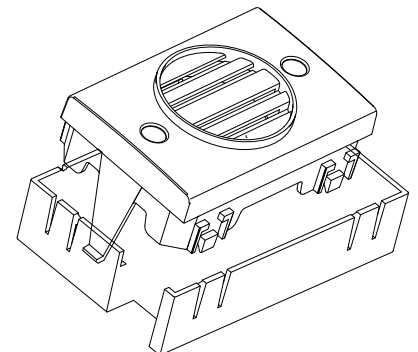
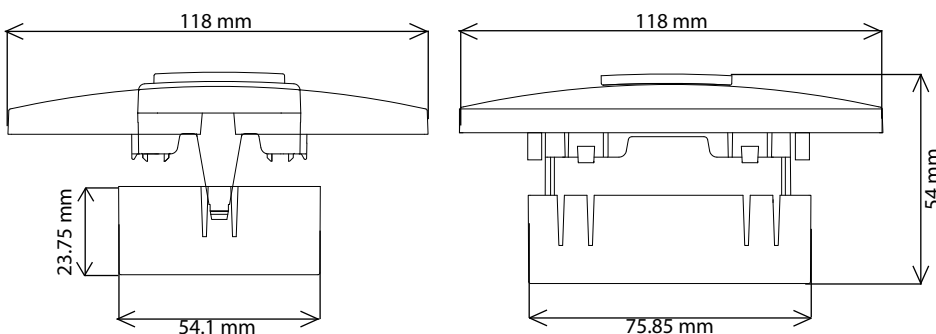
Environmental conditions

Storage temperature	-40 / +85°C
Operating temperature	-10 / +50°C
operating humidity	0 / 95% RH non condensing

Compliance

EMC	EN 61000-6-3:2007 + A1:2011; EN 50270:2015
Refrigeration Standards	EN 378-3; EN 14624; EN 50676; IEC 60335-2-40 Annex LL; ISO 5149-3; F-Gas Regulation

Mechanical drawings



Product P/N

S4138R32	R32 detector, thresholds 5% and 10% LFL, 12-24 Vdc
S4139R1234YF	R1234YF detector, thresholds 5% and 10% LFL, 12-24 Vdc
S4140R1234ZE	R1234ZE detector, thresholds 5% and 10% LFL, 12-24 Vdc
S4680R454A	R454A detector, thresholds 5% and 10% LFL, 12-24 Vdc
S4681R454B	R454B detector, thresholds 5% and 10% LFL, 12-24 Vdc
S4682R454C	R454C detector, thresholds 5% and 10% LFL, 12-24 Vdc
S4683R452B	R452B detector, thresholds 5% and 10% LFL, 12-24 Vdc
S4141R134A	R134A detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4142R410A	R410A detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4689R32	R32 detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4690R404A	R404A detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4691R407C	R407C detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4692R1234YF	R1234YF detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4693R1234ZE	R1234ZE detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4694CO2	CO ₂ detector, thresholds 1000 and 2000 ppm, 12-24 Vdc
S4143R32	R32 detector, thresholds 5% and 10% LFL, 90-240 Vac
S4144R1234YF	R1234YF detector, thresholds 5% and 10% LFL, 90-240 Vac
S4145R1234ZE	R1234ZE detector, thresholds 5% and 10% LFL, 90-240 Vac
S4660R454A	R454A detector, thresholds 5% and 10% LFL, 90-240 Vac
S4661R454B	R454B detector, thresholds 5% and 10% LFL, 90-240 Vac
S4662R454C	R454C detector, thresholds 5% and 10% LFL, 90-240 Vac
S4663R452B	R452B detector, thresholds 5% and 10% LFL, 90-240 Vac
S4146R134A	R134A detector, thresholds 1000 and 2000 ppm, 90-240 Vac
S4147R410A	R410A detector, thresholds 1000 and 2000 ppm, 90-240 Vac
S4669R32	R32 detector, thresholds 1000 and 2000 ppm, 90-240 Vac
S4670R404A	R404A detector, thresholds 1000 and 2000 ppm, 90-240 Vac
S4671R407C	R407C detector, thresholds 1000 and 2000 ppm, 90-240 Vac
S4672R1234YF	R1234YF detector, thresholds 1000 2000 ppm, 90-240 Vac
S4673R1234ZE	R1234ZE detector, thresholds 1000 2000 ppm, 90-240 Vac
S4674CO2	CO ₂ detector, thresholds 1000 and 2000 ppm, 90-240 Vac