

DRS Duct Mount Detector Range

NEW PRODUCT

Further technical specifications to be released.

Please contact S&S Middle East for additional information



Key Features:

- 24VAC or DC powered
- Traffic light indication
- 0-10V output
- Alarm relay volt free output, 70mA rated.
- Bacnet MS/TP or Modbus RTU (field selectable)
- Plug & play installation
- Soon available with CO, CO₂, NG, LPG, H₂, NO₂ & Refrigerant sensors
- Designed and manufactured in the UK

Product Overview:

Introducing the Merlin DRS Duct Mount Sensors from S&S Middle East, specifically engineered for reliable gas detection within HVAC systems in commercial and light industrial environments. These sensors are optimized for monitoring air quality and gas concentrations in ducted systems, ensuring effective detection of a variety of gases, including natural gas, carbon monoxide (CO), carbon dioxide (CO₂), LPG, hydrogen (H₂), nitrogen dioxide (NO₂), and refrigerants.

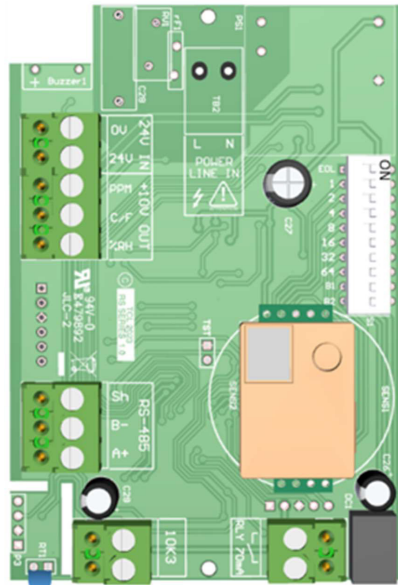
The Merlin DRS sensors incorporate advanced detection technologies tailored for duct mount applications, providing swift identification of gas leaks to enhance safety within operational spaces. Featuring a traffic light indicator display, these sensors deliver clear visual signals regarding gas levels, while in-built audible alarms promptly alert personnel to any potential hazards, facilitating immediate action.

Designed for seamless integration into existing HVAC systems, the Merlin DRS sensors offer power options of 24V AC/DC. They easily connect to building management systems (BMS) via Bacnet MS/TP or Modbus RTU, ensuring efficient monitoring and control.

Gases Available

- Natural Gas (CH₄)
- Carbon Monoxide (CO)
- LPG (C₃H₈)
- Hydrogen (H₂)
- Hydrogen Sulphide (H₂S)
- Nitrogen Dioxide (NO₂)
- Carbon Dioxide (CO₂)
- Refrigerant (Various Types Available)

PCB Overview



CONNECTION	LABEL	TERMINATION
24V AC/DC INPUT	24V IN	+24V 0V (Common GND)
ANALOG OUT/P	0-10V OUT	PPM (CO ₂ Sensor O/P)
DIGITAL OUT/P	RS-485	A+ B- SH (Shield)
CO ₂ VFC RELAY	RLY 70mA	(Open/Close Circuit)

DRS Technical Specification

Mechanical	Mounting	Duct Mounted
	Size (W x H x D)	151x111x50mm (5.95x4.37x1.87")
	Weight	350g
	Enclosure	ABS UL Flame retardant
Electrical	24V AC/DC Power Rating	12-24VDC (11-32 VDC) / 24VAC, (20-27 VAC) 50-60Hz
	Communication	127 units max
	Power Consumption	5W Max
Environmental	Operating Temperature	-10 to 50°C
	Storage	10-30°C
	Room Humidity	0 to 95% RH (continuous) non-condensing.
	Atmospheric Pressure	80 to 110Pa
	Altitude	<2000m
I/Os	Installation Cat (24V Voltage)	III (Class 3) Pollution Degree 2
	Analog Outputs	1x Linear 0-10V
	Digital Networks	RS-485 - BACnet MS/TP / MODBUS RTU (Selected when ordering)
	Relay Outputs	1x SPST 70mA
LED Indication	Green	OK
	Yellow	Low Alarm CO2
	Red	High Alarm CO2
Conformance	Safety	BS 61010-1
	Electromagnetic Compatibility	BS 50270
Sensing		
CO ₂ (ppm)		
Sampling: Diffusion Type NDIR		
Indication Range: 400 – 5000ppm		
Response: t90 <120s		
Calibration: ABC Logic Self-Calibration		
Warm Up Time: ~1 Minute		
Accuracy: 5% FS @ 25°C		
Lifespan: > 10 Years		
Resolution: 1ppm		

info@snsmiddleeast.ae