

Gas sensor module

for REFRIGERANT R32 DETECTION

FIS5084-01NC

FIS5084-01C1

FIS5084 series is a product that incorporates a semiconductor gas sensor into the control circuit. The drive control of gas sensor and output signal processing are performed by the microcomputer program.



Without case (NC type)



With case (C1 type)

Features

- **High quality and high reliability**

The mounted semiconductor SB-type gas sensor developed by our company features high sensitivity, quick response, and excellent durability.

- **No need for calibration**

The calibration with detection gas is already carried out at our factory. Therefore, you can use it as soon as the module is delivered to you.

- **Easy installation in your device**

Our module is compact, lightweight, and easy to take out the output signal. You can incorporate our module into your device easily.

- **Can be used under severe environment/condition**

You can choose module with or without case. Module with case has water-proof function, so that you can use under severe environment e.g., outside, inside of refrigerator etc.

- **Various output specifications**

- Alarm output : 1 point can be set.
- Life output : 2 points can be set.
- Malfunction output : Sensor failure and circuit failure can be detected.

Specifications: FIS5084-01series

Item	Specifications	
	FIS5084-01NC(Without case)	FIS5084-01C1 (With case)
Gas sensor	SB type semiconductor gas sensor	
Target gas	R32	
Response time	Within 30 seconds	
Power supply	5.0V DC \pm 5%	
Alarm output	Open collector	
Alarm concentration	R32 5,000ppm	
Malfunction output	Open collector	
Concentration output	Not included	
Average power concentration	40mA (Max. 80mA)	
Operating and storage temperature range	-25~60°C. no condensation	
Dimension	26x 26 x 20(H)mm	53 x 30 x 23.5(H)mm
Weight	5 g	16 g

Connector pins specifications		<p>■ Evaluation method</p> <ol style="list-style-type: none"> Apply the power supply voltage with pin 6 as DC5V and pin 1 as GND. Wait for about 10 seconds until the initial warm-up operation is completed. When the gas concentration exceeds the alarm level, the state output changes and automatically canceled when the gas concentration gets decreased. When you finish the measurement, turn off the input voltage. <p>■ Notes on evaluation</p> <ul style="list-style-type: none"> There is no regulation on the mounting direction of the product. Do not spray high-concentrated gas directly on the gas sensor. Avoid storage or use near silicon or organic solvents. Life output changes in duty ratio depending on the state as below: Notice 1: Used time exceeds 1825 days (5 years) Notice 2: Used time exceeds 3650 days (10 years) Other conditions than the above allow the power supply ON/OFF to reset the alarm output. <ol style="list-style-type: none"> When gas detection concentration exceeds 1.0vol%(=10000ppm), When the number of alarms between 0.5vol% and 1.0vol% exceeds 30 times, or When accumulated time between 0.5vol% and 1.0vol% exceeds 24 hours. 													
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In the interest of continued product improvement, we reserve the right to change design features without prior notice.