Refrigeration Detector

## 20-2000ppm **IP44**

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LHCFC

# LHCFC

Nov.10

20-2000ppm

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20-2000ppm

**AP** 

**Technical Data** 

#### **Features**

- **Continuous monotoring** -
- Low zero point drift
- **Poisoning stable** -
- Long life sensor -
- Easy maintenance/calibration -
- **Reverse polarity protected**
- **Overload protected**
- 4-20mA loop-powered or 2-10Vdc output signal

Gas	Freon	For detection of refrigerant Freon gases HCFC.		
<b>Detection principle</b>	Semiconductor	The transmitter is used for monotoring leakages in:		
Response time Sensor coverage	<50sec 100m2	<ul> <li>Cold storage depots - Ventilation Systems</li> <li>Breweries</li> <li>Commercial range in cooling systems</li> </ul>		
Measurement range	20-2000ppm		vignal 4.20mA and 2.10V/da the HCEC	
Storage time	12 months	transmitter is compatible to any electronic analogue control, DDC/PLC control or automation system.		
Mounting height	0,2m above floor	Ordering Codes		
Output signal				
4-20mA	load < 500ohm overload			
2-10Vdc	and short circuit proofed load < 50kohm overload and short circuit proofed	LHCFC R401a LHCFC R401b LHCFC R402a	Refrigeration Detector20-2000pRefrigeration Detector20-2000pRefrigeration Detector20-2000p	
Power supply	18-28Vdc (reverse polarity prot.)	LHCFC R402b LHCFC R408a	Refrigeration Detector 20-2000p Refrigeration Detector 20-2000p	
Power consumption	22mA, max (0,6VA <b>)</b>	LHCFC R409a LHCFC R22	Refrigeration Detector20-2000pRefrigeration Detector20-2000p	
Expected lifetime	>5 years normal operating envirom.	GCD	Protocol for CDA-series	
Humidity range		GAS17	Calibration gas 17 liter	
Continuous	15-95% rH non-condensing	REG	Pressure regulator flow adjusted to 0.5 lit/min	
Operating range Continuous	-15 up to +50C	Warning devices Warning signs	See special datasheet See special datasheet	
Rating	IP44 Protection Class			
Pressure range	Atmospheric +/-10%			

### Application

- tion Systems
- ems

AP	Refrigeration Detector	20-2000ppm IP44	LHCFC
Technical Data continue		Maintanance	
Physical Characteristics		At commissioning and at period determined by the person resp detection system (recommer	
Enclosure	GW Plast 75 GWT		

Flammability     UL94: VO Halogenfree       Enclosure colour     RAI 7032 (light grav)	
Enclosure colour RAI 7032 (light grev)	
Dimensions 80 x 40mm	
Weight Approx. 0,2kg	
Installation Wall mounting	
Cable entry         Standard 3 pieces	
Wire connectionScrew type terminal min. 0,25mmand max 2,5mm2	2
Max. loop resistor 500ohm (= wire resistor + controller input resistor)	
Guidelines EMV-Directive 89/336/EWG, CE	

## **Connecting Diagram**



Terminal 2 is only for 2-10Vdc signal = 3-wire 4-20mA two-wire loop powered

at periodic intervals on responsible for the gas mmendation every year).

After exchange of the sensor

If in case of operational or climatic influences the sensitivity of the sensor falls below 30 % in operation, calibration will not be possible any more.

Then the sensor has to be changed.

#### Exchange of sensor element

Sensor should always be installed without power applied:

- Unplug basic PCB EC-S carefully from the • terminal blocks on the base.
- Unplug old sensor element from the PCB EC-S. •
- Plug in sensor element into the PCB EC-S.
- Plug in the PCB EC-S into terminal block carefully.
- Calibrate

## Calibration



#### Calculation output signal

