

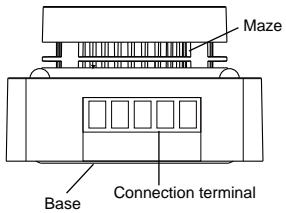
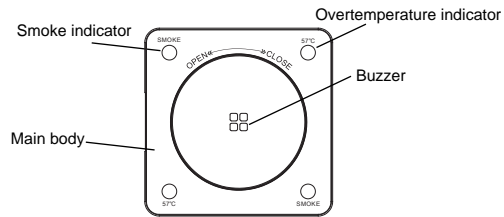
CHORDN

HSR dedicated smoke detectors for electrical cabinet user manual

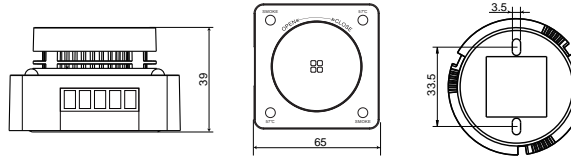
Main parameters

Standard: EN14604
 Working voltage: 12/24Vdc(range 9-30Vdc)
 Working current: monitoring state < 1mA@DC12V, < 5mA@DC24V
 alarm < 30mA@DC12V, < 35mA@DC24V
 Alarm output: Relay (SPDT)
 Contact capacity: 30VDC, 1A
 Working indicator:
 Monitoring state the red indicator light flashes about once every 6s
 Alarm state the red indicator light is on
 Alarm temperature: 57±2°C
 Buzzer: 80dB
 Installation height: < 12m
 Working environment temperature: -10 to +65°C
 Storage environment temperature: -15 to +85°C
 Humidity: 0-95%RH no condensation
 Recommended torque: 0.5Nm
 Connecting terminal: 3x1.0mm² terminal, forcing screw
 Cable length: BVVR0.5mm² 70m is allowed
 BVVR1.0mm² 200m is allowed

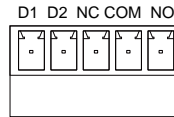
Structure



Dimensions(mm)

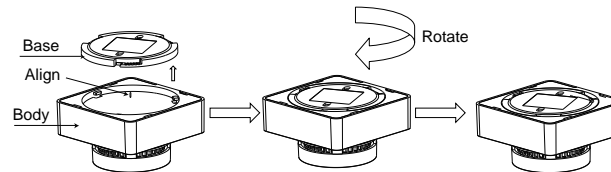


Wiring

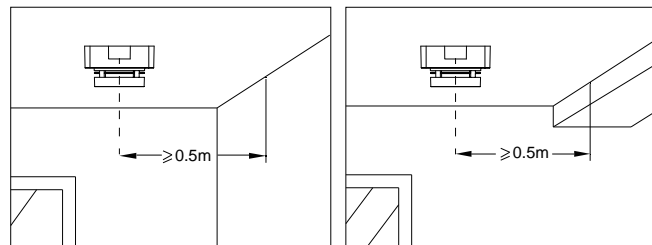


D1: Power supply
 D2: Power supply
 NC: Normally Closed
 COM: Common
 NO: Normally Open

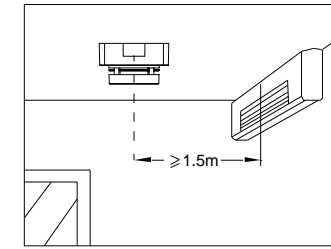
Installation



When installed indoors, the horizontal distance between the detector and the edge of the wall beam should not be less than 0.5m; There should be no shielding around the detector within 0.5m; The horizontal distance between the detector and the air supply part of the air conditioner should not be less than 1.5m, and the horizontal distance between the detector and the hole of the porous air supply ceiling should not be less than 0.5m.

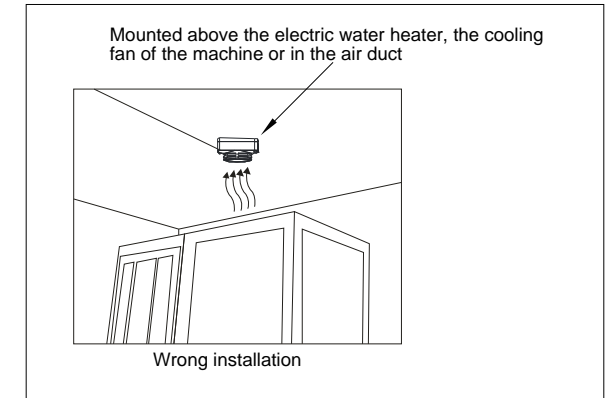


Mounted away from the wall



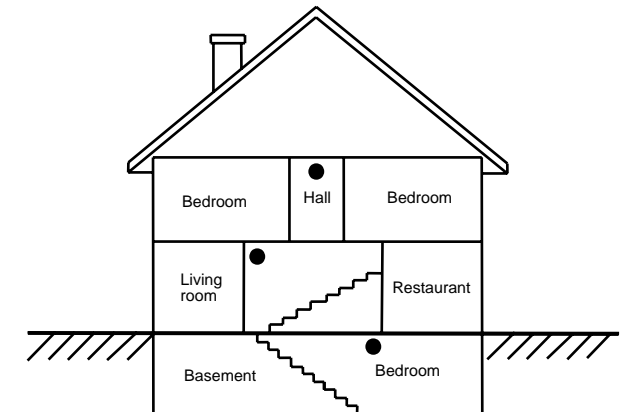
Mounted away from the air conditioner

Avoid installing the detector above the electric water heater, the cooling fan of the machine, or in the air duct or air room. These places are easy to produce dust particles and condensation mist, causing false alarm.

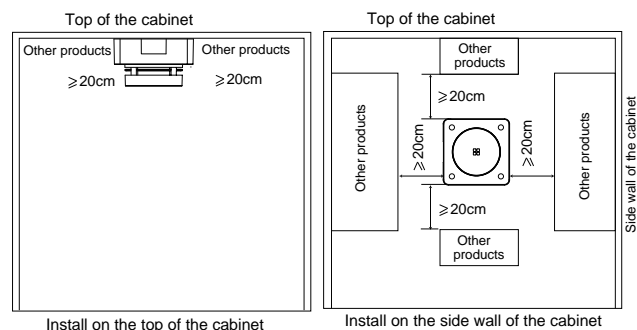


Wrong installation

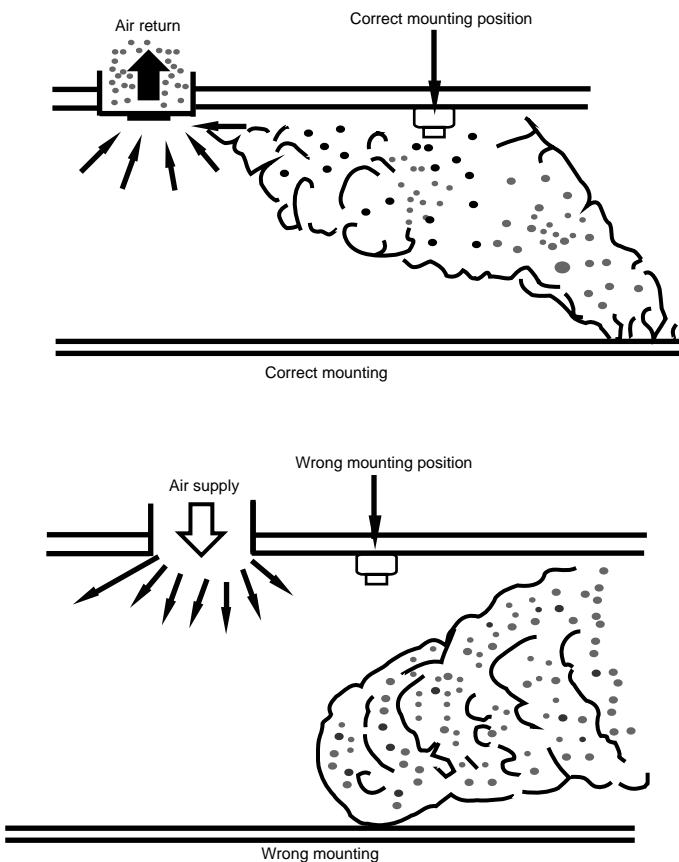
In living area, smoke detectors should be installed in the living room or near the upper stairs or both. Basement smoke detectors should be installed near the stairs leading upstairs. When mounted on an open joist ceiling, the detector shall be placed at the bottom of the joist. Detectors should be mounted relative to the stairs to intercept smoke from the basement fire before it enters the stairs.



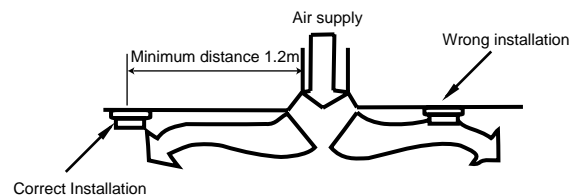
In the case of the detector is installed inside the cabinet, it is required that there should be a certain gap between the detector and the inner wall of the cabinet, and there should be no shielding around the detector within 20cm of the horizontal distance



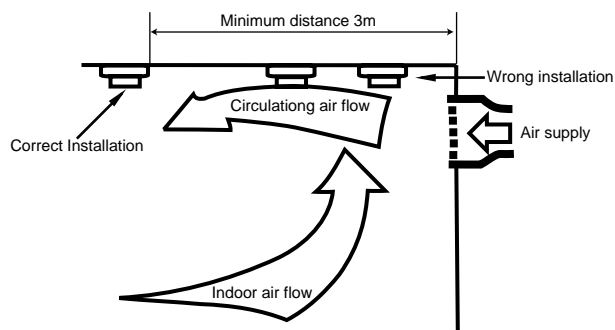
In the case of the detector is installed in a room with air supply and air return pipelines, the detector should be installed on the path of the air flow to the return air outlet.



In the case of the detector must be installed near the air supply outlet, keep it at a certain distance so that the detector could quickly and accurately detect the fire. Otherwise, it's not only makes the detector alarm slow, but also makes the detector easy to be interfered by the high speed air flow of tuyere, resulting in false alarm.



Air supply from the ceiling



Air supply from the side

Protection area of detectors and the number of detectors installed

The space height is 6-12 meters, protection area is about 60 square meters;
The space height is below 6 meters, protection area is about 40 square meters.

$$\text{Quantity} = \frac{\text{Detection area}}{\text{Protection area per detector}}$$

Maintenance


- Detectors should be tested at least once every six months. And the detectors installed are required to be cleaned and maintained every two years;
- The working environment conditions has a great impact on the performance of the detector. Its maintenance period should be shortened in the working conditions where dust and high wind speed are easy to produce and affect its normal use.
- Install the detector before commissioning. Keep it properly and take measures against dust, moisture, and corrosion before installation.


Suggestions

- It is recommended to replace detectors that used more than ten years.

Failure analysis and elimination

Failure	Analysis	Elimination	Remarks
Alarm after power on	Large smoke or steam in the room	Power on again after smoke and steam dissipated	
	Internal circuit problem	Return to depot	
The indicator is off after power on	Indicator is damaged or internal circuit problem	Return to depot	
	Wiring poor contact	Check the wiring and reconnect	
The indicator flashes twice every 45s after power on	Failure of sensor	Return to depot	
The indicator keeps flashing fast after power on, about 1 time/s	Severe pollution in the maze	Clean the maze	
Test without alarm	Inteal circuit is damaged	Return to depot	

 Do not install the detector in a place with high temperature and heavy fume, and and keep the air environment around the detector clean;
Avoid using a large amount of paint, thinner and other substances that generates colloidal suspension near the detector, so as not to affect the normal monitoring of the detector.

 Be sure to read this instructions carefully before using to ensure correct installation and use!

All parameters are subject to change without prior notice!

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