Macurco™ Refrigerant Detector



RD-6





Detector, Controller and Transducer

Refrigerant Detection and Control

The Macurco RD-6 is a low voltage, dual relay Refrigerant (REF) detector, controller and transducer. The RD-6 has selectable 4-20 mA output, buzzer and digital display options. It is an electronic detection system used to measure the concentration of refrigerant gas and provide feedback and automatic exhaust fan control to help reduce refrigerant gas concentrations in industrial refrigeration, cold storage or other commercial applications. The RD-6 is a low level meter capable of detecting several refrigerants including R-22, R-134A, R-404A, R-407C and R-410A.

Selectable options include:

- Fan relay actuation: selectable at 100 (default), 150, 200, 250, 300, 350ppm
- Output: Fan relay, Alarm relay and 4-20mA current loop
- Controls: Digital display (0-1,000 ppm), buzzer, fan delay, fan minimum runtime

Installation

- Mounts on a standard 4" x 4" electrical box
- 5 A SPDT fan relay controls valves, louvers or exhaust fans
- 0.5 A N.O. or N.C alarm relay connects to warning devices or control panels
- 4-20mA current loop compatible with the Macurco DVP-120 Control Panel
- Factory calibrated

Other Features

- Supervised system design: detector problem will cause the fan & alarm relay to activate
- Long life solid-state sensor
- ETL Listed to UL 61010-1, CAN/CSA C22.2 No 61010-1



RD-6 Specifications

- Power: 3 W (max) from 12 to 24 VAC or 12 to 32 VDC
- Current @ 24 VDC: 75 mA in alarm, 50 mA fan relay on and 23 mA stand by
- Shipping Weight: 1 pound (0.45 kg)
- Size: 4 1/2 x 4 x 2 1/8 in. (11.4 X 10.2 X 5.4 cm)
- Color: Dark gray
- Connections: plugs/terminals
- Mounting box: (not included) 4x4 electric
- Fan relay: 5 A, 240 VAC, pilot duty, SPDT, latching or non-latching
- Fan relay actuation: selectable at "dIS" (disabled), 100 (default), 150, 200, 250, 300, 350 ppm
- Fan Delay Settings of 0, 1, 3 (default), 5 and 10 minutes
- Fan Minimum Runtime settings are 0 (default), 3, 5, 10 or 15 minutes
- Alarm relay: 0.5A 120 V, 60 VA
- Alarm relay actuation: selectable N.O. default or N.C.
- Alarm relay settings: "dIS", 100, 125, 150, 200, 300 (default), 400, 500 or 600 ppm
- Current Loop, 4-20 mA for 0-1,000 ppm
- Operating Environment: 0°F to 125° F (-18°C to 52°C),10 to 90% RH non-condensing

Location

A Macurco RD-6 is normally mounted low in the room on a wall or column one foot above the floor in a central area where air movement is generally good. Use the same spacing as for smoke detectors, 30-foot centers, 900 square feet per detector (84 sq. meters). The coverage depends on air movement within the room or facility. Extra detectors may be needed near any areas where people work or where the air is stagnant. The RD-6 mounts on a 4x4 electrical box supplied by the contractor. Do not install the RD-6 inside another box unless it has good air flow through it. Do NOT mount the RD-6 where the normal ambient temperature is below 0°F or exceeds 125°F (below -18°C or above 52°C).

TYPICAL CONNECTION OF RD-6

TYPICAL COVERAGE 900 SQUARE FEET

RD-6 Rear View





