

# HC-1230, -1240 and -1250 Series Hygrostats

### ntroduction

The HC-1230 series room hygrostats and the HC-1240 and HC-1250 series duct hygrostats are designed to control humidifying and dehumidifying equipment.

The HC-1230 and HC-1240 provide one SPDT contact.

The HC-1250 provides two SPDT contacts.

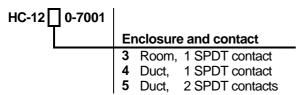


HC-1230 room and HC-1240 / -1250 duct, Hygrostats

| Features and Benefits |  |  |  |  |
|-----------------------|--|--|--|--|
| ☐ Room                | m or duct enclosures, wide set point<br>e. | Flexible application.  |  |  |
| ☐ SPD                 | T contact.                                 | Used for humidification or dehumidification and provides alarm signal. |  |  |
| ☐ Mod                 | el with two SPDT contacts available.       | Available for two switching ranges with neutral zone.                  |  |  |

2 HC-1200

## Ordering data



**Note:** A fixing bracket for the duct hygrostats is included in delivery.

#### **Accessories**

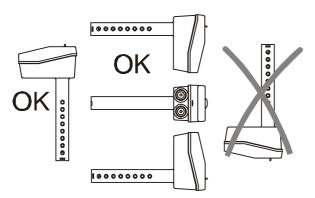
| EQ-1240-7001 | Kit for IP55 duct enclosure |  |
|--------------|-----------------------------|--|
| EQ-1230-7001 | Wall bracket                |  |

### nstallation and wiring instructions

To install please follow the instructions below:

- Locate the hygrostats where they will be exposed to normal ambient conditions.
- · Avoid untypical draughts.
- Avoid exposure to direct heat or light radiation (sun, lamps or radiators), as this will cause incorrect readings.
- Avoid installing the hygrostats close to the humidification device, this could lead to condensation affecting the hygrostat.

Please note the installation orientation as illustrated below.





#### WARNING

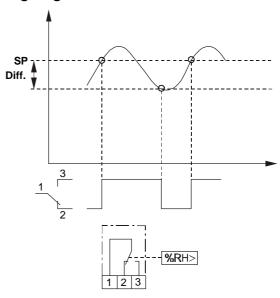
#### **Shock Hazard**

Disconnect the power supply before wiring connections are made to prevent personal injury, shock or damage to equipment.

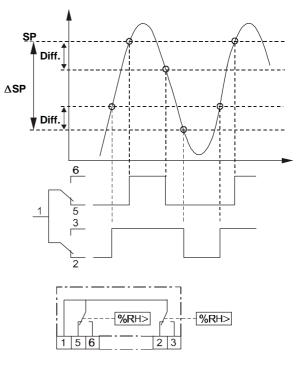
#### **Equipment Damage Hazard**

Make and check all wiring connections before applying power to the system. Short circuited or improperly connected wires may result in permanent damage to the unit.

#### Wiring diagram



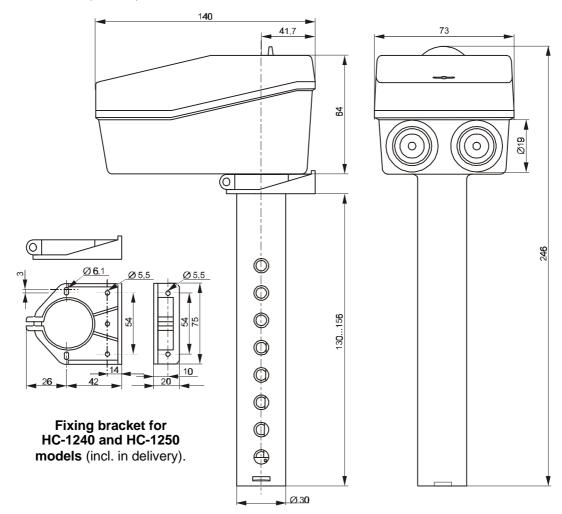
HC-1230 and HC-1240 (See "specifications")



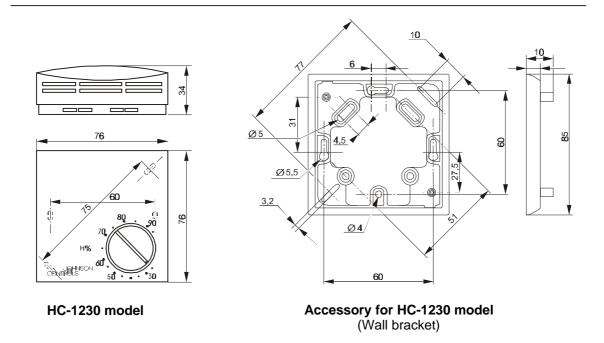
HC-1250 (See "specifications")

HC-1200 3

## **Dimensions** (in mm)



HC-1240 and 1250 models



HC-1200

# **S** pecifications

| Models                         | HC-1230-7001<br>Room Hygrostat                                    | HC-1240-7001<br>Duct Hygrostat      | HC-1250-7001<br>Duct Hygrostat |  |
|--------------------------------|---|-------------------------------------|--------------------------------|--|
| Sensing element                | Stabilised synthetic textile                                      |                                     |                                |  |
| Contacts                       | 1 S   | PDT                                 | 2 SPDT                         |  |
| Operating range (SP)           | 3090 % RH 1595 % RH   |                                     | 5 % RH                         |  |
| Switching differential (Diff.) | 6 % RH  | 4 % RH                              |                                |  |
| Neutral zone (∆SP)             |   |                                     | 625 % RH                       |  |
| Time constant                  | Approx. 5 min. at 0,2m/s  | Approx. 3 min. at 0,2m/s            |                                |  |
| Calibrated at                  | 55 RH at 23°C   |                                     |                                |  |
| Long term stability            | Approx -1,5 % RH / annum  |                                     |                                |  |
| Ambient temperature limits     | 040°C   | 070°C                               |                                |  |
|                                | (-2540°C non-   | (-2570°C non-condensing)            |                                |  |
|                                | condensing)   |                                     |                                |  |
| Enclosure protection           | IP 20   | IP 30 (IP 55 with kit EQ-1240-7001) |                                |  |
| Casing materials               | Cover: PC Lexan 940   | Cover: PC / AB                      | S Cycoloy C2100                |  |
|                                | Base: PPS Fortron 1140L4. Fibre glass reinforced                  |                                     |                                |  |
| Electrical ratings             | Max. 5 (3) A, 250 VAC; Min 100 mA, 24 VAC                         |                                     |                                |  |
| Electrical connections         | Screw connectors max. 2 x 1,5mm <sup>2</sup>                      |                                     |                                |  |
| Net shipping weight            | 135g  | 445g                                | 470g                           |  |
| Approvals                      | European Directives:<br>EMC (89 / 336 EEC)<br>LVD (73 / 23 / EEC) |                                     |                                |  |

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office.

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