

MECHANICAL HYGROSTAT

MFR 012



- > Efficient condensation control
- > Adjustable relative humidity range
- > High switching capacity
- > DIN rail mountable

The MFR 012 electromechanical hygrometer is designed to control the relative humidity inside enclosures. When connected to an enclosure heater (dehumidifier), it will energize the heater at the humidity set point in order to raise the dew point. This helps prevent damage and malfunction of electronic components caused by condensation and corrosion.¹ The MFR 012 can also be used to control cooling fans, warning lights or other devices.

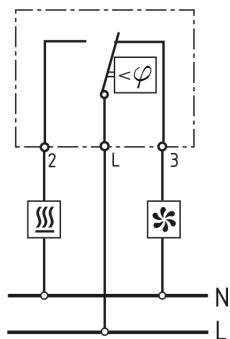
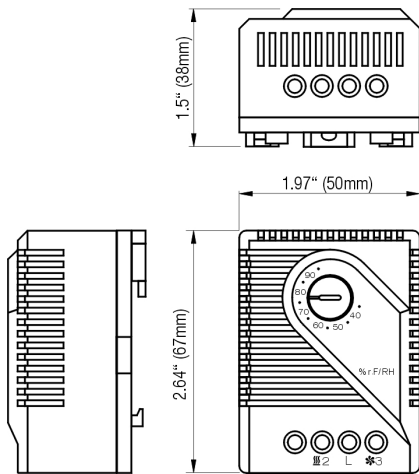
¹ The critical relative humidity level for most components is 65 %. Above 65 % RH, condensation can form and cause malfunctions of electronic equipment. Long term, this can lead to corrosion and permanent damage of electronic components and systems.



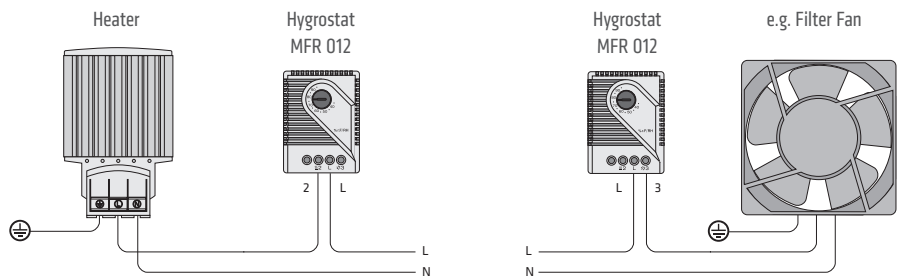
TECHNICAL DATA

Switching difference	4 % RH (±3 % tolerance) – at 50 % RH
Permissible air velocity	50 ft/sec (15 m/s)
Contact type	SPDT / change-over contact
Service life	> 50,000 cycles
Min. Switching capacity	100 mA @ AC/DC 20 V
Max. Switching capacity	5 A resistive @ AC 250 V DC 20 V
Connection	3-pole terminal, clamping torque 0.5 Nm max.: solid wire – AWG 14 max. (2.5 mm ²) stranded wire ¹ – AWG 16 max. (1.5 mm ²)
Housing	plastic, UL 94V-0, light grey
Mounting	clip for 35 mm DIN rail, EN 60715
Mounting position	vertical
Operating / Storage temperature	+32 to +140 °F (0 to +60 °C) / -40 to +140 °F (-40 to +60 °C)
Operating / Storage humidity	max. 95 % RH (non-condensing)
Dimensions	2.64 x 1.97 x 1.5" (67 x 50 x 38 mm)
Weight	approx. 2 oz. (60 g)
Protection type	IP20
Approvals	UL File No. E164102, EAC

¹ When connecting with stranded wires, wire end ferrules must be used.



- Enclosure heater
- Filter fan, cooling equipment, signal device



Wiring examples

Part No.	Setting range
01220.0-00	35 to 95 % RH