

# ELECTRONIC HYGROSTAT

DCF 010 | DC 20 to DC 56 V



- > High DC switching capacity
- > Adjustable humidity
- > Small hysteresis
- > Optical operating display (LED)
- > Integrated switch module
- > Precise measurement via an external sensor

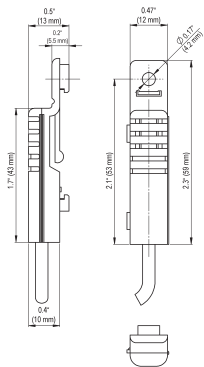
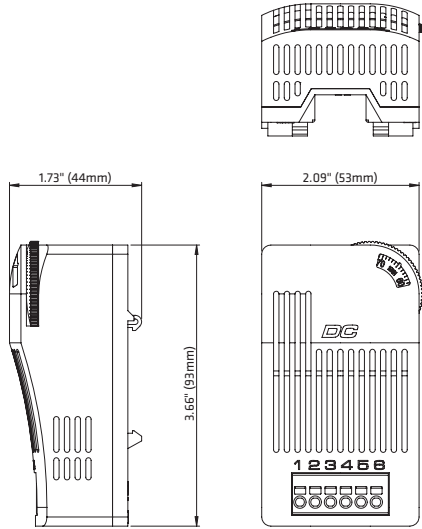
The electronic DC hygrostat with integrated switch module is used to control heating and cooling equipment, filter fans or signal devices through the relay. The hygrostat measures the relative humidity and can switch a signal current via an internal relay. The external sensor can be positioned freely anywhere in the control cabinet for precise measurement of the atmospheric humidity. Additionally, this hygrostat is available in versions that not only measure the relative humidity via the external sensor, but also the temperature.



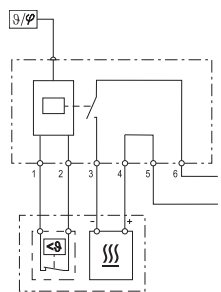
## TECHNICAL DATA

Switching difference (humidity)	4 % RH ( $\pm 1\%$ tolerance) at +77 °F (+25 °C), 50 % RH
Reaction time	approx. 5 sec.
External sensor	cable 2 m with snap in connector (included in the delivery)
Contact type	contact maker NO (MOSFET) or contact breaker NC (MOSFET)
Service life	> 100,000 cycles
Operating voltage	DC 20 to 56 V
Optical indicator	LED
Connection	6-pole terminal: stranded wire <sup>1</sup> AWG 16 (1.5 mm <sup>2</sup> ); max. AWG 12 (2.5 mm <sup>2</sup> )
Mounting	clip for 35 mm DIN rail, EN 60715
Housing	plastic, UL 94V-0, grey (bicolor)
Dimensions	3.7 x 2.1 x 1.7" (93 x 53 x 44 mm)
Weight	approx. 4.2 oz. (120 g) incl. sensor
Mounting position	vertical
Storage temperature	-40 to +176 °F (-40 to +80 °C)
Operating / Storage humidity	max. 90 % RH (non-condensing)
Protection type	IP20
Approvals	UL File No. E164102, VDE, EAC
Note	other versions on request

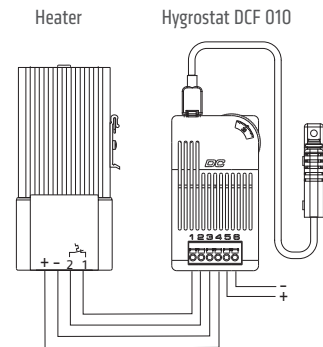
<sup>1</sup>When connecting with stranded wires, wire end ferrules must be used.



Wiring diagram



Wiring example



Part No.	Max. switching capacity (relay output)	Operating temperature	Primary switching function setting range humidity	Secondary switching function <sup>2</sup> Switch-on temperature	Contact (primary)
01012.0-20	DC 15 A	-22 °F to +104 °F (-30 °C to +40 °C)	40 to 90 % RH	+41 °F (+5 °C) pre-set	Contact maker (NO)
01012.0-21	DC 13 A	-22 °F to +122 °F (-30 °C to +50 °C)	40 to 90 % RH	+41 °F (+5 °C) pre-set	Contact maker (NO)
01012.0-22	DC 11 A	-22 °F to +140 °F (-30 °C to +60 °C)	40 to 90 % RH	+41 °F (+5 °C) pre-set	Contact maker (NO)

<sup>2</sup> Versions with secondary switching function can also register the temperature and therefore offer an additional protection for electronics.  
 Switching difference: 3 K ( $\pm 1$  K tolerance) at +77 °F (+25 °C), 50 % RH.