ELECTRONIC HYGROSTAT

DCF 010

Electronic hygrostat with integrated switch module for controlling DC devices in enclosures and housings. Designed as a normally open contact (NO), it switches all common loads in enclosure applications: Fans, coolers, signal transmitters.

- Internal switch module with high DC switching capacity
- Relative humidity adjustable
- Secondary switch function: fixed temperature 5 °C
- Small hysteresis
- External sensor

OVERVIEW TECHNICAL DATA

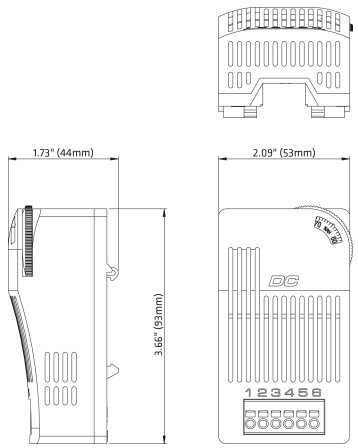
Setting range	40 % RH - 90 % RH
Contact type	MOSFET
Protection type	IP20
Operating display	LED
External sensor	Cable 2 m with snap-in male connector
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	20 V - 56 V
Inrush current	24 A
Inrush current duration	10 s
Power consumption	1 W
Reference voltage ohmic	20...56 VDC
Reaction time	5 s
Service life	>100000 cycles
Setting range 2	5 °C
Switch-on temperature	5 °C
Switching differential	4 % RH
Switching differential tolerance	± 1 % RH
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 80 °C
Connection	6-pole clamp: stranded wire 1.5 mm² (AWG 16); max. 2.5 mm² (AWG 12)
Design	Normally open (NO)

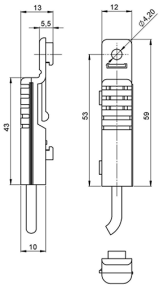
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	93 mm
Width	53 mm
Depth	44 mm
Weight	120 g
Note	Secondary switch function: Versions with a secondary switch function can also react to temperature and thus offer even greater contactor protection for the electronics. Switching differential: 3K (+1K tolerance) at +25 °C (+77 °F), 50% RH. Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

Article number	Switching capacity	Switching current ohmic	Operating temperature
01012.0-20	15 A (DC)	15 A	-40 °C - 40 °C
01012.0-21	13 A (DC)	13 A	-40 °C - 50 °C
01012.0-22	11 A (DC)	11 A	-40 °C - 60 °C

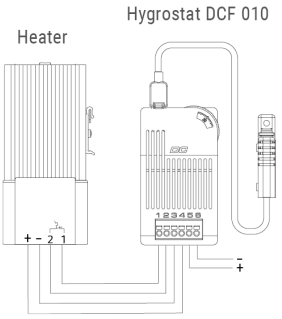
TECHNICAL DRAWINGS





External sensor

Connection example



Connection diagram