

ELECTRONIC HYGROTHERM

The KSHTC Hygrotherm senses the ambient temperature and relative air humidity. Depending on which contact combination is chosen, it then turns on or off a connected device if either the temperature is below, or the humidity above the set point. The integrated LED in each adjustment knob is lit indicating the active function.

STANDARD FEATURES

Controls both temperature and humidity Optical function displays (LED) High switching capacity DIN rail mountable



Scale

°F / % RH

°C / % RH °C / % RH Find additional information on this model at kooltronic.com, or use the Technical Documents QR code below.

Technical **Documents**























TECHNICAL DATA

32-140°F (0-60°C) adjustable Temperature range: Humidity range: 50-90% RH adjustable

Switching difference

Model

KSHTCF

K2SHTC

K7SHTC

(temperature): approximately 3.6°F (2K) ± 1K tolerance

Power

120-230 VAC, 50/60 Hz

120-230 VAC, 50/60 Hz

24-48 VDC

Switching difference (humidity):

approximately 4% RH ± 1% tolerance

Response time: approximately 5 sec. Contact type: Change-over contact

10 A resistive / 1.6 A inductive @ AC 240 V Relay output (max.

0.6 A @ DC 60 V1 switching capacity): Max. inrush current AC 30 A for 10 sec. Service life: >30,000 cycles

Function control light: LED

Connections: 5-pole terminal for AWG 14 max (2.5 mm)² Mounting: Clip for 35 mm DIN rail (EN 60715)

Housing: Plastic, UL94V-0

Weight: Approx. 3.5 oz (100g)

Mounting position: Vertical

-40 to 140°F (-40 to 60°C) Operating temperature: Storage temperature: -40 to 140°F (-40 to 60°C)

IP 20 Protection type:

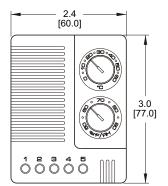
Contacts 1 & 2: Supply voltage Input:

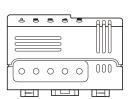
Relay output: Contacts 3 & 5 and contacts 4 & 5 (see table below)

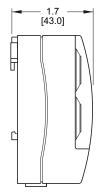
Contacts	close at	open at	use for
3 and 5		humidity drop or temperature rise	heaters de-humidifiers low-temp alarms
	humidity drop or temperature rise	humidity rise or temperature drop	cooling humidifiers high-temp alarms

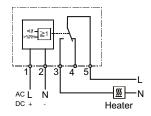
DRAWINGS

Dimensions, inches [mm], are for reference only and are subject to change.

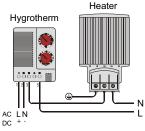








Connection diagram



Example of connection

HOW TO ORDER Specify model number.

Specifications are subject to change without notice. Suitability of this product for its intended use and any associated risks must be determined by the end customer/buyer in its final application.

kshtc.qxd (1/11/21) (CDR: 20293)

¹Not UL confirmed.

²When connecting with stranded wires, wire end ferrules must be used.