



# 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

Model	Power	Scale
KSHTCF	120-230 VAC, 50/60 Hz	°F / % RH
K2SHTC	120-230 VAC, 50/60 Hz	°C / % RH
K7SHTC	24-48 VDC	°C / % RH

## TECHNICAL DATA

Temperature range:	32-140°F (0-60°C) adjustable
Humidity range:	50-90% RH adjustable
Switching difference (temperature):	approximately 3.6°F (2K) ± 1K tolerance
Switching difference (humidity):	approximately 4% RH ± 1% tolerance
Response time:	approximately 5 sec.
Contact type:	Change-over contact
Relay output (max. switching capacity):	10 A resistive / 1.6 A inductive @ AC 240 V 0.6 A @ DC 60 V <sup>1</sup>
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) <sup>2</sup>
Mounting:	Clip for 35 mm DIN rail (EN 60715)
Housing:	Plastic, UL94V-0
Weight:	Approx. 3.5 oz (100g)
Mounting position:	Vertical
Operating temperature:	-40 to 140°F (-40 to 60°C)
Storage temperature:	-40 to 140°F (-40 to 60°C)
Protection type:	IP 20

<sup>1</sup>Not UL confirmed.

<sup>2</sup>When connecting with stranded wires, wire end ferrules must be used.

**Input:** Contacts 1 & 2: Supply voltage  
**Relay output:** Contacts 3 & 5 and contacts 4 & 5 (see table below)

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

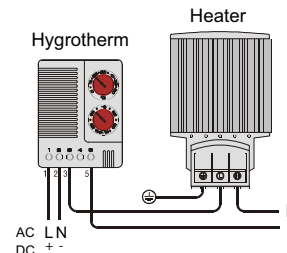
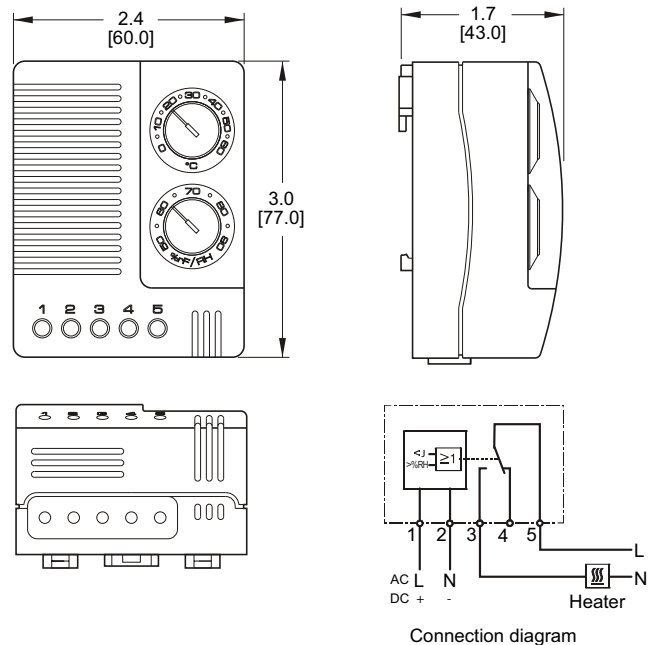
Find additional information on this model at [kooltronic.com](http://kooltronic.com), or use the Technical Documents QR code below.

Technical Documents



## DRAWINGS

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



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.

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