ELECTRONIC HYGROTHERM

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

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.

Model	Power	Scale
KSHTC	120 VAC, 50/60 Hz	°C / %RH
KSHTCF	120 VAC, 50/60 Hz	°F / %RH
K2SHTC	230 VAC, 50/60 Hz	°C / %RH
K2SHTCF	230 VAC, 50/60 Hz	°F / %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 160 sec.
Contact type:	Change-over contact
Relay output (switching capacity):	NC: AC 240 V - 6A resistive, 1A inductive NO: AC 240 V - 8A resistive, 1.6A inductive NC: AC 120 V - 6A resistive, 1A inductive NO: AC 120 V - 8A resistive, 1.6A inductive DC 24 V - 4A resistive
Service life:	>100,000 cycles
Function control light:	LED
Connections:	5-pole terminal for AWG 14 max (2.5 mm²)
Mounting:	Clip for 35 mm DIN rail (EN 50022)
Housing:	Plastic, UL94V-0
Weight:	Approx. 6 oz (0.2 kg)
Mounting position:	Vertical
Operating temperature:	32 to 140°F (0 to 60°C)
Storage temperature:	-4 to 176°F (-20 to 80°C)
Protection type:	IP 20
Agency approvals:	UL (VDE - p/n K2SHTC only)

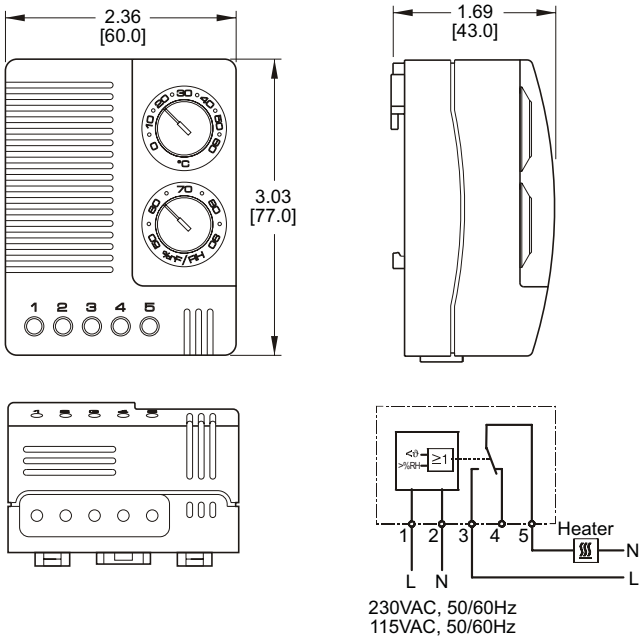
Input: Contacts 1 & 2: Supply voltage (120 VAC or 230 VAC)

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

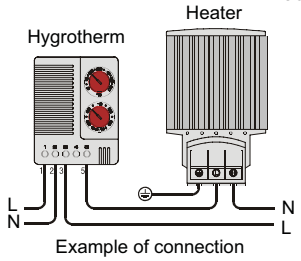
Contacts	close at ...	open at ...	use for
3 and 5	humidity rise or temperature drop	humidity drop or temperature rise	heaters de-humidifiers low-temp alarms
4 and 5	humidity drop or temperature rise	humidity rise or temperature drop	cooling humidifiers high-temp alarms

DRAWINGS

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



Connection diagram



Example of connection

Kooltronic, Inc., 30 Pennington-Hopewell Road, P.O. Box 240, Pennington, NJ 08534-0240
Tel: (609) 466-3400 Fax: (609) 466-1114 Internet: www.kooltronic.com E-Mail: sales@kooltronic.com