# Transformer control systems Temperature-controlled, five-step



Dim. mm

B H T

400 V, 3~, 50/60 Hz

500 200

200

IP54

+40 °C

676.1

702

### Five-step climate transformer controller KTRD

- ☐ Fault-resistant, low-loss transformer controller for temperaturedependent fan control including motor protection.
- □ Recommended for noise-critical applications.
- ☐ An electronic thermostat type TME 4 or EST is required for control and must be ordered separately as an accessory.
- For three-phase current fans 3~, 400 V, 50/60 Hz

Accessories for KTRD

Four-step electronic

For temperature-dependent

control of a KTR transformer

(on/off) of up to four 1~ fans.

Electronic control thermostat

with multiple control variables for

controlling a climate transformer

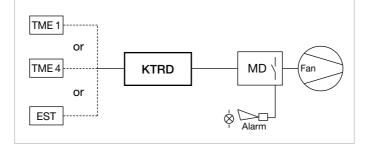
controller or for series connection

Supply voltage 230 V~ required.

thermostat

EST

controller KTR.



TME 4

#### Climate transformer controller **KTRD 400 V**

For five-step automatic control of three-phase current fans depending on room temperature. Via builtin operating switch, also manually step-controllable.

Integrated motor protection through connection of external thermal contacts on the motor. Robust casing made of steel, lacquered twice in light grey.

Electronic four-step thermostat with switching sequence of 1 K to the defined setpoint. Allows five-step temperature-controlled fan operation depending on the pre-defined setpoint and actual temperature in combination with climate controller

Robust casing made of impactresistant plastic, light grey. Cable routing to bottom of casing in PG 11.

# Control functions

- Temperature-dependent, five-step fan control via KTR units. Control range limit possible through specification of a minimum and maximum air rate (voltage). Minimum air rate can be switched on and off.
- Ventilation valve control (analogue 0...10 V)
- Frequency inverter control (analogue 0...10 V)
- Heating thermostat
- Temperature monitor (under and overtemperature with external temperature compensation).
- via a dirt-resistant membrane keyboard.

## Displays

- Displays for operating mode, room temp., external temperature and setpoint temperature.
- Signal LED for auto. reduction.
- Alarm signal LED for overtemperature, undertemperature, system fault.
- Scaled illuminated point display (0-100 %) for fan speed and valve opening.

### ☐ Temperature sensor

One external and one internal temperature sensor included in delivery. Casing in IP 55, installation up to a distance of 100 m from the controller, connection via NYM 3 x 1.5 mm<sup>2</sup>.



	man ambient temp
	Wiring diagram no.
	TME 4
	Voltage
	Max. continuous cu
<b>3</b> *	Temperature range
	Switching accuracy
	Switching distance
	Protection class
9	Protection category
1	Dim. mm
	Weight approx.
	Wiring diagram no.

TME 4	Ref. no. 01335
Voltage	230 V~, 50/60 Hz
Max. continuous cui	rrent (AC 3) 6 A
Temperature range	0 to +50 °C
Switching accuracy	+/- 0.8 K at 20 °C
Switching distance	1 K
Protection class	II
Protection category	IP54
Dim. mm	W 120 x H 80 x D 75
Weight approx.	0.4 kg

Ref. no. I max.

KTRD 3 01650

KTRD 5.5 01651

Protection category

Max. ambient temperature

Voltage

Α

3.0 300

5.5 300 500 200

**KTRD 15** 01653 15.0 400 500 200

**KTRD 10** 01652 10.0 400 500



## Possible settings

- Continuously variable specification of setpoint temp. and control range.
- Min./max. power (speed) limit.
- Minimum volume flow can be switched on and off.
- Automatic reduction on/off.
- Continuously variable temp. specification for activation of heating.
- Continuously variable specification for alarm signal if temperature is too high or too low.
- Min. and max. valve opening.

### Casing

Plastic, light grey with transparent hinged cover, for surfacemounted installation.

EST	Ref. no. 01355
Voltage	230 V, 1~, 50/60 Hz
Protection category	IP54
Transformer conn.	230 V AC / max. 10 A
Temperature range	(adjustable) 0 to 40 °C
Control range (adju	stable) 2 to 12 K
Alarm low temp. (a	djustable) -20 to 0 K
Alarm high temp. (a	adjustable) 0 to 25 K
Heating (adjustable	-15  to  +5  K
External temp. com	pensation 0 to 20 K
Min. air rate approx	c. 0 to 40 %
Max. air rate appro	x. 60 to 100 %
Minimum air shut-o	off -25 to 0 K
Dim. mm V	V 260 x H 215 x D 120
Weight approx.	2.0 kg
Wiring diagram no.	0
3 : a.g. a	