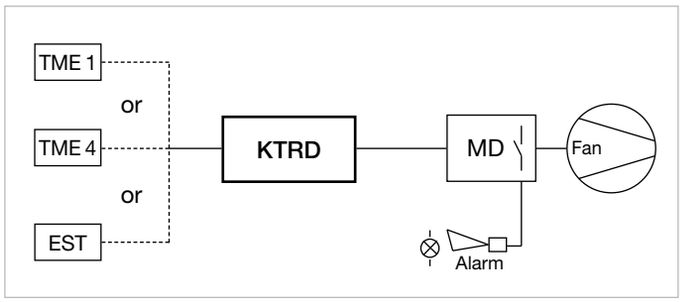
■ **Five-step climate transformer controller KTRD**
▢ Fault-resistant, low-loss transformer controller for temperature-dependent fan control including motor protection.
▢ Recommended for noise-critical applications.
▢ An electronic thermostat type TME 4 or EST is required for control and must be ordered separately as an accessory.



■ **For three-phase current fans 3~, 400 V, 50/60 Hz**

Climate transformer controller KTRD 400 V
For five-step automatic control of three-phase current fans depending on room temperature. Via built-in 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.

KTRD

Type	Ref. no.	I max. A	Dim. mm B	H	T
KTRD 10	01652	10.0	400	500	200
KTRD 15	01653	15.0	400	500	200

Voltage	400 V, 3~, 50/60 Hz
Protection category	IP54
Max. ambient temperature	+40 °C
Wiring diagram no.	676.1

■ **Accessories for KTRD**

■ **Four-step electronic thermostat**
For temperature-dependent control of a KTR transformer controller or for series connection (on/off) of up to four 1~ fans. Supply voltage 230 V~ required.

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 KTR.
Robust casing made of impact-resistant plastic, light grey.
Cable routing to bottom of casing in PG 11.

TME 4

TME 4	Ref. no. 01335
Voltage	230 V~, 50/60 Hz
Max. continuous current (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
Wiring diagram no.	702

■ **Electronic control thermostat EST**
with multiple control variables for controlling a climate transformer controller KTR.

▢ **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 mm².

EST

▢ **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 surface-mounted 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 (adjustable)	2 to 12 K
Alarm low temp. (adjustable)	−20 to 0 K
Alarm high temp. (adjustable)	0 to 25 K
Heating (adjustable)	−15 to +5 K
External temp. compensation	0 to 20 K
Min. air rate approx.	0 to 40 %
Max. air rate approx.	60 to 100 %
Minimum air shut-off	−25 to 0 K
Dim. mm	W 260 x H 215 x D 120
Weight approx.	2.0 kg
Wiring diagram no.	357.3