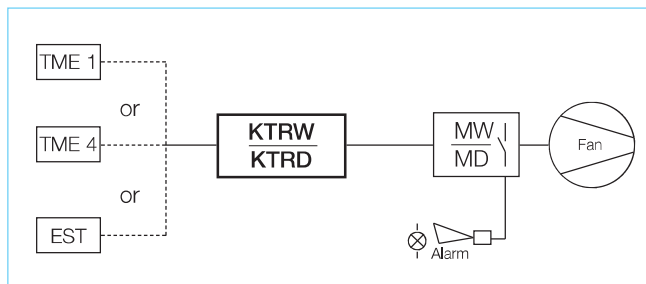


■ **Five-step climate transformer controller KTRW and KTRD**

- Trouble-free, low-loss transformer controller for temperature-dependent fan control including full motor protection.
- Recommended for noise critical applications.
- Control via an electronic thermostat type TME 4 or EST to be ordered separately as accessory.



For single phase fans
1 ph., 230 V, 50/60 Hz

Climate transformer controller KTRW 230 V

For automatic control of one or several 1 ph. fans in relation to the room temperature. Five-step automatic operation, whereby each step can also be switched manually. Integrated full motor protection by connecting the thermal contacts on the motor. Suitable for stable ventilation. Light grey polymer casing.

Type	Ref. no.	I max. A	Dim. in mm		
			B	H	T
KTRW 3	1662	3	236	316	128
Voltage	230 V~, 50/60 Hz				
Protection class	IP 54				
Max. ambient temperature	+40 °C				
Wiring diagram no.	SS-674				



For three phase fans
3 ph., 400 V, 50/60 Hz

Climate transformer controller KTRD 400 V

For automatic control of five step 3 ph. fans in relation to the room temperature. The built-in operating switch also allows manual control. Integrated full motor protection by connecting the thermal contacts on the motor. Robust casing made of steel, dual coating in light grey.

Type	Ref. no.	I max. A	Dim. in mm		
			B	H	T
KTRD 3	1650	3	300	500	200
KTRD 5.5	1651	5.5	300	500	200
KTRD 10	1652	10	400	500	200
KTRD 15	1653	15	400	500	200
Voltage	400 V, 3~, 50/60 Hz				
Protection class	IP 54				
Max. ambient temperature	+40 °C				
Wiring diagram no.	SS-676.1				



■ **Accessories for KTRW and KTRD**

Four-step electronic thermostat
For temperature-dependent control of a KTR transformer controller or for on/off operation of up to four single phase fans. (Supply voltage 230 V required.)

Electronic four step thermostat with a switching sequence of 1 K for adjusted setpoint. Enables five step temperature-controlled fan operation in combination with the climate controller KTR in relation to the pre-set setpoint and actual temperatures. Robust casing made of impact-resistant, light grey polymer. Cable entry at the bottom of the casing in PG 11.

Type	Ref. no.	I max. A	Dim. in mm		
			B	H	T
Type TME 4	Ref. no. 1335				
Voltage	230 V~, 50/60 Hz				
Max. continuous current (AC 3)	6 A				
Temperature range	0 to +50 °C				
Switching precision	+/- 0.8 K at 20 °C				
Switching distance	1 K				
Protection category	II				
Protection class	IP 54				
Dim. mm	W 120 x H 80 x D 75				
Weight approx.	0.4 kg				
Wiring diagram no.	SS-702				



Electronic control thermostat EST

with various control variables to control a climate transformer controller KTR.

Control functions

- Temperature dependent, five-step fan control via KTR units. Limitation of control range possible by selecting a minimum and maximum air rate (voltage). Minimum air rate can be switched on and off.
- Ventilation damper control (analogue 0...10 V)
- Control of a frequency inverter (analogue 0...10 V)
- Heating thermostat
- Temperature monitor (insufficient and excessive temperatures with outside air temperature compensation).
- Adjustments made via a dirt-resistant membrane keypad.

□ **Displays**

- Displays for operation mode, room temperature, outside temperature and adjusted setpoint temperature.
- Signal LED for soft-closing mechanism.
- Alarm signal LED for insufficient, excessive temp., system error.
- Scaled LED display (0-100 %) for fan speed and opening of shutter.

□ **Temperature sensor**

An outside and an inside temperature sensors are included as standard. Casing protected to IP 55, installation up to 100 m distance from controller, connection by means of NYM 3 x 1.5 mm².

□ **Possible settings**

- Stepless specification of set-point temp. and control range.
- Min. / max. power (speed) limit.
- Min. air flow vol. can be on/off.
- Soft-closing mechanism on/off.

Type EST Ref. no. 1355

Voltage	230 V, 1~, 50/60 Hz
Protection class	IP 54
Transf. connection	230 V AC / max. 10 A
Temperature range (adjustable)	0 - 40 °C
Control range (adjustable)	2 - 12 K
Alarm low temp. (adjustable)	-20 - 0 K
Alarm high temp. (adjustable)	0 - 25 K
Heating (adjustable)	-15 - +5 K
Outside temp. compensation	0 - 20 K
Min. air rate approx.	0 - 40 %
Max. air rate approx.	60 - 100 %
Disable minimum air speed	-25 - 0 K
Dim. mm	W 260 x H 215 x D 120
Weight approx.	2.0 kg
Wiring diagram no.	SS-357.3

- Stepless temperature specification for activation of heating.
- Stepless specification for alarm signal for low and high temperatures.
- Min. and max. shutter opening.



■ **Casing**

Polymer, light grey with transparent hinged lid, for surface installation.