







Pictorial schematic ETR 10-24 V DC C FTR ETR EC fan

Electronic controller for differential pressure or temperature

Area of application

For continuously variable control of single and three-phase EC fans or frequency inverters with a setpoint input of 0–10 V DC. Provides the EC fan or frequency inverter with a supply voltage of 10–24 V DC/6 mA (safety extralow voltage), the controller can be supplied directly from it, alternatively via a power supply unit (NG 24, accessories).

Display

- Multifunctional LCD display.
- Numerical setpoint and actual value display with measur. unit.
- Alarm, day/night operation.
- Text display for menu, status.

■ Control functions

Quick and easy commissioning of parameters using the LCD display and three internal input buttons.

Permanent measurement display in LCD display.

- Optional parameterisation as

 Actuator = 0-10 V analogue
 output proportional to measured
 actual value as control variable
 for external controls or as
- Controller = controlled 0-10 V analogue output depending on the set setpoint and the measured actual value.

The controlled output voltage balancing the actual value and setpoint value lies between 0% (0 V DC) and 100% (10 V DC). The minimum and maximum values can be specified, two setpoints (e.g. for day/night operation) can also be set. Switching by means of weekly timer (types WSUP, WSUP-S, see accessories).

Differential pressure controller EDR

With fixed integrated pressure sensor and connections for pressure hoses (DN 5 mm, onsite.

□ Adjustable pressure ranges: 0-1000 Pa, 0-500 Pa, 0-300 Pa, 0-200 Pa.

Temperature controller ETR

The controller is freely adjustable withing the sensor measurement ranges, optionally in heating or cooling function, with adjustable minimum air shut-off.

- ☐ Temperature control range−50 to +150 °C.
- Appropriate sensors (types LTA, LTK, LTR, see accessories) are available for temperature measurement.

References

If necessary, multiple fans can be connected in parallel to EDR or ETR depending on the fan type to be connected.

Accessories for EDR and ETR

NG 24 Ref. no. 01439 Power supply unit for DIN top hat rail mounting, input 100–240 V AC, output 24 V DC/1.75 A. Required if fan type does not supply 10–24 V DC/6 mA.

WSUP Ref. no. 09990 Weekly timer.

WSUP-S Ref. no. 09577 Weekly timer for top hat rail mounting.

Accessories for ETR

LTA 40 Ref. no. 01336 External temperature sensor, measurement range –20 to +60 °C, protection category IP54.

LTK 40 Ref. no. 01324 Temperature sensor for rectangular duct installation, measurement range 0 to.

LTR 40 Ref. no. 01323 Room temperature sensor, measurement range 0.5 to +40 °C.

Туре	Ref. no.	Power supply	Analogue outputs	Signal input	Perm. humidity	Protection category	Protection class	Permissible ambient temp.	Casing	Dim. mm	Weight	Wiring diagram
EDR	01437	10-24 V DC, 6 mA	0–10 V DC 10 V / 0.3 mA 24 V / 10 mA	10–24 V DC / 6 mA Switching setpoint 1/2 (day/night)	85 %	IP54	III (safety extra-low voltage, galvanically isolated)	−10 to +60 °C	Surfmount., plastic, light grey	W 137 H 106 D 56	250 g	1039
ETR	01438	10-24 V DC, 6 mA	0–10 V DC 10 V / 0.3 mA 24 V / 10 mA	10–24 V DC / 6 mA Switching setpoint 1/2 (day/night)	85 %	IP54	III (safety extra-low voltage, galvanically isolated)	−10 to +60 °C	Surfmount., plastic, light grey	W 137 H 106 D 56	200 g	1298