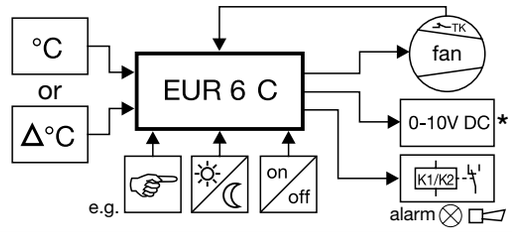
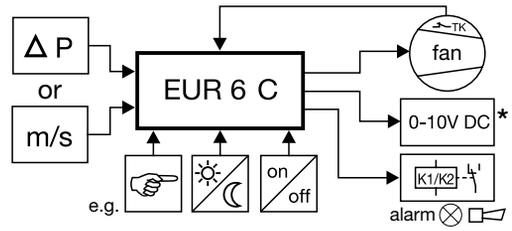
EUR 6 C

Mode 2.03: Temperature control with additional function
Mode 2.05: Differential temperature control



* e.g. for valve, frequency inverter.

Mode 4.01: Differential pressure control
Mode 6.01: Air velocity control



* e.g. for valve, frequency inverter.

Universal controller EUR 6 C Electronic automatic controller with phase angle-controlled power unit.

Area of application

For control of central/ventilation systems or for the continuously variable control of one or more speed-controllable single phase fans.
In the residential, commercial, industrial and agricultural sector.

Control functions

Quick and easy commissioning of parameters using the integrated Commissioning assistant. The following control parameters can be controlled depending on the connected sensors:

- ☐ **Manual speed control,** e.g. adjustable via keyboard
- ☐ **Temperature** (required accessory Temperature sensor LTR 40 or LTK 40).
- ☐ **Temperature with additional functions** pre-programmed, (required accessory Temperature sensor LTR 40 or LTK 40).
- ☐ **Differential temp. control** (required accessory Temperature sensor LTR 40 or LTK 40).
- ☐ **Differential pressure** (required accessory Differential air pressure sensor LDF 500).
- ☐ **Differential pressure with outdoor temperature compensation** (required accessory Differential air pressure and temperature sensors LDF 500 and LTR 40 or LTK 40). Ideal for central ventilation systems according to DIN 18017 in residential buildings.
- ☐ **Air velocity** (required accessory Air velocity sensor LGF 10).

The desired sensors must be ordered separately as accessories. The control ranges are freely adjustable within the sensor measurement ranges.

The controlled output voltage balancing the actual value and setpoint value lies between 0% (35 V) and 100% (corresponds to approx. 80 V – 230 V).
The minimum and maximum values can be specified.

Main switch with positions:
"0" = control unit off.
"I" = automatic operation.
"230 V" = uncontrolled direct mains operation.

Inputs and outputs:
Outputs:
- 1 x motor connection phase angle-controlled.
- 1 x analogue output 0–10 V for controlling e.g. frequency inverter, valve, EC motor.
- 2 x potential-free relay, programmable, alarm, heating or status reports.

Inputs:
- 2 x sensor inputs, programmable to the respective required sensor type.
- Connection of thermal contacts for motor protection.

When a TK is triggered, the entire system will deactivate and it must be manually reactivated once the motor has cooled down.
- 2 x digital inputs, can be programmed to release, external fault, limit on/off, switching night reduction, internal/external, control/manual operation, reset, max. speed on/off.

Possible settings
- Continuously variable specification of setpoints and control range.
- Min./max. power (speed) limit.
- Minimum volume flow can be activated and deactivated.
- Connection of e.g. heating via programmable relay.
- Continuously variable specification for alarm signal if temperature is too high or low, output to display or also to relay.
- Min. and max. valve opening.
- Reversal of control function.
- Constant control of ventilation valves.
- Adjustment via a dirt-resistant membrane keyboard.

Display

- ☐ Multifunctional LC display.
- ☐ Numerical setpoint and actual value display with measurement unit.
- ☐ Symbols (alarm, heating, release).
- ☐ Bar/level display.
- ☐ Text display for menu, status and fault signals.

Required accessories

LDF 500 Ref. no. 01322
Differential air pressure sensor, measurement range 0 to 500 Pa.

LGF 10 Ref. no. 01325
Air velocity sensor, measurement range 0 to 10 m/s.

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 +40 °C.

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

EUR 6 C	Ref. no. 01321
Voltage	230 V~, 50/60 Hz
Max. load	6 A
Required minimum current	0.2 A
Controlled output voltage	0 – 100 %
Temp. measurement range	0 – 40 °C
Pressure measurement range	0 – 500 Pa
Speed measurement range	0 – 10 m/s
Permitted ambient temp.	0 to +40 °C
Protection category	IP54
Casing	Surface installation, plastic, light grey
Dim. mm	W 223 x H 200 x D 131
Weight approx.	1.4 kg
Wiring diagram no.	911

References

Electronic speed control units can generate motor humming noises. Transformer control units should be used in noise-critical applications.