EUR EC

■ **Universal control system EUR EC**
Electronic control unit with 0–10 V DC control output.

□ **Area of application**
For stepless control or regulation of single and three phase EC fans with a setpoint input of 0–10 V DC.

□ **Control functions**
Simple and quick start-up of parameters via integrated "startup wizard". Depending on the connected sensor a control can be carried out according to following control variables:
– **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 temperature control** (required accessory temperature sensor LTR 40 or LTK 40)
– **Differential pressure** (required accessory differential air pressure sensor LDF 500)
– **Differential pressure with outside air temperature compensation** (required accessory differential air pressure and temperature sensor LDF 500 and LTR 40 or LTK 40). Ideal for central ventilation systems according to DIN 18017 in residential construction.
– **Air velocity** (required accessory air velocity sensor LGF 10)

The required sensor is to be ordered separately as an accessory. The control ranges are freely adjustable within the sensor's range.

The aligned output voltage according to nominal value and current value is between 0 % (0 V DC) to 100 % (10 V DC). The specification of minimum and maximum values is possible.

Inputs and outputs:
Outputs:
– 2 x analogue outputs 0–10 V to control e.g. EC motor, frequency inverter, shutter
– 2 x potential-free relay, programmable, alarm, heating or status signals
Inputs:
– 2 x sensor inputs, programmable on the respective necessary sensor type
– 3 x digital inputs, programmable ro release, external interference, limit on /off, switching night reduction, internal/external, control/manual operation, reset, max. speed on/off

Possible settings
– Stepless selection of setpoints and control range
– Min./max. power (speed) limit
– On/off switching of minimum air flow volume
– Switching e.g. heating via programmable relay
– Stepless selection for alarm indication at low and high temperature, output on display or additionally on relay
– Min. and max. shutter opening
– Reverse control functions
– Continuous control of ventilation dampers
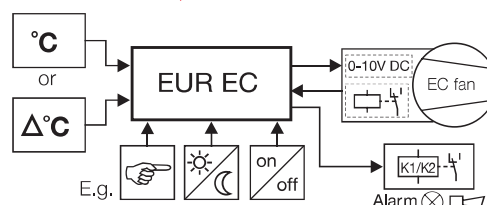– Adjustments made via a dirt-resistant membrane keypad.

□ **Display**
– Multi-function LC display
– Numerical setpoint and actual value display with scale
– Symbols (alarm, heating, release)
– Bar graph/level indicator
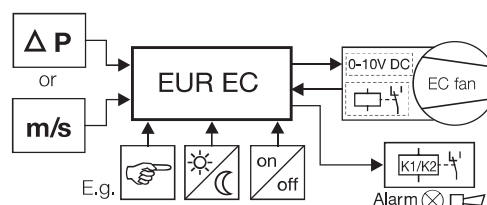– Text display for menu, status and fault indications

■ **Note**
Depending on the fan type to be connected, multiple fans can be connected in parallel to an EUR EC.

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

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

Type EUR EC	Ref. no. 1347
Voltage	230 V~, 50/60 Hz
Control output	0–10 V / max. 10 mA
Controlled output voltage	0 – 100 %
Control range temperature	0 – 40 °C
Control range pressure	0 – 500 Pa
Control range velocity	0 – 10 m/s
Permitted ambient temp.	0 to +40 °C
Protection class	IP 54
Casing	surface mounted installation, polymer, light grey
Dim. mm	W 223 x H 200 x D 131
Weight	approx. 1.0 kg
Wiring diagram no.	SS-1001

■ **Necessary accessories**

Type LDF 500	Ref. no. 1322

Differential air pressure sensor
Range 0 – 500 Pa

Type LGF 10	Ref. no. 1325

Air velocity sensor
Range 0 – 10 m/s

Type LTA 40	Ref. no. 1336

Temperature sensor for outside
Range –20 to +60 °C
Protection class IP 54

Type LTK 40	Ref. no. 1324

Temperature sensor for duct installation
Range 0 to +40 °C

Type LTR 40	Ref. no. 1323

Room temperature sensor
Range 0.5 to +40 °C