Electronic speed controller for the continuously variable speed control of alternating current fans

- Multiple different fans can be operated with one controller until the rated load capacity is reached. A reserve of 10% must be taken into account for dimensioning.
- Minimum output voltage can be adjusted to motor characteristics via potentiometer. The lower limit for smooth motor start-up must be maintained!
- Overload protection from built-in microfuse.
- Additional connection of indicator lights or shutter possible via uncontrolled output.
- Complies with EMC guidelines, DIN EN 50370, DIN EN 61000 / VDE 0838, DIN EN 55014, DIN EN 60669.

Design ESU 1 and ESU 3
An innovation by HELIOS

- ▢ Both types are compatible with the current light switch ranges of many manufacturers. Thus, the speed controller can be integrated in the intended switch range on site. Colour adjustment is also not a problem. The frame, central insert and rotary knob are taken from the “dimmer range” in the switch series.
- ▢ Standard delivery includes: Controller insert, flush-mounted cover plate and rotary knob made of plastic in white.
- ▢ Operation indicator via light ring surrounding the rotary knob.

Surface-mounted design

- ▢ Closed plastic casing in attractive design.
- ▢ ESA 1 and ESA 3 with operation indication via light ring.

Important information
Only motors which are suitable for electronic control through voltage reduction can be connected.

Electronic speed control units, which function on the basis of the phase control principle, can generate motor humming noises which may be perceived as disturbing in the lower speed/ voltage range. Transformer control units which do not generate noise should therefore be used in noise-critical applications.

For flush-mounted installation
1~ alternating current, 230 V

ESU 1



ESU 1 Ref. no. 00236
Max. load 1 A
Front and rotary knob made of white plastic. Installation in standard flush-mounted box. Operation indicator via light ring.
Minimum load 0.15 A
Protection category (installed) IP30
Wiring diagram no. 556.1
Dim. mm W80 x H80 x D21 prot.

ESU 3



ESU 3 Ref. no. 00237
Max. load 2.5 A (T 40 E)
Front and rotary knob made of white plastic. Installation in standard flush-mounted box. Operation indicator via light ring.
Minimum load 0.15 A
Protection category (installed) IP30
Wiring diagram no. 556.1
Dim. mm W80 x H80 x D21 prot.

For surface-mounted installation
1~ alternating current, 230 V

ESA 1



ESA 1 Ref. no. 00238
Max. load 1 A
White plastic casing, operation indicator via light ring in rotary knob.
Minimum load 0.15 A
Protection category IP40
Wiring diagram no. 556.1
Dim. mm W 80 x H 80 x D 65

ESA 3



ESA 3 Ref. no. 00239
Max. load 2.5 A (T 40 E)
White plastic casing, operation indicator via light ring in rotary knob.
Minimum load 0.15 A
Protection category IP40
Wiring diagram no. 556.1
Dim. mm W 80 x H 80 x D 65

Surface-mounted, with reverser
1~ altern. current, 230 V
Can only be used with fan types: REW 150 and REW 200, series HV, H 200/4 and window fans GX.

BSX



BSX Ref. no. 00240
Max. load 1 A (T 40 E)
Surface-mounted speed controller with reverser for reversible fans (supply and extract ventilation) in white plastic casing. Only for fans which are reversible using a changeover switch.
Minimum load 0.15 A
Protection category IP40
Wiring diagram no. 480.2
Dim. mm W 80 x H 80 x D 65

For distribution box installation
1~ alternating current, 230 V

ESE 2.5



ESE 2.5 Ref. no. 01302
Max. load 2.5 A
For installation in switch cabinets and distribution cabinets. Compatible with 35 mm standard profile rails.
Minimum load 0.1 A
Protection category IP30
Wiring diagram no. 376
Dim. mm W 35 x H 86 x D 94