







Speed potentiometer PU/PA with additional functions Switch and LED

☐ Area of application

For direct control/setpoint specification for EC fans with a potentiometer input.

Also with release switch and LED display for operating status (depending on the fan type equipment).

□ Control with potentiometer

The potentiometer is directly connected to the potentiometer input on the fan control. This has a potentiometer power supply of e.g. 10 V DC and a setpoint input of 0–10 V DC.

■ Minimum voltage

A second potentiometer is integrated in the PU/PA. The minimum voltage (min. 1.3 V) is continuously variable, so that a safe motor start-up is guaranteed at the lowest speed setting.

☐ Release switch

The rotary knob for the potentiometer is also a pressure switch which can be used to activate/ deactivate a fan with release input (e.g. 24 V DC).

☐ Light ring with LED

Optical indication of fan operating status. Changes from green (normal operation) to red (fault) for fans with operation signalling relay.

Required supply voltage see technical data.

Product range

☐ LED power supply 10 V

PU 10	Ref. no. 01734
Installation	in standard flush-m. box
Dim. mm	W 80 x H 80 x D 21 protr.

PA 10 Ref. no. 01735
Casing Surf.-mounted installation,
plastic, light grey
Dim. mm W 80 x H 80 x D 65

☐ LED power supply 24 V

PU 24 Ref. no. 01736 Installation, dimensions see PU 10

PA 24 Ref. no. 01737 Installation, dimensions see PA 10

■ Technical data for all types

Potentiometer 10 kOhm (min. potentio. aprx. 7.9 – 16.5 kOhm)
A potentiom. power supply of 10 V provides a control voltage 0 – 10 V DC.
Min. volt. 1.3 – 6.7 V DC adjustable.
LED supply voltage:

 $\begin{array}{ccc} & 10/24 \text{ V DC (P 10/24), min. 6 mA} \\ \text{Perm. ambient temp.} & 0 \text{ to } +40 \text{ °C} \\ \text{Protection category} & \text{IP40} \\ \text{Wiring diagram no.} & 1000 \end{array}$

■ Three level switch SU/SA 10 V / 0-10 V

speed setting

Pictorial schematic SU / SA

SU/A-3 10

☐ Area of application

Three level switch for flush-mounted or surface-mounted installation.

Three level controlling of EC fans or frequency inverters with a 0–10 V DC control input.

☐ Functions

Three different setpoint specifications can be issued via SU/SA

Each level is freely definable from 0–10 V DC via a separate potentiometer.

The connection of a weekly timer (WSUP, WSUP-S, accessories) for switching from 3 level day operation to e.g. night operation is also possible.

Night/reduced operation can also be adjusted via another potentiometer from 0–10 V DC.

Product range

0-10V DC

Flush-mounted

SU-3 10 Ref. no. 04266 Install. deep flush-m. box (D 65 mm) Dim. mm W 80 x H 80 x D 15 prot.

EC fan

Surface-mounted

SA-3 10 Ref. no. 04267
Protection category IP40
Casing Surf.-mounted installation,
plastic, white
Dim. mm W 80 x H 80 x D 60

Technical data for all SU/SA types

Supply input: 10 VDC Ri = 12.5 kOhm (safety extra-low voltage)

Internal consumption: 1.5 mA
Control output: 0 - 10 V DC
either via switch or external switchover
Prot. category IP30 when installed
Protection class III
Wiring diagram no. 1022

References

If necessary, multiple fans can be connected in parallel to one speed potentiometer or three level switch depending on the fan type to be connected.