



DATA SHEET
twilight switches
EDS 16 ohne LF 1
for daylight-linked lighting control (mounting rail installation)
 Article number 09500121



Function

Twilight switches switch on electrical consumers when the daylight level drops below a lower light value and switches off the electrical consumers again when an upper light value is exceeded. Doepke twilight switches are available in designs for outdoor mounting and also for distribution board installation with light sensors mounted outdoors. The twilight switches of this series are devices for distribution board installation with an external light sensor. It is possible to install the switch and external light sensor anywhere, regardless of the lighting to be switched; the distribution board easily handles the settings for the switch-on/switch-off thresholds. The operating and control voltage of the devices is 230 V AC. The EDS 16 compares the current illuminance with the set switch-on threshold. If the illuminance reaches the desired switch-on threshold, a delay time starts. Once the delay time has expired the load relay of the twilight switch is switched on. If the switch-off threshold is reached due to increasing illuminance, the relay switches off again after the delay time has expired. The slow switching responses prevent unnecessary switch-on or dangerous switch-off when the brightness changes briefly (e.g. due to lightning and car headlights).

Features

energy saving thanks to automatic lighting control, switch-on/switch-off delay mutes brief fluctuations in brightness, low internal consumption, easy mounting and adjustment, adjustable switch-on threshold of 2 to 1000 lux, switch-off threshold prescribed by internal factor 1.5, potential-free NO contact (16 A), switch-on/relay status indicated by LED, LF 1 light sensors for outdoor mounting (IP44), cable length to LF 1 up to 100 m, more than one twilight switch can use one LF 1.

Mounting

Twilight switch: quick fastening to mounting rail, any installation position
 Light sensor LF 1: , Wall mounting, preferably facing north or east

Applications

Control of lighting for streets, buildings and industrial premises.

Notes

Depending on the order number, the twilight switch is supplied with or without a light sensor.

Accessories

sensors LF

Technical Data

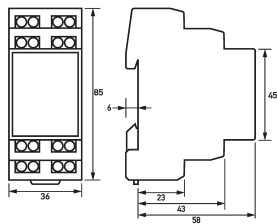
Technical Data	EDS 16 ohne LF 1
Series	EDS 16
Number of (n.o, n.c.,change-over)	1
Manual operating mode possible	false
Adjustability, delay	fixed
Switch-on delay range	max. 60 s
Switch-off delay range	max. 40 s
Adjustability, switch-on threshold twilight	Smooth, logarithmic
Switch-on threshold range shading twilight	2 lux ... 1000 lux
Adjustability of twilight hysteresis	fixed

Subject to technical changes

Technical Data	EDS 16 ohne LF 1
Adjustability of the switch-off threshold hysteresis factor	1.5
Operating voltage (AC)	230 V (207 V ... 253 V)
Operating frequency	50 Hz
Internal consumption	max. 1.6 W
Display (switch-on threshold, status output)	
Number	2
Type	LED
load circuit	
Specification	relays
Rated voltage (AC)	230 V
Rated current (AC)	16 A
Rated power	max. 3680 VA
Rated frequency	50 Hz
max. Rated power glow lamps	3000 VA
max. Rated power fluorescent lamp compensated	200 VA
max. Rated power fluorescent lamp not compensated	1000 VA
max. Rated power fluorescent lamps duo-switching	1000 VA
screw-type terminal (sensor input)	
max. Connection C1 cable length	100 m
Clamping area	0.4 mm ² ... 2.5 mm ²
Tightening torque	max. 0.6 Nm
screw-type terminal (load output)	
Clamping area	0.4 mm ² ... 2.5 mm ²
Tightening torque	max. 0.6 Nm
General data	
Duty cycle	continuous operation (Duty cycle ≤ 100 %, at U _e)
Operating position	optional
Ambient temperature	-10 °C ... 45 °C
Housing type	distribution board housing
Installation type	Mounting rail (35 mm)
Housing material	polycarbonate (PC)
Protection class	IP20
sealable	false
Width	35 mm
Height	85 mm
Depth	65 mm
Installation depth	58 mm
Module widths	2
Weight	0.131 kg
Design requirements/Standards	EN 60669-1

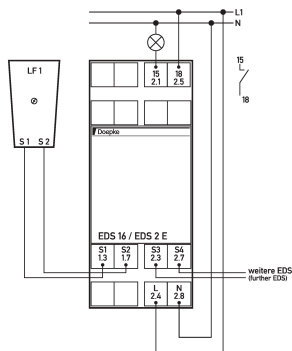
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Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram