LSK 04

General

The daylight sensor has seven independent, programmable threshold value switches with hysteresis function and four independent programmable analogue channels. There are three commands for programming the light sensor functions (SETLSK, PROGLSK, BGRLSK).
The daylight sensor processes illuminances from 1 lx to 70,000 lx with a resolution of 1 lx.

Inputs / Outputs

• 7 threshold value switches (can be analysed via the subnet)

The following bits can be analysed by software:

Digital inputs:

Ex.1	Switch value (threshold value) 1
Ex.2	Switch value (threshold value) 2
Ex.3	Switch value (threshold value) 3
Ex.4	Switch value (threshold value) 4
Ex.5	Switch value (threshold value) 5
Ex.6	Switch value (threshold value) 6
Ex.7	Switch value (threshold value) 7
Ex.8	Feedback signal for "programming underway"

x - light controller module address

Digital outputs:

Ax.1	Save switch-on value (automatic threshold) 1
Ax.2	Save switch-on value (automatic threshold) 2
Ax.3	Save switch-on value (automatic threshold) 3
Ax.4	Save switch-on value (automatic threshold) 4
Ax.5	Save switch-on value (automatic threshold) 5
Ax.6	Save switch-on value (automatic threshold) 6
Ax.7	Save switch-on value (automatic threshold) 7
Ax.8	Key for programming the set switch-on value (automatic threshold)

x - light controller module address

Function displays
• 1 red LED indicates the operating voltage
• 1 flashing yellow LED indicates the communication with the master via subnet

Connections
• 1 connection for the subnet (BUS A and BUS B, RS-485)
• 1 connection for the operating voltage (Ub, 0V)

Design
• Round, diameter 51mm, for flush mounted boxes, installation depth 23mm

Special function DIP switch 1
• Baudrate
  - switch OFF data transmission rate 38400 Baud
  - switch ON data transmission rate 9600 Baud

Assembly
The light sensor should face out of the room towards the main inflow of light. The light sensor should be mounted in such a way that the sensor head of the light sensors cannot record any artificial light from the light circuits to be controlled. You can align the sensor head in the desired direction once the light sensor has been secured.

Programming the threshold value switch
The outside light sensor has seven independent threshold value switches. You can teach in a threshold value to each threshold value switch using a programming key. You can also set a hysteresis and a time constant for the lag of the seven threshold value switches for each light sensor using the "SETLSK" command.

If you do not set these values the following defaults will apply:

• Hysteresis: default = 1%
• Time constant: default = 0s
• The hysteresis is designed to prevent the switch from repeatedly switching around the threshold value. It is specified in % (1 to 100 %).
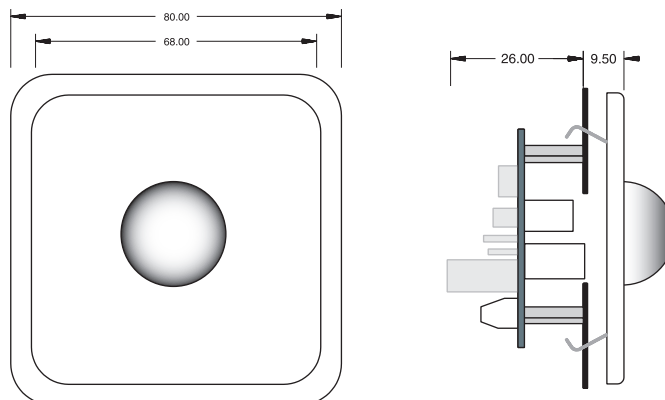
Technical data

Type	LSK-04
Art. Nr.	80085004 (AP achievement 80085014)
Operating voltage	12-35V DC or 12 - 27V AC
Current consumption	25mA
Subnet (RS-485)	max. 5,6V limted by Z-diodes
Dimensions	DxH 51x45mm with sensor (without cover)
Weight	ca. 45g without front plate
Connection	Screw terminals 1,5mm² for BUS
Operating temperature	-10...+60°C
Storage temperature	-25...+70°C
Humidity	0...85 % r.F. non condensing
Protection grade	IP 00 (without front plate)
ESD immunity	Category 3 according to IEC 1000-4-2
EMV immunity	Use in typical industrial enviroment. Category 3 according to IEC 1000-4-4 (Test was carried out within a whole system)
CE sign	yes

Terminal assignment

≅ Ub	Operating voltage
0V	Operating voltage
A	Subnet (BUS A, RS-485)
B	Subnet (BUS B, RS-485)

View

Wiring diagram

```
+24V
0V=
BUS-A
BUS-B
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ISYGLT
light sensor
LSK-04

address
1 2 3 4 5 6 7 8

Art.-Nr.: 80085004

Ub 0V A B