finder®
SWITCH TO THE FUTURE

Light dependent relay 16 A



Exterior light control

Driver's control console

Internal light management

11
SERIES

FINDER reserves the right to alter characteristics at any time without notice. FINDER assumes no liability for damage to persons or property, caused as a result of the incorrect use or application of its products.

Relays for automatic control of lighting according to ambient light level - with separate light sensor

- Complies with EN 45545-2 +A1:2016 (protection against fire of materials), EN 61373 (resistance against random vibrations and shock, Category 1, Class B), EN 50155 (resistance to temperature and humidity, T1 class)
- Sensitivity adjustment from 1 to 100 lux
- One module, 17.5 mm wide
- Low energy consumption
- 24 V DC/AC version
- For the first 3 working cycles the delay time (On and Off) is reduced to zero in order to aid installation
- LED status indication
- SELV separation between contact and supply circuit
- Double insulation between supply and light sensor
- Delay Time: 1 sec ON
  6 sec OFF
- 35 mm rail (EN 60715) mount
- Cadmium free contact material
- Cadmium free light sensor (IC photo diode)

11.31



- 1 pole
- 17.5 mm wide

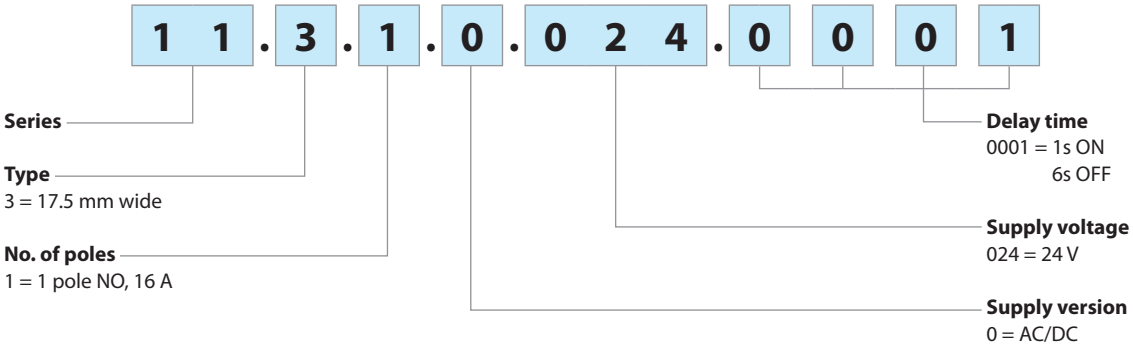
* Short term (10 min) +70°C

For outline drawing see page 5

Contact specification			
Contact configuration			1 NO (SPST-NO)
Rated current/Maximum peak current		A	16/30 (120 - 5 ms)
Rated voltage/ Maximum switching voltage		V AC	250/400
Rated load AC1		VA	4000
Rated load AC15 (230 V AC)		VA	750
Nominal lamp rating:			
	230 V incandescent/halogen	W	2000
	fluorescent tubes with electronic ballast	W	1000
	fluorescent tubes with electromechanical ballast	W	750
	CFL	W	400
	230 V LED	W	400
	LV halogen or LED with electronic ballast	W	400
	LV halogen or LED with electromechanical ballast	W	800
Minimum switching load		mW (V/mA)	1000 (10/10)
Standard contact material			$AgSnO_2$
Supply specification			
Nominal voltage (U_N)		V AC (50/60 Hz)	24
		DC	24
Rated power		VA (50 Hz)/W	2.5/0.9
Operating range		V AC (50 Hz)	16.8…28.8
		DC	16.8…32
Technical data			
Electrical life at rated load in AC1		cycles	$100 \cdot 10^3$
Threshold setting:		Standard range lx	1…100
		High range lx	—
Hysteresis (switching Off/On ratio)			1.25
Delay time: switching On/Off		s	1/6
Ambient temperature range		°C	–25…+55*
Protection category: light dependent relay/light sensor			IP 20/IP 54
Approvals (according to type)			CE EAC

Ordering information

Example: 11 series light dependent relay, 1 NO (SPST-NO) 16 A contact, 24 V AC/DC supply.



Technical data

Insulation		Dielectric strength	Impulse (1.2/50 µs)
	between supply and contacts	4000 V AC	6 kV
	between supply and light sensor	2000 V AC	4 kV
	between open contacts	1000 V AC	1.5 kV
EMC specifications			
Type of test		**Reference standard**	
Electrostatic discharge	contact discharge	EN 61000-4-2	4 kV
	air discharge	EN 61000-4-2	8 kV
Radiated electromagnetic field (80…1000 MHz)		EN 61000-4-3	10 V/m
Fast transients	on supply terminals	EN 61000-4-4	3 kV
(burst 5/50 ns, 5 and 100 kHz)	on light sensor connection	EN 61000-4-4	3 kV
Voltage pulses on supply terminals	common mode	EN 61000-4-5	4 kV
(surge 1.2/50 µs)	differential mode	EN 61000-4-5	3 kV
Radiofrequency common mode voltage	on supply terminals	EN 61000-4-6	10 V
(0.15…80 MHz)	on light sensor	EN 61000-4-6	3 V
Voltage dips	70% U_N, 40% U_N	EN 61000-4-11	10 cycles
Short interruptions		EN 61000-4-11	10 cycles
Radio frequency conducted emissions	0.15…30 MHz	EN 55014	class B
Radiated emissions	30…1000 MHz	EN 55014	class B
Terminals			
Screw torque	Nm	0.8	
Max. wire size	solid cable	1 x 6 / 2 x 4 mm²	1 x 10 / 2 x 12 AWG
	stranded cable	1 x 4 / 2 x 2.5 mm²	1 x 12 / 2 x 14 AWG
Wire strip length	mm	9	
Other data			
Cable grip of light sensor	mm	7.5…9	
Maximum cable length relay to light sensor	m	50 (2 x 1.5 mm²)	
Preset threshold	lx	10	
Power lost to the environment			
	in stand-by W	0.3	
	without contact current W	0.9	
	with rated current W	1.7	

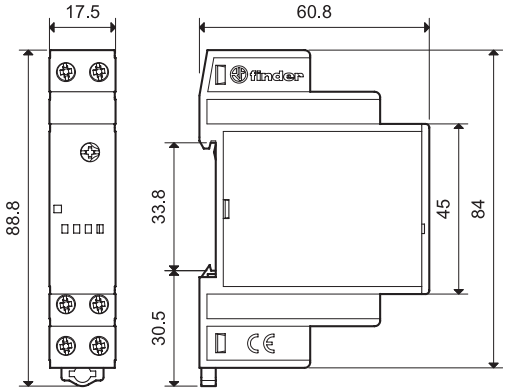
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LED functions

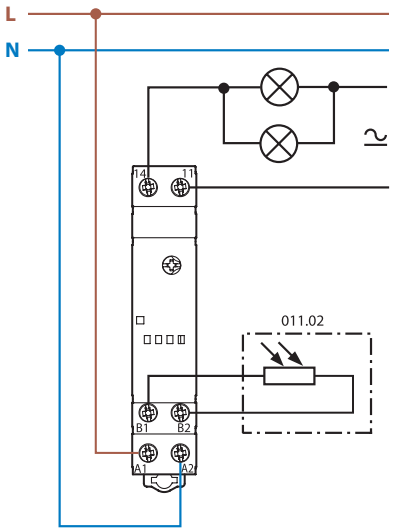
LED	Supply voltage	NO output contact 11.31
———	OFF	Open
▮ ▮ ▮	ON	Open
▮▮▮▮▮▮▮	ON	Closed

Outline drawings

11.31
Screw terminal



Wiring diagrams



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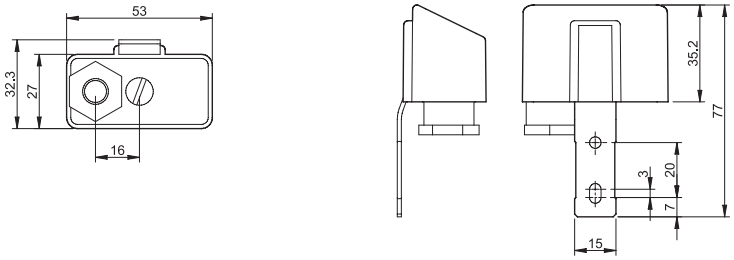
Accessories



011.02

Light sensor (supplied with light dependent relay)	011.02

- Ambient temperature range: –40…+70 °C
- Cadmium free
- Non polarized
- Double insulated with respect to light dependent relay supply
- Not compatible with type 11.71.0.024.1001



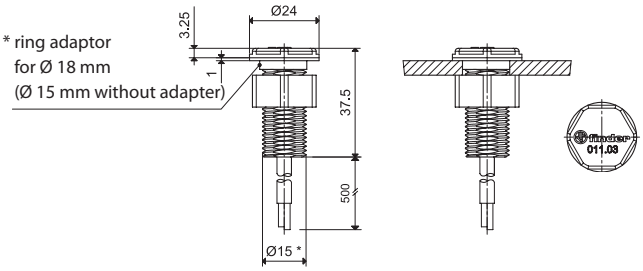


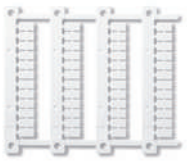
011.03

Flush-mounted light sensor (protection category: IP66/67)	011.03

- Ambient temperature range: –40…+70 °C
- Cadmium free
- Non polarized
- Double insulated with respect to light dependent relay supply
- Not compatible with type 11.71.0.024.1001
- Supplied with light dependent relay (packaging code POA)

Connection cable		
Material		PVC, flame retardant
Conductor size	mm^2	0.5
Cable length	mm	500
Cable diameter	mm	5.0
Working voltage	V	300/500
Test voltage, cable	kV	2.5
Max. temperature	°C	+90





060.48

Sheet of marker tags, plastic, 48 tags, 6x12 mm, for CEMBRE's thermal transfer printers	060.48

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