

PLD E 608 W ...

**LED enclosure light, AC wide-range input,
color temperature 4000 K, with motion detector,
with/without socket**

Data sheet
106414_en_05

© PHOENIX CONTACT 2016-02-29



1 Description

The LED light is designed to illuminate the interior of control cabinets. The integrated optics ensure optimum illumination of the control cabinet.

You can mount the LED light using the integrated tool-free snap-in hook system and also connect multiple lights one after the other.

The light mode can be controlled via a button. The light can be permanently switched on or off or automatic mode can be enabled. In automatic mode, the light is switched on and off via an integrated motion detector.

If a socket is integrated, it can be used to connect an additional device.

Features

- Color temperature 4000 K
- Lights can be connected in series
- IP20 degree of protection
- Motion sensor
- Socket (depending on type)



Make sure you always use the latest documentation.
It can be downloaded from the product at phoenixcontact.net/products.

2	Table of contents	
1	Description	1
2	Table of contents	2
3	Ordering data	3
4	Technical data	5
5	Safety notes.....	8
6	Illuminance distribution	8
7	Pin assignment.....	9
8	Using the socket.....	9
9	Connection examples	9
10	Function description	9

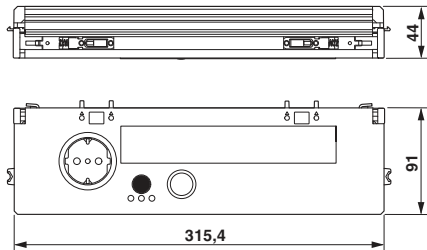
3 Ordering data

Description	Type	Order No.	Pcs./Pkt.
LED enclosure light, AC wide-range input, color temperature 4000 K, with motion sensor, type F socket (Schuko)	PLD E 608 W 315/F	2702226	1
LED enclosure light, AC wide-range input, color temperature 4000 K, with motion sensor, type B socket (e.g., for USA)	PLD E 608 W 315/B	2702227	1
LED enclosure light, AC wide-range input, color temperature 4000 K, with motion sensor, type E socket (e.g., for France and Belgium)	PLD E 608 W 315/E	2702228	1
LED enclosure light, AC wide-range input, color temperature 4000 K, with motion sensor	PLD E 608 W 265	2702224	1
Accessories (PLD E 608 W 315/F)			
Description	Type	Order No.	Pcs./Pkt.
Power cable, 3-position, PVC, orange RAL 2004, free cable end, on Socket straight, black, Cable length: 3 m	PLD E 608-CA-3,0/FS AM	2702302	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 0.6 m	PLD E 608-CA-MS/0,6/FS AM	2702303	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 1 m	PLD E 608-CA-MS/1,0/FS AM	2702304	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 4 m	PLD E 608-CA-MS/4,0/FS AM	2702305	1
Connector for series connection, black, 3-pos.	PLD E 608-CO-MS	2702308	5
Socket for power supply and series connection, black, 3-pos.	PLD E 608-CO-FS	2702309	5
T-distributor with 2 sockets and one connector for series connection, black, 3-pos.	PLD E 608-CO-MS/FS/FR	2702310	5
Set for magnetic mounting of class 600 PLD enclosure lights	PLD E 608-ME MM	2702315	1
Set for screw mounting of class 600 PLD enclosure lights, including screws	PLD E 608-ME SM	2702316	1
Set consisting of two mounting carriages with snap-in hooks for class 600 PLD enclosure lights (replacement part)	PLD E 608-ME SFM	2702317	1
Accessories (PLD E 608 W 315/B)			
Description	Type	Order No.	Pcs./Pkt.
Power cable, 3-position, PVC, gray RAL 7001, free cable end, on Socket straight, black, Cable length: 3 m	PLD E 608-CA-3,0/FS/UL	2702306	1
Power cable, 3-position, PVC, gray RAL 7001, Plug straight, black, on Socket straight, black, Cable length: 0.6 m	PLD E 608-CA-MS/0,6/FS/UL	2702307	1
Connector for series connection, black, 3-pos.	PLD E 608-CO-MS	2702308	5
Socket for power supply and series connection, black, 3-pos.	PLD E 608-CO-FS	2702309	5
T-distributor with 2 sockets and one connector for series connection, black, 3-pos.	PLD E 608-CO-MS/FS/FR	2702310	5
Set for magnetic mounting of class 600 PLD enclosure lights	PLD E 608-ME MM	2702315	1
Set for screw mounting of class 600 PLD enclosure lights, including screws	PLD E 608-ME SM	2702316	1
Set consisting of two mounting carriages with snap-in hooks for class 600 PLD enclosure lights (replacement part)	PLD E 608-ME SFM	2702317	1

Accessories (PLD E 608 W 315/E)	Type	Order No.	Pcs./Pkt.
Power cable, 3-position, PVC, orange RAL 2004, free cable end, on Socket straight, black, Cable length: 3 m	PLD E 608-CA-3,0/FS AM	2702302	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 0.6 m	PLD E 608-CA-MS/0,6/FS AM	2702303	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 1 m	PLD E 608-CA-MS/1,0/FS AM	2702304	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 4 m	PLD E 608-CA-MS/4,0/FS AM	2702305	1
Connector for series connection, black, 3-pos.	PLD E 608-CO-MS	2702308	5
Socket for power supply and series connection, black, 3-pos.	PLD E 608-CO-FS	2702309	5
T-distributor with 2 sockets and one connector for series connection, black, 3-pos.	PLD E 608-CO-MS/FS/FR	2702310	5
Set for magnetic mounting of class 600 PLD enclosure lights	PLD E 608-ME MM	2702315	1
Set for screw mounting of class 600 PLD enclosure lights, including screws	PLD E 608-ME SM	2702316	1
Set consisting of two mounting carriages with snap-in hooks for class 600 PLD enclosure lights (replacement part)	PLD E 608-ME SFM	2702317	1
Accessories (PLD E 608 W 265)	Type	Order No.	Pcs./Pkt.
Power cable, 3-position, PVC, orange RAL 2004, free cable end, on Socket straight, black, Cable length: 3 m	PLD E 608-CA-3,0/FS AM	2702302	1
Power cable, 3-position, PVC, gray RAL 7001, free cable end, on Socket straight, black, Cable length: 3 m	PLD E 608-CA-3,0/FS/UL	2702306	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 0.6 m	PLD E 608-CA-MS/0,6/FS AM	2702303	1
Power cable, 3-position, PVC, gray RAL 7001, Plug straight, black, on Socket straight, black, Cable length: 0.6 m	PLD E 608-CA-MS/0,6/FS/UL	2702307	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 1 m	PLD E 608-CA-MS/1,0/FS AM	2702304	1
Power cable, 3-position, PVC, orange RAL 2004, Plug straight, black, on Socket straight, black, Cable length: 4 m	PLD E 608-CA-MS/4,0/FS AM	2702305	1
Connector for series connection, black, 3-pos.	PLD E 608-CO-MS	2702308	5
Socket for power supply and series connection, black, 3-pos.	PLD E 608-CO-FS	2702309	5
T-distributor with 2 sockets and one connector for series connection, black, 3-pos.	PLD E 608-CO-MS/FS/FR	2702310	5
Set for magnetic mounting of class 600 PLD enclosure lights	PLD E 608-ME MM	2702315	1
Set for screw mounting of class 600 PLD enclosure lights, including screws	PLD E 608-ME SM	2702316	1
Set consisting of two mounting carriages with snap-in hooks for class 600 PLD enclosure lights (replacement part)	PLD E 608-ME SFM	2702317	1

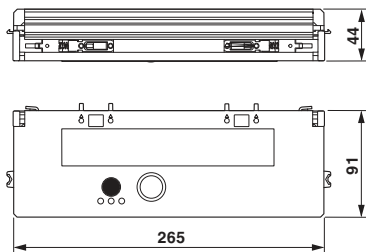
4 Technical data

Dimensions (nominal sizes in mm)



Length	315.4 mm
Width	91 mm
Height	44 mm

Dimensions (nominal sizes in mm)



Length	265 mm
Width	91 mm
Height	44 mm

General data

Weight (PLD E 608 W 315/F)	770 g
Weight (PLD E 608 W 315/B)	770 g
Weight (PLD E 608 W 315/E)	770 g
Weight (PLD E 608 W 265)	650 g
Color	traffic grey A RAL 7042
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 %
Permissible humidity (storage/transport)	5 % ... 95 %
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20
Protection class	I
Mounting position	any
Mounting type	Snap-in hook system

Special properties

can be switched in series
including mounting accessories

Connection data

Connection method Installation coupler
Number of positions 3

Power supply for module electronics

Supply voltage range	85 V AC ... 265 V AC (50/60 Hz) 100 V AC ... 250 V AC (50/60 Hz, nominal voltage)
Supply voltage range (PLD E 608 W 315/B)	100 V AC ... 125 V AC (50/60 Hz) 100 V AC ... 125 V AC (50/60 Hz, nominal voltage)
Supply voltage range (PLD E 608 W 315/E)	85 V AC ... 265 V AC (50/60 Hz) 100 V AC ... 250 V AC (50/60 Hz, nominal voltage)
Supply voltage range (PLD E 608 W 265)	85 V AC ... 265 V AC (50/60 Hz) 100 V AC ... 250 V AC (50/60 Hz, nominal voltage)
Power consumption	9.8 W

Light properties

Source of light type	LED
Number of LEDs	23
Service life, lighting appliance	50,000 h (L70)
Light color	Neutral white
Color temperature	4000 K
Color rendering index	85
Luminous flux	685 lm (Net luminous flux)
Illumination	max. 1255 lx (50 cm distance) max. 310 lx (Distance of 1 m)

Motion detector

Detection range	1.5 m ±0.25 m
Detection angle	35 ° ±5° (Horizontal and vertical)
Lighting duration	180 s (Retriggered)

Socket (PLD E 608 W 315/F)

Socket	Type F
Can be used as typical for the country	Germany Finland Greece Luxembourg Netherlands Norway Austria Portugal Russia Sweden Spain Turkey
Current consumption	max. 16 A (from the socket)

Socket (PLD E 608 W 315/B)

Socket	Type B
Can be used as typical for the country	USA Canada Brazil Japan
Current consumption	max. 12 A (from the socket)

Socket (PLD E 608 W 315/E)

Socket	Type E
Can be used as typical for the country	France Belgium Poland
Current consumption	max. 16 A (from the socket)

Socket (PLD E 608 W 265)

Socket	none
--------	------

Mechanical tests

Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6	5g
Shock in acc. with EN 60068-2-27/IEC 60068-2-27	25g
Continuous shock according to EN 60068-2-27/IEC 60068-2-27	10g

Conformance with EMC Directive 2004/108/EC (valid until 19.04.2016) / 2014/30/EU (valid from 20.04.2016)**Noise immunity test in accordance with EN 61000-6-2**

Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2	Criterion B, 4 kV contact discharge, 8 kV air discharge
Electromagnetic fields EN 61000-4-3/IEC 61000-4-3	Criterion A; Field intensity: 10 V/m
Fast transients (burst) EN 61000-4-4/IEC 61000-4-4	Criterion A, ± 4 kV
Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5	Criterion A, ± 1 kV (symmetrical), ± 2 kV (asymmetrical)
Conducted interference EN 61000-4-6/IEC 61000-4-6	Criterion A; Test voltage 10 V

Noise emission test according to EN 61000-6-3

Radio interference properties EN 55015	Class B
--	---------

Approvals

For the latest approvals, please visit phoenixcontact.net/products.

5 Safety notes



WARNING: Explosion hazard

Do not install and operate the light in potentially explosive spaces!



WARNING: dangerous contact voltage

Before any work on the light, always switch off the supply voltage and ensure it cannot be switched on again!



CAUTION: Impaired vision

Looking at the light continually can temporarily impair vision. This can increase the danger of accidents. Therefore do not look at a light source for a long period.



NOTE: Damage to the electronics

The IP20 degree of protection (IEC 60529/EN 60529) of the device is intended for use in a clean and dry environment.

Do not subject the device to mechanical and/or thermal loads that exceed the specified limits.

6 Illuminance distribution

Please refer to the figure below for the illuminance distribution.

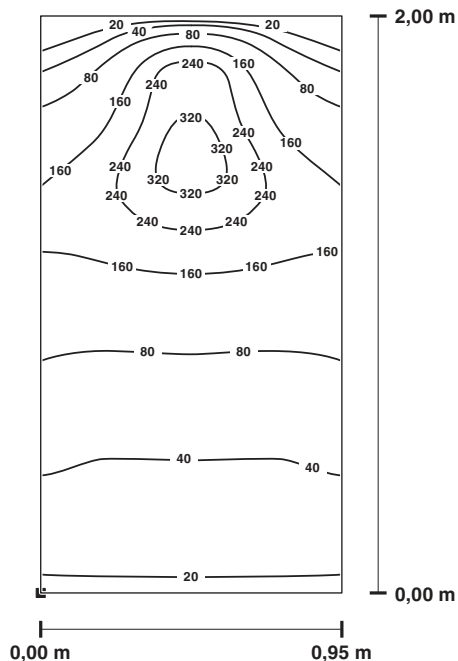


Figure 1 Illuminance distribution in Lux (installation depth of the control cabinet plate $d = 200$ mm)

7 Pin assignment

To supply power to the light, connect the cable to the X01 PWR IN connector.

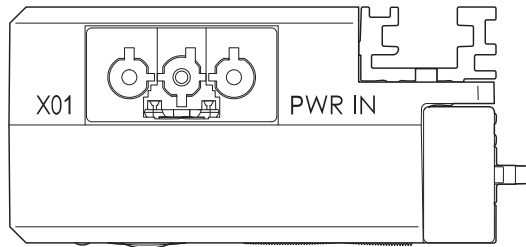


Figure 2 Connection of the supply voltage of a light

To connect multiple lights in series, connect the X02 PWR OUT output of one light to the X01 PWR IN input of the following light.

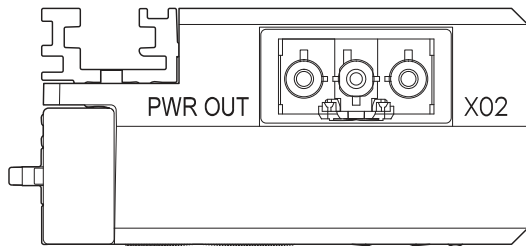


Figure 3 Forwarding of the supply voltage with the series connection of lights

8 Using the socket

If a socket is integrated, it can be used to connect an additional device.



NOTE: Damage to the electronics
Observe the maximum permissible current carrying capacity when connecting a device to the socket.

9 Connection examples

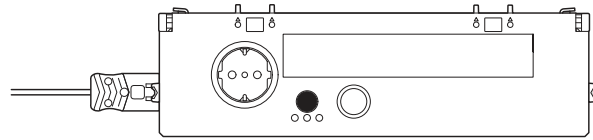


Figure 4 Connection of a light

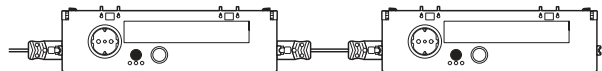


Figure 5 Series connection of two lights

10 Function description

Once you have provided voltage to the light, it is ready for operation and in mode 0 (delivery condition) or in the most recently selected mode.

Button S1 on the light is used to control the light mode. The current mode is indicated via the status LEDs.

Press the button to change mode. Each time button S1 is pressed, the light changes to the next mode: 0 - A - I.

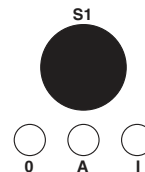


Figure 6 Button S1 and status LEDs

Mode	Status LEDs	Description
0	Red	OFF
		Rated control supply voltage is connected, light is out
A	Yellow	Automation mode: motion detector is active
		Light switches on when movement occurs in the vicinity (approx 1.5 m) for 180 seconds and then switches off again
I	Green	ON
		Light is on continuously