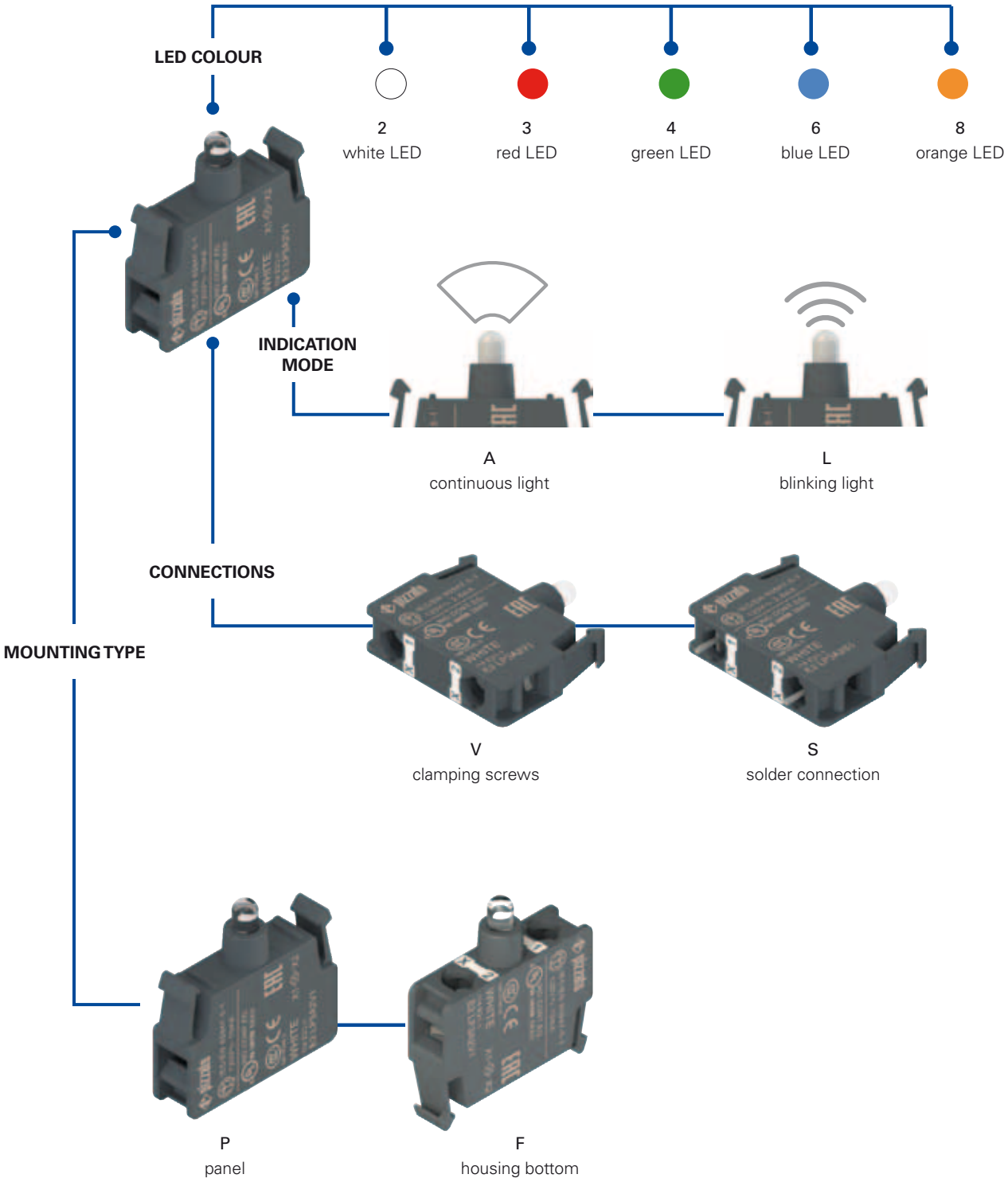
Selection diagram



Code structure

Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

E2 LP1A3V1

Mounting type	
P	panel
F	housing bottom

Supply voltage	
1	12 … 30 Vac/dc (high luminosity)
3	120 Vac (high luminosity)
4	230 Vac (high luminosity)
7	120 Vac/dc (standard luminosity)
8	230 Vac/dc (standard luminosity)

Indication mode	
A	continuous light
L	blinking light (12 … 30 V supply only)

LED colour	
2	white
3	red
4	green
6	blue
8	orange

Connection type	
V	clamping screws
S	solder connection (panel mounting only)

Protection degree	
0	IP00 with solder connection
1	IP20 screw connection

Main features

- High luminosity LED
- Three supply voltages:
  12 … 30 Vac/dc, 120 Vac, 230 Vac
- continuous or blinking light
- Panel and base mounting versions

Markings and quality marks:

IMQ approval:	CA02.04805
UL approval:	E131787
CCC approval:	2013010305631156
EAC approval:	RU C-IT ДМ94.B.01024

Technical data

General data

Protection degree acc. to IEC 60529:	IP20 with screw connection IP00 with solder connection
Ambient temperature:	-25°C … +70°C
Endurance:	100.000 hours (at rated voltage and +25 °C ambient temperature)
Utilization requirements:	see page 124

LED unit

Cable cross section:	min. 1 x 0.5 mm² (1 x AWG 20) max. 2 x 2.5 mm² (2 x AWG 14)
Operating voltages and currents: (high luminosity)	12 … 30 Vac/dc; 5 … 15 mA 102 … 138 Vac; 10 … 12 mA 195 … 264 Vac; 9 … 10 mA
Operating voltages and currents: (standard luminosity)	102 … 138 Vac/dc; 2.5 mA 195 … 264 Vac/dc; 2.5 mA
Tightening torque of the terminal screws:	0.6 … 0.8 Nm
Blinking frequency:	1 Hz

In conformity with standards:
IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1, UL 508, CSA 22-2 no.14.

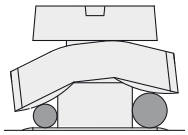
In conformity with the requirements of:
Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and EMC Directive 2004/108/EC.

General data

Continuous or blinking light

The LED units can be provided with two different lighting types: continuous or blinking light. The blinking light versions allow a faster identification on the panel of the lit device compared to the continuous light. The particular internal electronic circuit autonomously alternates the ON and OFF phases without any special electrical connection.

Clamping screw plates

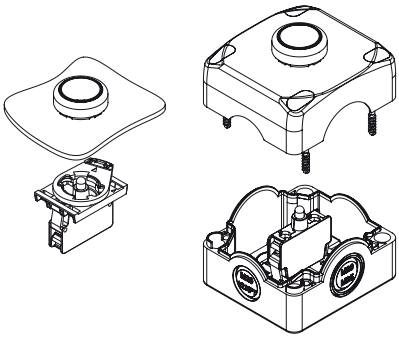


These clamping screw plates of the LED units have a particular "roofing tile" structure and are connected loosely to the clamping screw. In this way, during the wires fixing, the clamping screw plate is able to suit to cables of different diameter and tends to tighten the wires toward the screw instead of permitting them to escape towards the outside.

High luminosity LED

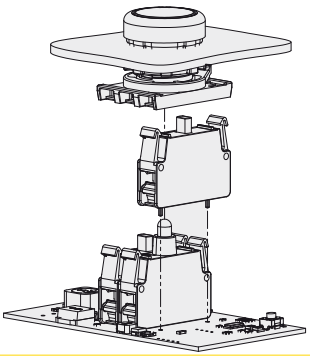
The LED units to combine with the luminous devices feature a high-intensity LED (Light Emitting Diodes), which ensures greater visibility. The use of an integrated LED gives greater benefits compared to incandescence lamps because they last longer and absorb less power than the latter. LEDs feature greater reliability, low consumption, and high resistance to vibrations.

Available versions



The LED units of the signalling and command devices feature two types of coupling: panel and base mounting.

Solder connection on printed circuit



Versions with panel mounting of the EROUND series LED units with solder pin are available. In cases where there is no wiring, but a printed circuit, these LED units can be directly welded on the latter.

Characteristics approved by UL

Rated supply voltage Un: 12 … 30 Vac/dc, Rated supply current In: 5 … 15 mA

Notes:
- Use 60° or 75 °C copper (Cu) conductor, rigid or flexible, wire size AWG 12-20.
- Terminal tightening torque of 7.1 Lb In (0.8 Nm).

Characteristics approved by IMQ

Rated insulation voltage (Ui): 500 V
Type of indicator light: Incorporated LED
Terminals: screw terminals
Rated operating voltage (Ue): 12 … 30 Vac/dc (5 … 15 mA), 120 Vac (10 mA), 230 Vac (10 mA)

In conformity with standards: EN 60947-1, EN 60947-5-1:2004 + A1:2009, fundamental requirements of the Low Voltage Directive 2006/95/EC.

Selection table for LED units

5 pcs. packs

LED colour	Actuator colour	Panel mounting Screw connection Operating voltage 12 … 30 Vac/dc	120 Vac	230 Vac
white	white / yellow	E2 LP1A2V1	E2 LP3A2V1	E2 LP4A2V1
red	red	E2 LP1A3V1	E2 LP3A3V1	E2 LP4A3V1
green	green	E2 LP1A4V1	E2 LP3A4V1	E2 LP4A4V1
blue	blue	E2 LP1A6V1	E2 LP3A6V1	E2 LP4A6V1
orange	orange	E2 LP1A8V1	E2 LP3A8V1	E2 LP4A8V1

LED colour	Actuator colour	Panel mounting Solder connection Operating voltage 12 … 30 Vac/dc	120 Vac	230 Vac
white	white / yellow	E2 LP1A2S0	E2 LP3A2S0	E2 LP4A2S0
red	red	E2 LP1A3S0	E2 LP3A3S0	E2 LP4A3S0
green	green	E2 LP1A4S0	E2 LP3A4S0	E2 LP4A4S0
blue	blue	E2 LP1A6S0	E2 LP3A6S0	E2 LP4A6S0
orange	orange	E2 LP1A8S0	E2 LP3A8S0	E2 LP4A8S0

It is recommended to observe the colour combination of the LEDs with the actuator colours.

Selection table for LED units

5 pcs. packs

LED colour	Actuator colour	Housing bottom mounting Screw connection Operating voltage 12 … 30 Vac/dc	120 Vac	230 Vac
white	white / yellow	E2 LF1A2V1	E2 LF3A2V1	E2 LF4A2V1
red	red	E2 LF1A3V1	E2 LF3A3V1	E2 LF4A3V1
green	green	E2 LF1A4V1	E2 LF3A4V1	E2 LF4A4V1
blue	blue	E2 LF1A6V1	E2 LF3A6V1	E2 LF4A6V1
orange	orange	E2 LF1A8V1	E2 LF3A8V1	E2 LF4A8V1

Complete units with LED unit and mounting adapter

LED colour	LED pos. 2	pos. 3	pos. 1	Panel mounting Operating voltage 12 … 30 Vac/dc
white	-	LED	-	E2 AC-XXBC0053 E2 1BAC11 + E2 LP1A2V1
red	-	LED	-	E2 AC-XXBC0055 E2 1BAC11 + E2 LP1A3V1
green	-	LED	-	E2 AC-XXBC0054 E2 1BAC11 + E2 LP1A4V1
blue	-	LED	-	E2 AC-XXBC0056 E2 1BAC11 + E2 LP1A6V1
orange	-	LED	-	E2 AC-XXBC0057 E2 1BAC11 + E2 LP1A8V1

Items with code on **green** background are stock items

Complete units with LED unit, contact block and mounting adapter

LED colour	Contacts			Panel mounting
	pos. 2	pos. 3	pos. 1	Operating voltage 12 … 30 Vac/dc
white	1NC	LED	-	**E2 AC-XXBC0020** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A2V1
red	1NC	LED	-	**E2 AC-XXBC0037** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A3V1
green	1NC	LED	-	**E2 AC-XXBC0029** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A4V1
blue	1NC	LED	-	**E2 AC-XXBC0045** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A6V1
orange	1NC	LED	-	**E2 AC-XXBC0058** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A8V1

Other combinations on request.

LED colour	Contacts			Panel mounting
	pos. 2	pos. 3	pos. 1	Operating voltage 12 … 30 Vac/dc
white	-	LED	1NO	**E2 AC-XXBC0021** E2 1BAC11 + E2 LP1A2V1 + E2 CP10G2V1
red	-	LED	1NO	**E2 AC-XXBC0039** E2 1BAC11 + E2 LP1A3V1 + E2 CP10G2V1
green	-	LED	1NO	**E2 AC-XXBC0031** E2 1BAC11 + E2 LP1A4V1 + E2 CP10G2V1
blue	-	LED	1NO	**E2 AC-XXBC0047** E2 1BAC11 + E2 LP1A6V1 + E2 CP10G2V1
orange	-	LED	1NO	**E2 AC-XXBC0059** E2 1BAC11 + E2 LP1A8V1 + E2 CP10G2V1

Other combinations on request.

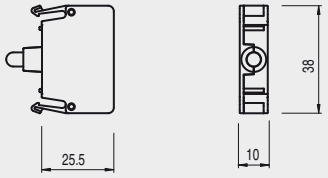
LED colour	Contacts			Panel mounting
	pos. 2	pos. 3	pos. 1	Operating voltage 12 … 30 Vac/dc
white	1NC	LED	1NO	**E2 AC-XXBC0027** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A2V1 + E2 CP10G2V1
red	1NC	LED	1NO	**E2 AC-XXBC0044** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A3V1 + E2 CP10G2V1
green	1NC	LED	1NO	**E2 AC-XXBC0036** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A4V1 + E2 CP10G2V1
blue	1NC	LED	1NO	**E2 AC-XXBC0052** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A6V1 + E2 CP10G2V1
orange	1NC	LED	1NO	**E2 AC-XXBC0060** E2 1BAC11 + E2 CP01G2V1 + E2 LP1A8V1 + E2 CP10G2V1

Other combinations on request.

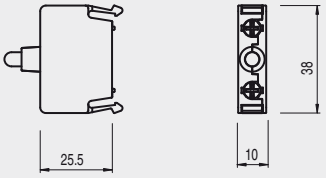
Dimensions

All measures in the drawings are in mm

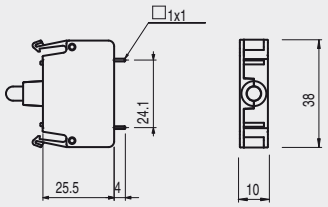
LED unit for panel mounting



LED unit for base mounting



LED unit for panel mounting, solder connection



Ø 1.4 mm holes on PCB

➔ The 2D and 3D files are available at **www.pizzato.com**