

## CRYSTAL SGN LED

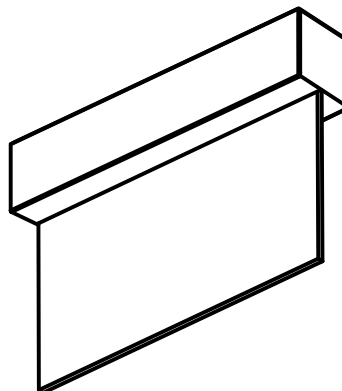
INSTALLATION AND MAINTENANCE MANUAL **EN**

## MOUNTING TYPE

- C5 - recessed
- C6 - directly to the ceiling
- C7 - flexible suspended
- W3 - side to the wall
- W4 - back to the wall

## SYSTEM VARIANT

- CB - luminaire supplied from HVCBS (230V AC/216V DC), without address module
- CBAM - luminaire supplied from the HVCBS (230V AC/216V DC), with built-in address module and operating mode selection
- LV - luminaire supplied with 24V DC from the LVDBS system, without address module
- LVAM - luminaire supplied with 24V DC from the LVDBS system, with built-in address module and operating mode selection



## TECHNICAL DATA

Supply voltage	CB	230V AC 50/60HZ 80-275V DC
	CBAM	230V AC 50/60HZ 170-275V DC
	LV, LVAM	10-32V DC
Power consumption		3W
Current consumption		0,5
Protection class	CB, CBAM	I
	LV, LVAM	III
Ingress protection		IP20, IP40 <sup>1)</sup>
Light source type		LED strip <sup>2)</sup>

Light source temperature		5000K
Colour rendering index		70
Light source supply power		1W
Light source lifespan		> 50 000h
Ambient temperature range	CB, CBAM	-10°C - +55°C
	LV, LVAM	TE: <sup>3)</sup> -25 - +65°C -25°C - +70°C
Supply cable cross-section area		0,5 - 2,5mm <sup>2</sup>
Supply cable diameter		13 mm
Suitable for through wiring		YES

<sup>1)</sup> Depends on mounting type; <sup>2)</sup> Non-exchangeable, but serviveable light source;

<sup>3)</sup> TE - extended temperature range

## SAFETY

- During the installation and usage of emergency luminaires, follow the national safety rules as well as generally accepted technical rules.
- Supply voltage should never be removed from the permanent phase by any external switches, relays or contactors (BMS, wall switch, etc.).
- During usage of emergency luminaires keep a register of inspection reports.
- Luminaire installation or maintenance has to be preceded by turning off the power supply and battery.
- Ensure that all foreign bodies are removed before the luminaire power is switched on.
- The luminaire is to be used undamaged and in accordance with specifications.
- The luminaire designed for use inside the building.

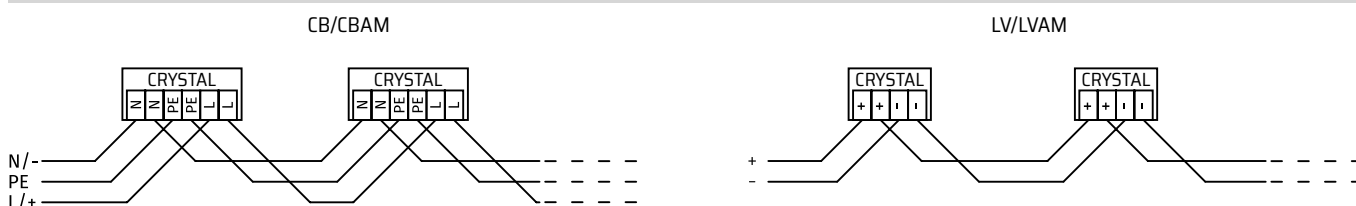
The above-mentioned luminaire is a fire protection equipment and therefore falls within relevant standards and regulations.



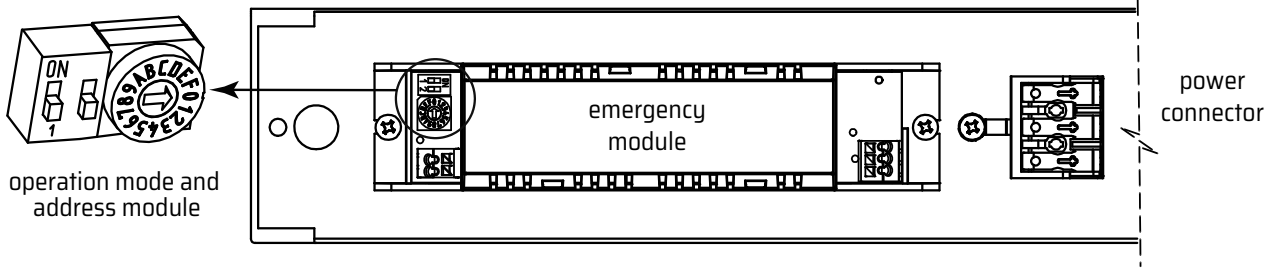
**NOT OBEYING THE SAFETY INSTRUCTIONS AND RECOMMENDATIONS CAN CAUSE LIFE THREAT OR EVEN DEATH**

Not obeying this instruction manual can result in luminaire damage and loss of warranty

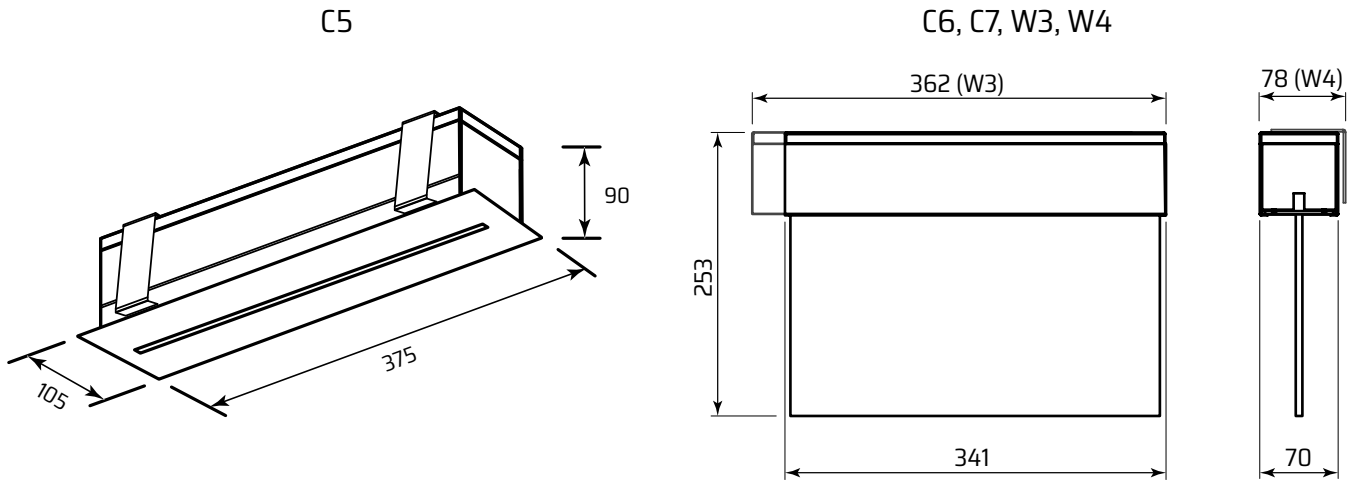
## WIRING DIAGRAM



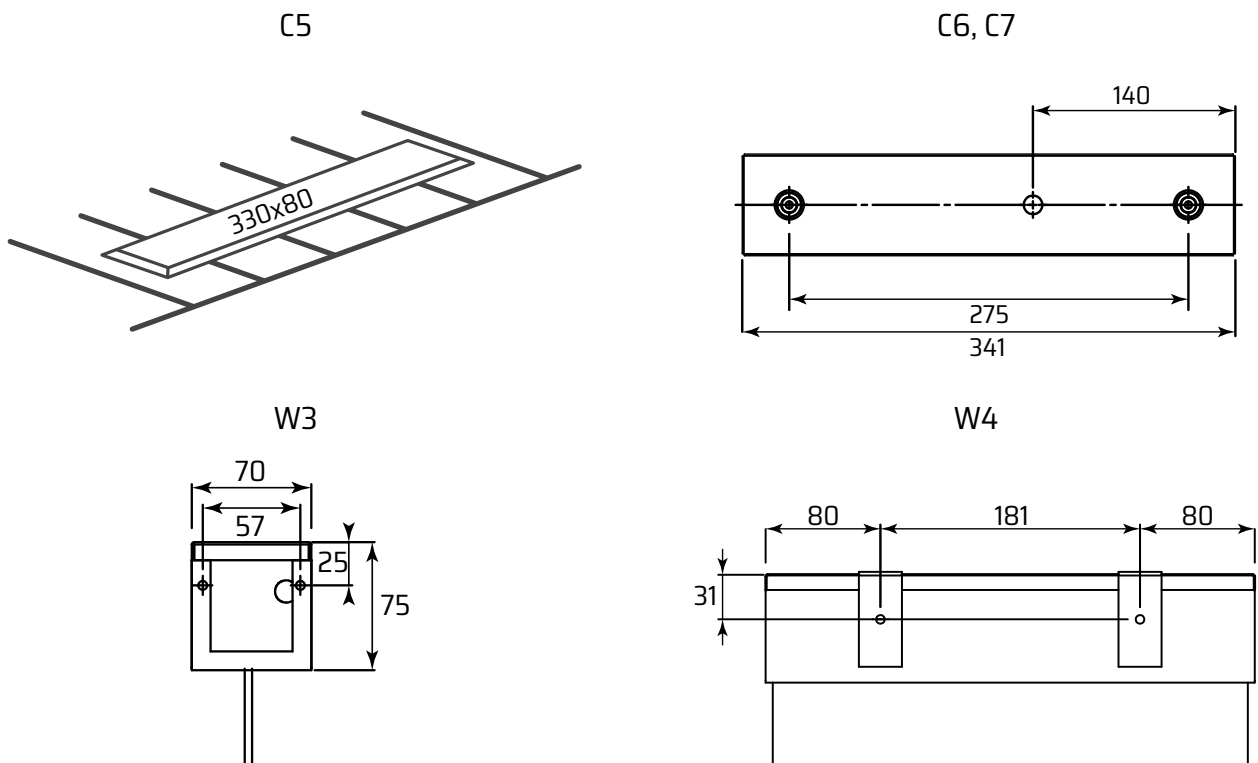
## LUMINAIRE CONSTRUCTION



## DIMENSIONS (mm)



## MOUNTING DIMENSIONS (MM)

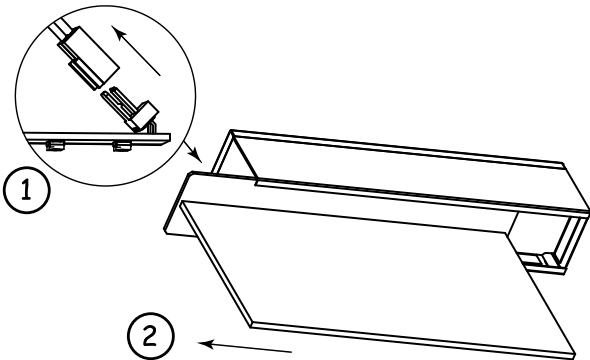


**BEFORE ANY INSTALLATION OR MAINTENANCE OPERATION IS PERFORMED ON THE LUMINAIRE THE POWER SUPPLY SHOULD BE DISCONNECTED**

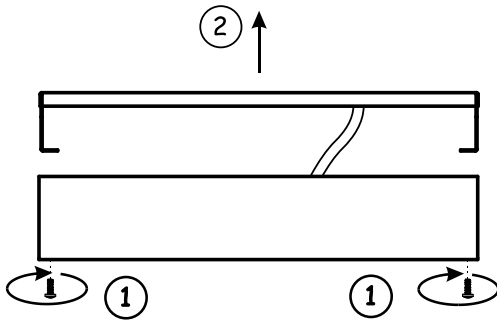
All installation and maintenance procedures can be performed only by qualified, properly trained and if appropriate, certified staff

# INSTALLATION

1. Unpack the luminaire after transport and verify its condition.
2. Make in the ceiling (C5, C6, C7) or in the wall (W3, W4) appropriate holes (see MOUNTING DIMENSIONS).
3. Slide the plate with the safety sign out of the glades until you can easily disconnect the LED strip power. Then slide the plate completely out of the guides.

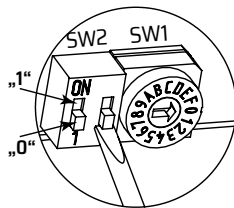
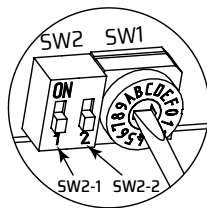


4. Remove the two screws securing the housing cover to gain access to the emergency module.



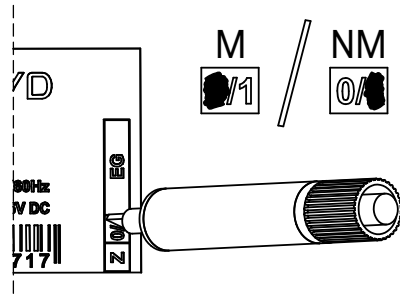
5. In case of luminaires with built-in address module:
  - a. set luminaire address using the rotary switch SW1 and second slider of SW2 switch (SW2-2). Setting the SW2-2 position to „1” means adding 10 to the address, according to the table below.

SW2-2	SW1	Address	SW2-2	SW1	Address
0	1	1	1	1	11
0	2	2	1	2	12
0	3	3	1	3	13
0	4	4	1	4	14
0	5	5	1	5	15
0	6	6	1	6	16
0	7	7	1	7	17
0	8	8	1	8	18
0	9	9	1	9	19
0	A	10	1	A	20



- b. using the first slider of SW2 switch (SW2-1) select the operating mode. Position „1” – maintained (M), position „0” – non-maintained (NM).

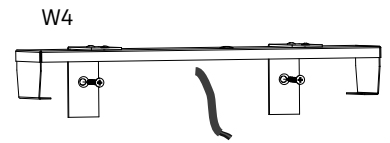
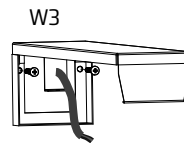
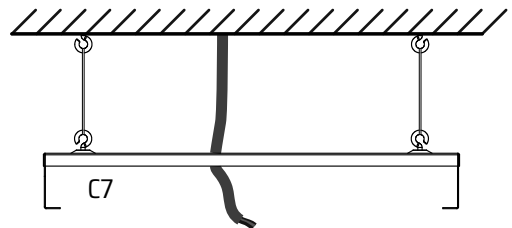
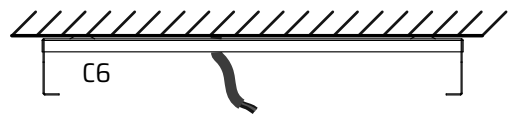
6. Mark the operating mode on the luminaire label. Mark **0** for maintained mode (M) and **1** for non-maintained mode (NM).



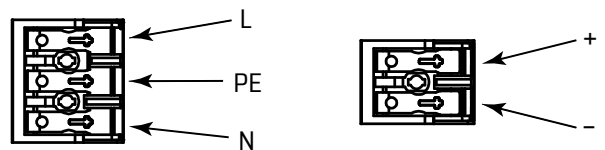
7. Lead the power supply cables through the grommets in the housing cover. Screw the luminaire cover to the ceiling (C6), flexible suspension (C7) or to the wall (W3, W4).

Use the mounting holes created in point 2.

Use dowels and screws suitable for the mounting surface.



8. Strip 7-8mm of wire copper insulation. Connect power cables to the power supply connector (see LUMINAIRE CONSTRUCTION and WIRING DIAGRAM).



The luminaire may be loop-through connected if allowed by national regulations and the electrical design.

9. Mount the luminaire in the reverse order (points 4 and 3).
10. For C5 mounting type – slide the luminaire through the hole in the ceiling.
11. Perform the commissioning procedure.

## COMMISSIONING

After all installation procedures are finished, luminaire operation needs to be verified.

Follow the instructions below:

1. Switch the luminaire power supply on. The light source should light:
  - a. for 90s, when NM mode is set.
  - b. constantly, when SM mode is set.
2. Switch off the luminaire power supply and configure the system, then:
  - a. Run the functional test on system.
  - b. Verify luminaire operation. The light source should operate properly.
  - c. Verify if the system reports proper luminaire operation.

## MAINTENANCE

Luminaire should be cleaned with a damp cloth according to building maintenance plan.

Do not use abrasive cleaners, solvents, substances and cleaning agents containing alcohol to clean the light source.

The light source used in this luminaire may only be replaced by the manufacturer, his service agent or a similar qualified person.

## STORAGE

The luminaire should be stored no longer than 6 months from the date of purchase, in a dry place with an ambient temperature range of -10 - +30°C.

## WARRANTY

Warranty is valid and enforceable only when manufacturer's recommendations are preserved, and the installation and usage are proper. Warranty is granted for a period of 12 months from the date of sale, unless the luminaire has been sold under different contract conditions. The warranty is excluded in case of misuse, unsuitable use, wrong connection or mechanical defects of the luminaire caused by the client.