



INSTALLATION AND MAINTENANCE MANUAL FOR  
LIGHT FITTING

# INV320LED-...-RC



IK10+



150J



IP65



PLK



SECURE  
LOCK



Carefully read the instructions before  
mounting the light fitting.

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## 1. GENERAL INFORMATION

Dustproof and waterproof light fitting for installation indoors and outdoors. Designed for use in tunnels, underpasses and any areas exposed to acts of vandalism.

I	N	V	3	2	0	L	E	D	0	6	0	0	J	2	M	2	1	3	E	2	2	P	C	I	N	I	R	O	P	C	A	3	I	I	R	C			
								1	2	0	0	B	4			2	4			20							A	3	Z	B									
								1	5	0	0	A			3	5			22																				
grupa								przybliżona długość				typ modułu LED / LED module type			prąd sterowania			zasilanie			wpuszty kablowe				materiał obudowy			materiał klosza			wersja awaryjna			klasa ochronności			wersja wpuszczana		
group								approximate length							driving current			power supply			sable inlets				housing material			diffuser material			emergency version			protection class			recessed version		

LED module risk group RG=1

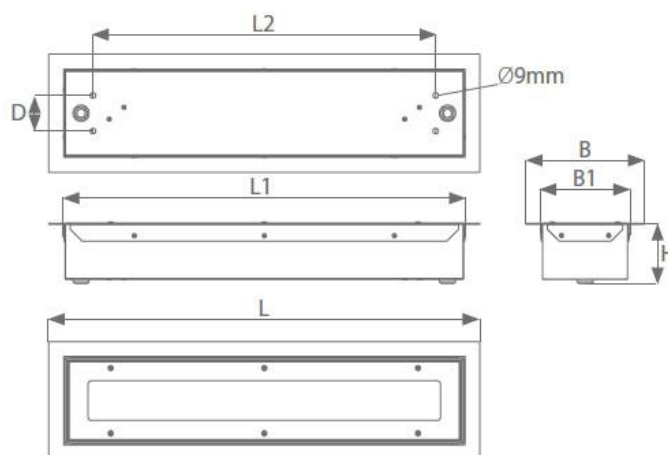
## 2. TECHNICAL INFORMATION

### NARROW VERSION

Type	Power	Electrical unit	IP	Protection class	Power factor	Ambient temp.
INV320LED-1200-J1-1-...-RC	18,8 W	230V 0,50,60Hz	65	II	≥0,95	-40 do +45 °C
INV320LED-1200-J2-3-...-RC	27,2 W					-40 do +40 °C
INV320LED-1200-B2-1-...-RC	36,6 W					

### WIDE VERSION

Type	Power	Electrical unit	IP	Protection class	Power factor	Ambient temp.
INV320LED-0600-J2-1-...-RC	18,8 W	230V 0,50,60Hz	65	II	≥0,95	-40 do +45 °C
INV320LED-0600-J2-3-...-RC	27,2 W					-40 do +40 °C
INV320LED-0600-B2-1-...-RC	36,6 W					-40 do +45 °C
INV320LED-1200-J4-1-...-RC	36,6 W					-40 do +40 °C
INV320LED-1200-J4-3-...-RC	53,5 W					-40 do +45 °C
INV320LED-1200-B4-2-...-RC	83,2 W					-40 do +40 °C



NARROW VERSION

Type	L	L1	L2	B	B1	H	D
INV320LED-0600-J1-.-RC	730	680	580	200	150	100	60
INV320LED-0600-B1-.-RC							
INV320LED-1200-J2-.-RC	1360	1310	800				
INV320LED-1200-B2-.-RC							

WIDE VERSION

Type	L	L1	L2	B	B1	H	D
INV320LED-0600-J1-.-RC	730	680	580	305	255	100	130
INV320LED-0600-B1-.-RC							
INV320LED-1200-J2-.-RC	1360	1310	800				
INV320LED-1200-B2-.-RC							

### 3. PHOTOMETRICAL DATA

NARROW VERSION

Type	Luminous flux	Efficiency	Colour temperature	CRI	Lifetime
INV320LED-0600-J1-1-.-RC	2140 lm	114 lm/W	4000K	>80	>50000 h
INV320LED-1200-J2-3-.-RC	2766 lm	101 lm/W			
INV320LED-1200-B2-1-.-RC	4280 lm	117 lm/W			

Żywotność modułów LED: L<sub>70</sub>B<sub>10</sub>

## WIDE VERSION

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INV320LED-0600-J2-1-...-RC	2140 lm	114 lm/W	4000K	>80	>50000 h
INV320LED-0600-J2-3-...-RC	2766 lm	101 lm/W			
INV320LED-0600-B2-1-...-RC	4280 lm	118 lm/W			
INV320LED-1200-J4-1-...-RC	4260 lm	118 lm/W			
INV320LED-1200-J4-3-...-RC	5534 lm	104 lm/W			
INV320LED-1200-B4-2-...-RC	9067 lm	109 lm/W			

Lifetime of a LED modules: L70B10

## 4. CONSTRUCTION DESCRIPTION

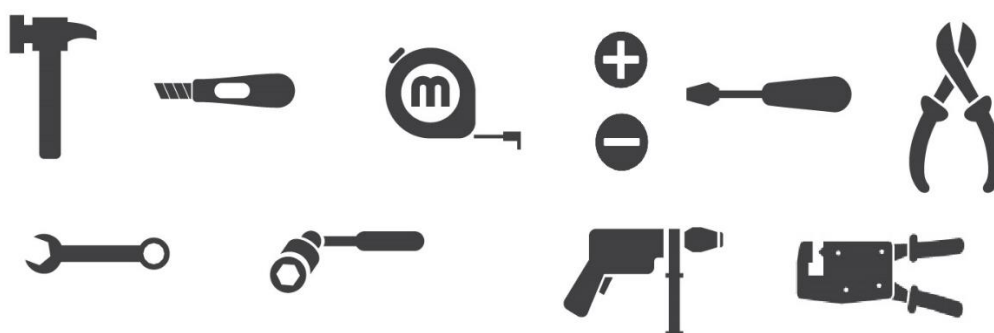
Housing is made of stainless steel. Diffuser is made of polycarbonate. Mounting tray is made of powder painted stainless steel.

## 5. PRELIMINARIES

### CONDITIONS OF SAFETY RULES

- Carefully read all the information included in the manual before mounting the light fitting
- General safety must be applied.
- Failure to comply with rules of the installation and use can lead to personal injury or property loses. Company ATM Lighting sp. z o.o. takes no responsibility in such cases.
- Failure to comply with rules included in manual results with void of the manufacturer warranty.

### NECESSARY TOOLS



## 6. LIGHT FITTING MOUNTING

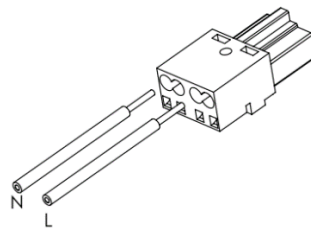
Light fitting is designed for direct installation on ceiling or wall.

## 7. ELECTRICAL CONNECTION

To connect power supply:

- enter the power cable to the housing through the cable,
- carefully unisolate the cables cores (8-10mm), and put it into the connector according to marking inside the light fitting,
- put the admission cable through the cable inlet and connect it with the socket;
- tight the power cable in the strain relief and then connect plug and socket;
- check the effectiveness of grounding (only in case of light fittings made in I protection class).

Power connection:



Remarks:

- If cable entries are made from rubber to put cable into housing it is necessary to carefully made a hole in cable gland. The diameter of the hold need to provide a tight fit of the gland membrane with power cable.
- Use one wrench to tighten the sealing nut, while using the second wrench to block gland body against rotation, otherwise damage of the sealing can be caused and therefore sealing level will be decreased.

## 8. CONDITIONS OF SAFETY USE

- Every light fitting has to have rating plates with rating data on it. Each light fitting must have this „Installation and maintenance manual” , which must be kept by user until the end of exploitation.
- Light fittings are designed for fixed installations only.
- Using light fitting outside the designated operating temperature range is unacceptable and will decrease a lifetime of light fitting and/or damage it. It will also cause a loss of warranty.
- Each light fitting must have a warning sign: „do not open under voltage” on it.
- Admission cables must have 2-wires and diameter 6-12mm.
- Use power wires with cross section 0,5-1,8mm<sup>2</sup>.
- Maximum cross current I=16A.
- The diffuser is made of polycarbonate, so it mustn't be exposed on chemical substances which may destroy it, especially: oil, acetone, chloride, ethyl, ether. In case of doubts with substances are in work place of light fitting, which can damage the product, the action of fixing should be taken.



- Do not stare into working light source.



- Risk of electrical shock.

## 9. LIGHT FITTING MAINTENANCE AND SERVICING

**REMARK:** during the servicing and maintenance touching of LED are prohibited, because it will decrease the lifetime of light fitting and cause the loss of manufacturer's warranty.

**INSPECTION:** at least once a month. Inspection is made without opening the light fitting. User must check admission cables condition (insulation damage, cracks, burns etc.). Cables must not have any acute bends. Outside parts of the light fitting must be checked. No cracks or corrosion signs may occur. Bolts used to mount light fitting should be properly tightened, washers mustn't be cracked. Cleanliness of outer surfaces and light fittings surroundings must be checked. Light fittings may not be soiled by paint or grease. Do not allow for dust (dirt) deposition on the light fitting. The readability of rating and warning plates must be checked. Abnormalities found must be fixed.

**SERVICE AND MAINTENANCE:** at least once a year. Service and maintenance must be made with power supply turned off. User must make inspection steps first. After opening the metal parts painting, condition of inner wiring and its mounting, insulating materials, cable glands gaskets, terminals. Abnormalities found must be fixed. Rating and warning plates must be cleaned. Surfaces of insulating materials and covers must be clean.

**VERIFICATION OF TECHNICAL CONDITION:** at least once for 2 years. Power supply must be switched off. Light fitting must be uninstalled. Besides all the examination from inspection, service and maintenance paragraphs electrical examination from the inspection, service and maintenance paragraphs electrical examination must be also made: light fitting current consumption, insulation examination, protective earthing condition. Special attention must be paid to insulating parts condition. No crack or burns may occur.

**CLEANING:** do not allow for dust (dirt) deposition on the light fitting. Cleaning must be proceeded without use of chemical. Cleaning must be proceeded with use of compressed air and soft cleaning cloth or soft brush. If necessary use water and/or neutral detergent, however without any chemicals, which can damage any part of the light fitting.

## 10. PARTS EXCHANGE

All of parts considered as a spare parts must be ordered at manufacturer of light fitting.

## 11. REPAIRING

All repairs (excluding lamps exchange) may be made only by manufacturer or authorized repair workshops.

## 12. LAMP SOURCE EXCHANGE

Lamps exchange may be made only by specially trained personnel using the original components provided by ATM Lighting sp. z o.o.

## 13. TRANSPORT AND CONDITIONS OF STORAGE

During transportation light fittings shouldn't be exposed to precipitation or mechanical shock.

Light fittings may be storage only in sheltered warehouses, within +5°C to +35°C temperature range, and relative humidity lower than 75%. No corrosion causing vapors or gases should be present.

## 14. DISPOSAL OF WASTE EQUIPMENT

User must obey relevant rules and regulations about disposal of wasted equipment valid in their country.

## 15. WARRANTY

- It is forbidden to use damaged or malfunctioned light fitting.
- It is required to disconnect power supply from the light fitting before any maintenance work.
- All specific information can be found in document „General terms and conditions warranty ATM Lighting sp. z o.o.” available at the website [www.atmlighting.pl/en/](http://www.atmlighting.pl/en/)

### ADDRESS:

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