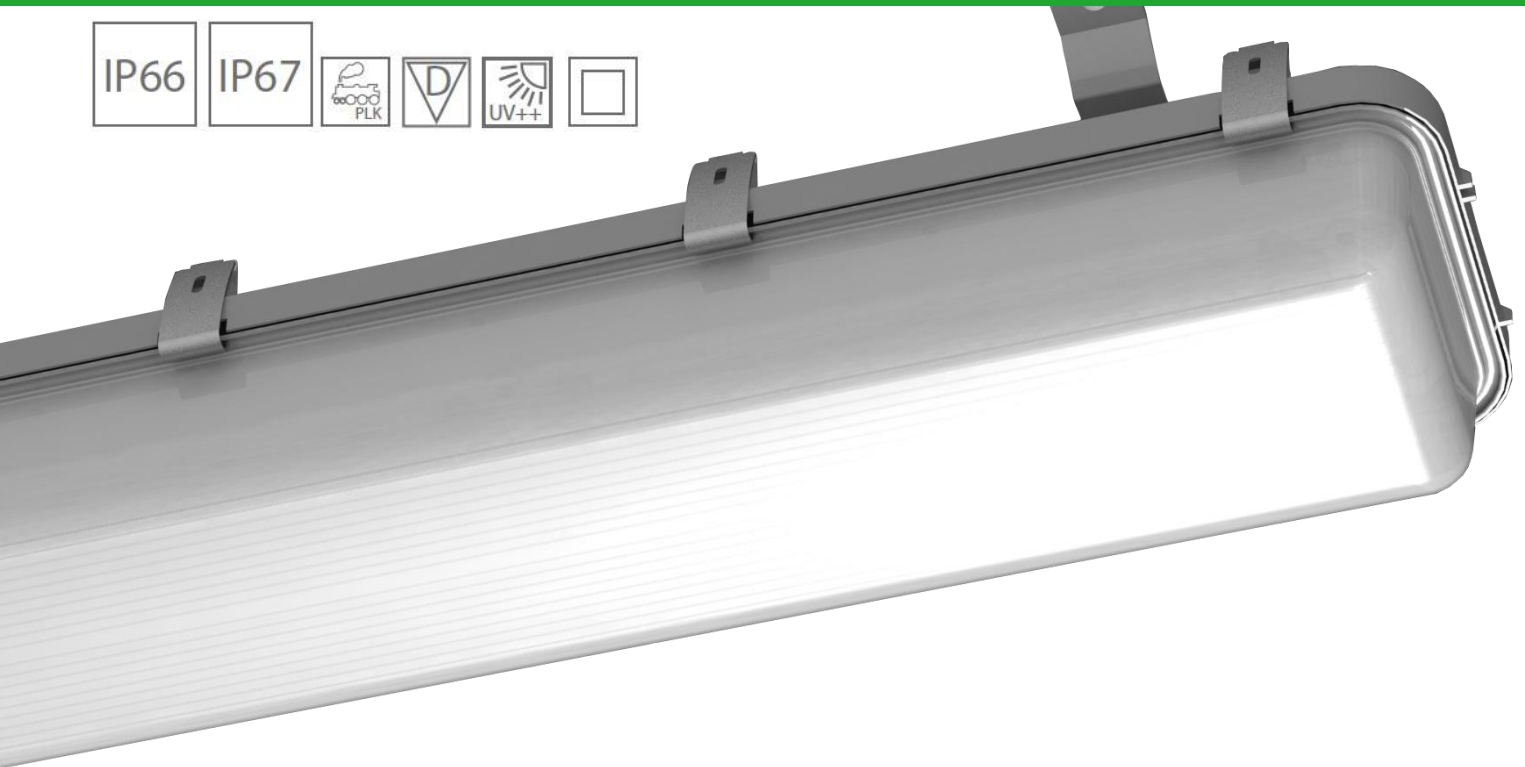
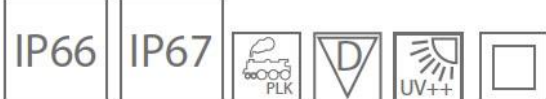




INSTALLATION AND MAINTENANCE MANUAL FOR  
LIGHT FITTING

# INS230-...-LED



Carefully read the instructions before  
mounting the light fitting.

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## 1. GENERAL INFORMATION

Waterproof and dustproof industrial light fitting with LED modules. Designed to light indoor and outdoor areas such as corridors, halls, warehouses.

### DOSTĘPNE KONFIGURACJE | AVAILABLE OPTIONS

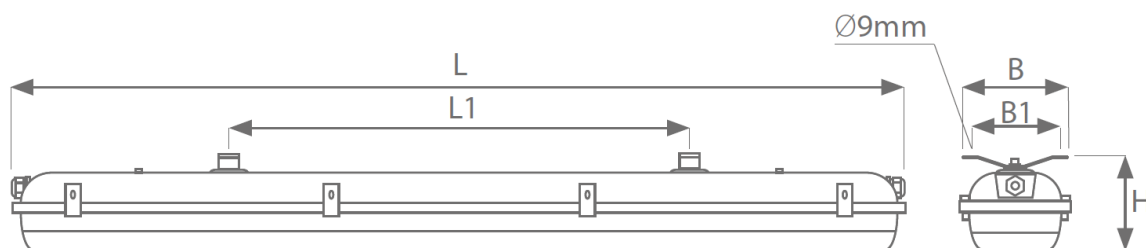
I	N	S	2	3	0	—		—		—		—	3	5	E	—		—	P		—	PC	—		—	AMO1	—	L	E	D
grupa group	typ type						0 6 0 0	J 2	1								30		10	20		PC			AMO2					
							1 2 0 0	B 4	3							33		11	25		PM			AMO3						
																			20*			PT		AMO4						
																			21*					AMO5						
																			22*					AMO10						

\* układ dławnic 20, 21, 22 nie jest dostępny w wykonaniu P25 | cable gland entries positions 20, 21, 22 are not available in P25 version

LED module risk group RG=1

## 2. TECHNICAL INFORMATION

Type	Power	Electrical unit	IP	Protection class	Power factor	Ambient temp.
INS230LED-0600-J2-1	18,8 W	230V 0,50,60Hz	66/67	II	≥0,95	-25 do +45°C
INS230LED-0600-J2-3	27,2 W					
INS230LED-1200-J4-1	36,6 W					
INS230LED-1200-J4-3	53,5 W					
INS230LED-1200-B4-1	72,1 W					-25 do +40°C



Type	L	L1	B	B1	H
INS230LED-0600	673	450	190	160	134
INS230LED-1200	1283	660			

### 3. PHOTOMETRICAL DATA

Type	Luminous flux	Efficiency	Colour temperature	CRI	Lifetime
INS230LED-0600-J2-1	2365 lm	126 lm/W	4000K	>80	>50000 h
INS230LED-0600-J2-3	3188 lm	117 lm/W			
INS230LED-1200-J4-1	4787 lm	131 lm/W			
INS230LED-1200-J4-3	6566 lm	123 lm/W			
INS230LED-1200-B4-1	9797 lm	136 lm/W			

Lifetime of a LED modules:  $L_{70}B_{10}$

### 4. CONSTRUCTION DESCRIPTION

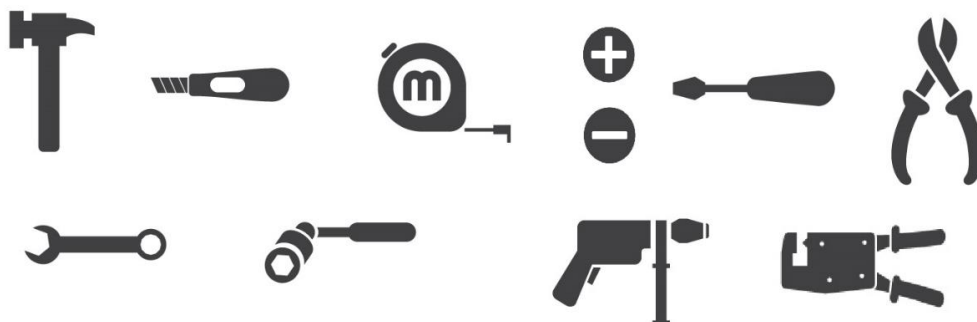
Housing and diffuser are made of UV resistant polycarbonate. Mounting tray is made of galvanized steel sheet. Clamps are made of stainless steel.

### 5. PRELIMINARIES

#### CONDITIONS OF SAFETY RULES

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

### NECESSARY TOOLS

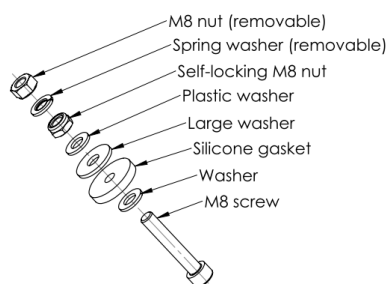
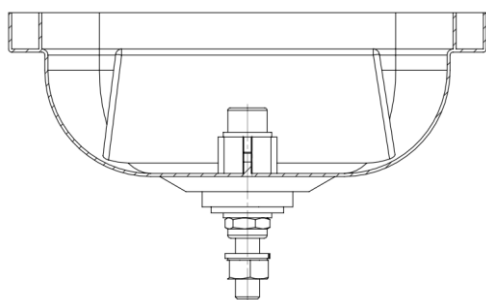


## 6. LIGHT FITTING MOUNTING

Light fitting is mounted in one of following ways:

1. Light fitting equipped with „bolt kit”.

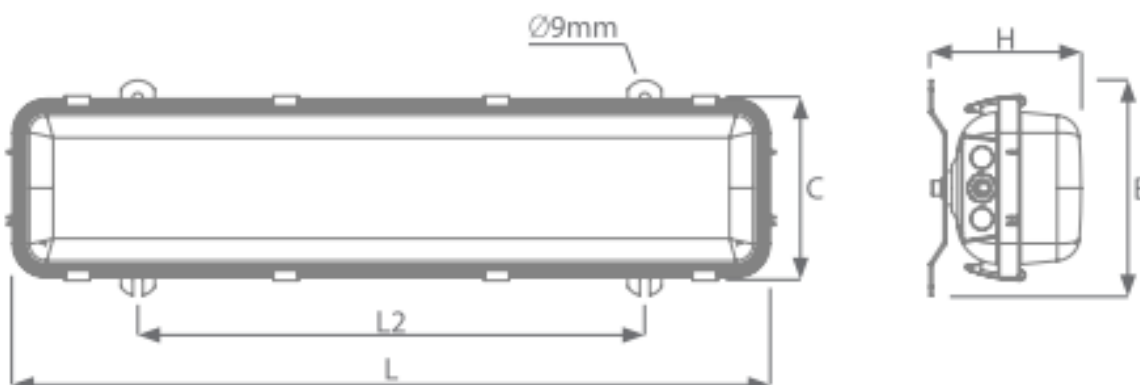
Light fitting is equipped with two mounting kits, designed for direct installation on ceiling. Installation dimensions are given in point 2. Light fitting is equipped with universal bolt kit size M8.



- While mounting remove only M8 nut and spring washer. It is forbidden to remove any other washer. Disassembly bolt kit is forbidden because it will cause decreasing of sealing level.

2. Light fitting equipped with AMO1.

Light fitting is mounted with use of two brackets, designed for direct installation on a ceiling or on a wall.



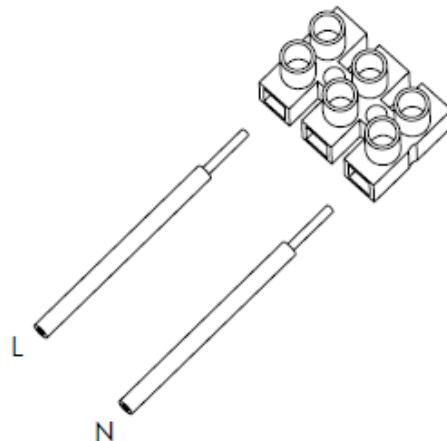
Type	L	L2	B	H	C
INS230LED-0600	673	450	168	109	160
INS230LED-1200	1283	660			

## 7. ELECTRICAL CONNECTION

To connect power supply:

- enter the power cable to the housing through the cable entry (gland),
- carefully unisolate the wires (8-10mm), and put it into the connector according to a label inside the light fitting,
- precisely tighten power cable in the gland with two wrench,

Power connection:



Remarks:

- 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 must have rating plates with rating data on it. Each light fitting is equipped with 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 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 (with PE wire) and diameter 8-13mm.
- Use power wires with cross section 0,5-1,8mm<sup>2</sup>.
- Maximum cross current I=16A.
- The housing and diffuser are made of polycarbonate, so they 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: 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 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 transport 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/)



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