INSTRUCTION MANUAL

SOPEX Explosion Proof LED Floodlights
Models: SXF8011W/8011N/8012W/8012N/8013W/8013N

> ⚠️
> - Do not open the floodlight when energised
> - Read the instruction manual before installation
> - The floodlight must be installed and maintained by an authorised trained person
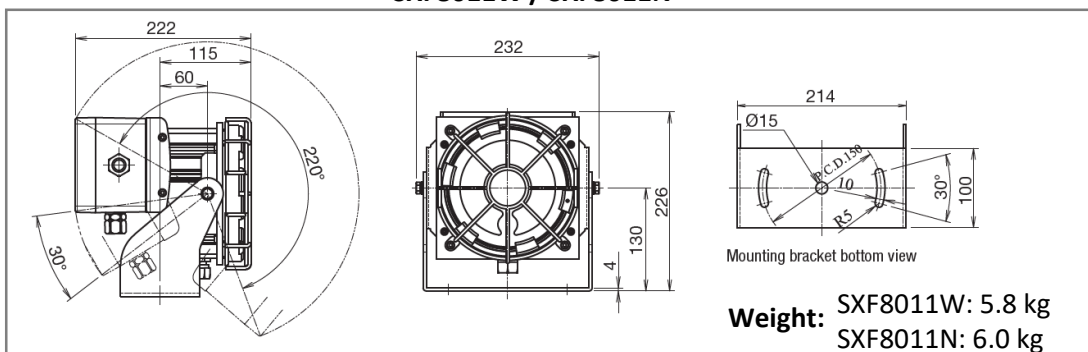> - All modifications on this floodlight are forbidden

TECHNICAL SPECIFICATIONS

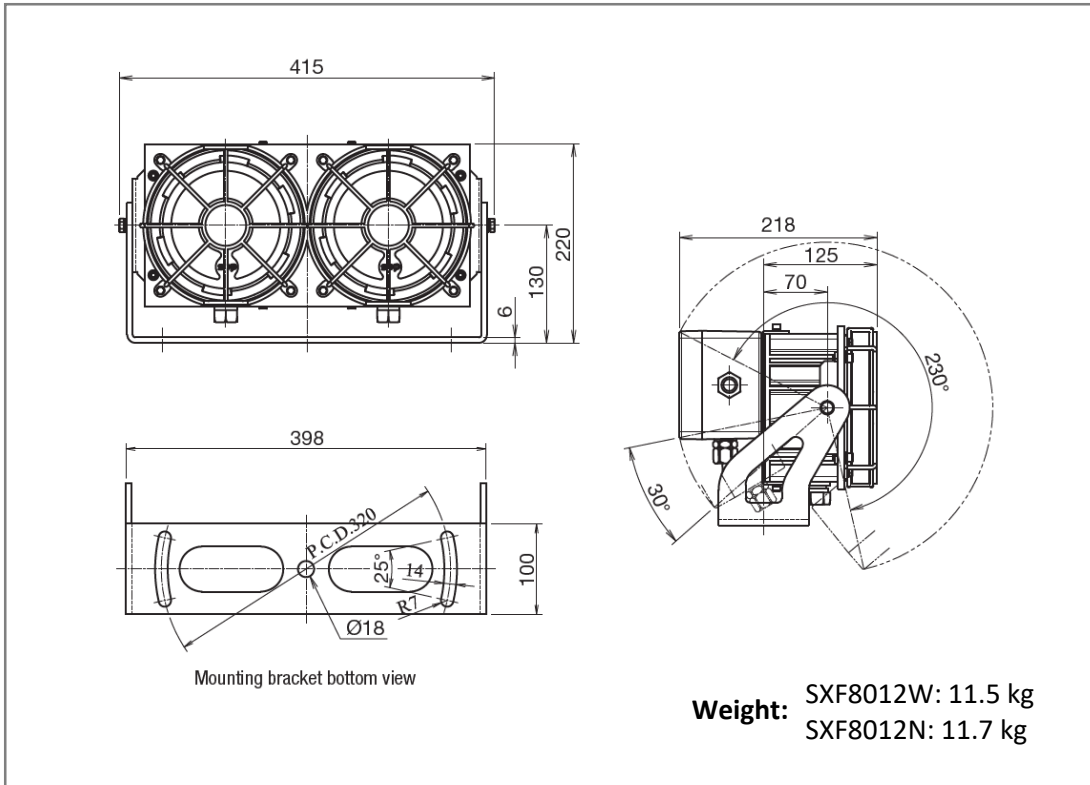|	SXF8011W/8011N	SXF8012W/8012N/8013W/8013N
Certification code	⟨Ex⟩ II 2 G D Ex db eb op is IIC T6/T5 Gb Ex tb op is IIIC T80°C / T100°C Db	⟨Ex⟩ II 2 G D Ex db eb op is IIC T6/T5/T4 Gb Ex tb op is IIIC T80°C / T100°C / T135°C Db
Ambient Temperature	-40°C ≤ Ta ≤ +40°C / +50°C	-40°C ≤ Ta ≤ +30°C / +40°C / +50°C
Hazardous Locations	Gas: Zones 1 & 2 Dust: Zones 21 & 22	
Ingress Protection	IP66/67	
Protection Class	Class 1	
Voltage	AC 100-120V/220-240V 50/60Hz	
Power Factor	0.995 at 100V, 0.996 at 220V	
CCT	5000K	
Service Life	100,000h at ambient temperature of 40°C	

Model	Power Rating	Current	Lumens Output	Peak Candlepower	Beam Angle
SXF8011W	78W	0.78A@100V / 0.34A@220V	6000 lumens	2000 cd	108°
SXF8011N	78W	0.78A@100V / 0.34A@220V	5680 lumens	7500 cd	36°
SXF8012W	156W	1.56A@100V / 0.69A@220V	12000 lumens	4000 cd	108°
SXF8012N	156W	1.56A@100V / 0.69A@220V	11800 lumens	16000 cd	36°
SXF8013W	234W	2.34A@100V / 1.03A@220V	17100 lumens	6400 cd	108°
SXF8013N	234W	2.34A@100V / 1.03A@220V	16900 lumens	22000 cd	36°

OVERALL DIMENSIONS AND WEIGHT

SXF8011W / SXF8011N

Mounting bracket bottom view

Weight: SXF8011W: 5.8 kg
SXF8011N: 6.0 kg

SXF8012W / SXF8012N

415
220
130
6

218
125
70
230°
30°

398
P.C.D.320
25°
14
R7
Ø18
100

Mounting bracket bottom view

Weight: SXF8012W: 11.5 kg
SXF8012N: 11.7 kg

SXF8013W / SXF8013N

600
220
130
9

218
125
70
230°
30°

584
P.C.D.480
15°
14
R7
Ø18
100

Mounting bracket bottom view

Weight: SXF8013W: 17.0 kg
SXF8013N: 17.3 kg
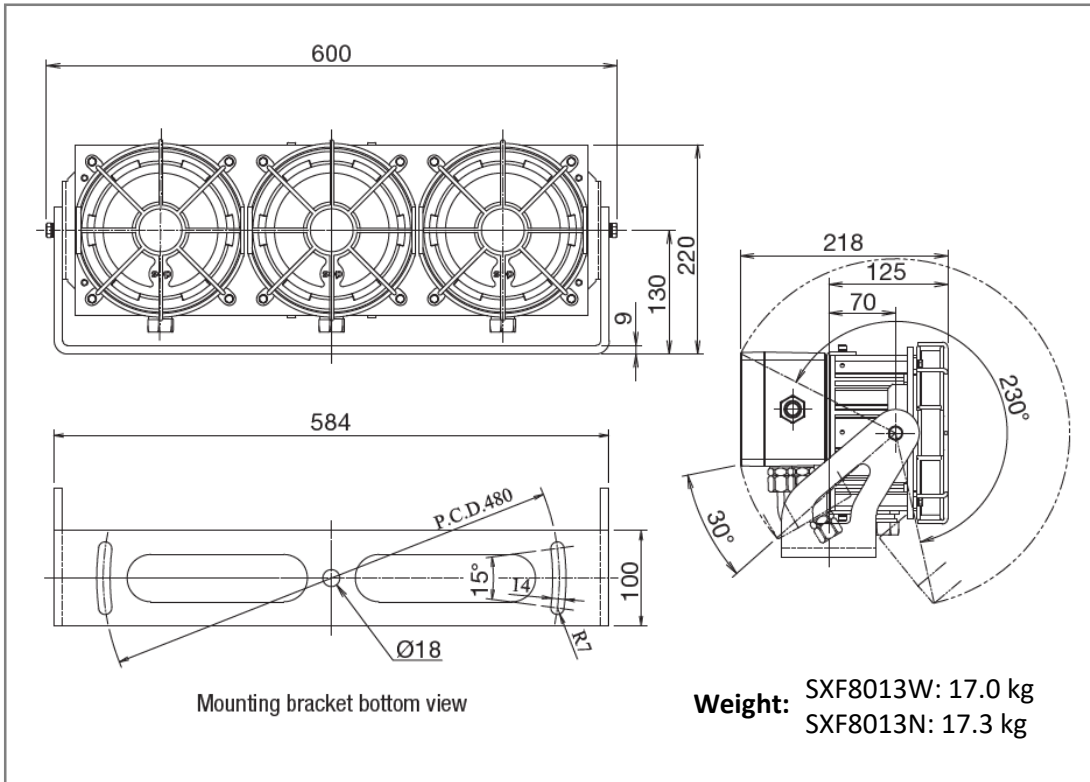
TEMPERATURE CLASSIFICATION

	Ambient Temperatures		
	-40°C to +30°C	**-40°C to +40°C**	**-40°C to +50°C**
SXF8011W		T6 and T80°C	T5 and T100°C
SXF8011N		T6 and T80°C	T5 and T100°C
SXF8012W	T6 and T80°C	T5 and T100°C	T4 and T135°C
SXF8012N	T6 and T80°C	T5 and T100°C	T4 and T135°C
SXF8013W	T6 and T80°C	T5 and T100°C	T4 and T135°C
SXF8013N	T6 and T80°C	T5 and T100°C	T4 and T135°C

SPECIAL CONDITION FOR SAFE USE

When operated at ambient temperature below -20°C, the tempered glass cover of the floodlight becomes more brittle and can only withstand impact energy of 1J. Please handle with care in low temperature environment.

INSTALLATION INSTRUCTIONS

- The installer and/or maintenance personnel must verify the floodlight's certification code is compatible with the environmental and authorised conditions of the site.
- Check the power rating label to ensure the floodlight is suitable for the electrical main supply.
- All inadequate and wrong installation or usage will render the warranty void.
- Ensure power is turned off before installation or troubleshooting. Do not open any part of the floodlight when it is energised.
- The floodlight has one power cable entry at the junction box that is fitted with an ATEX and IECEx approved M20 cable gland for unarmoured cable of diameter 11.0mm to 15.0mm. Second cable gland or glands of other sizes are options sold separately.
- Open the junction box by unscrewing the 4 screws on the cover.
- Use a 3 core power cable that is compatible with the cable gland size.
- Strip the outer sheath at the connecting end of the cable to expose the 3 insulated wires.
- Insert the power cable through the gland until the outer sheath appears through the cable gland bore inside the junction box.

Junction Box

Insulated wire

Outer sheath of power cable

Outer nut of cable gland
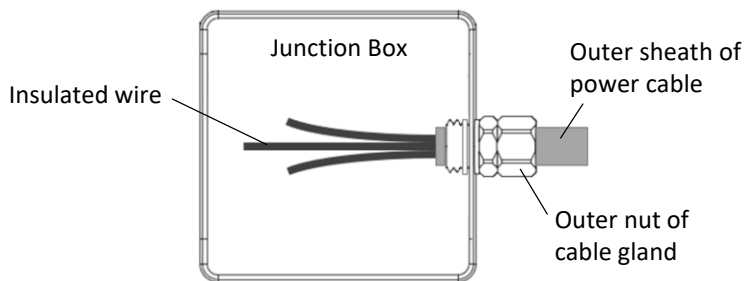
- Using a torque wrench spanner, tighten the outer nut of the gland with 32.5Nm installation torque to properly seal the cable in the gland.
- Strip the insulation at the tip of the 3 insulated wires to expose the conductors for connection.
- Connect the 3 insulated wires to the terminal block inside the junction box according to their respective positions: Live (L - brown), Neutral (N - blue) and Protective Earth (PE - Yellow/Green).
- The terminal block is able to receive wires with cross section up to 4mm^2. Ensure the bare copper of the wires are fully inserted into the terminals and the screws are sufficiently tightened.
- Close the junction box cover and tightening the 4 screws firmly.

- Use AISI 316 stainless steel screws to secure / mount the floodlight.
- The LED floodlight can be turned on or restarted instantly with full brightness. No warm-up time is required.
- Other than the junction box, no other parts of the floodlight should be opened for installation, modification or maintenance.
- To ensure the junction box is waterproof and maintain the floodlight's warranty:
    a) Check the compatibility of the cable gland size with the power cable diameter. Tightening of the cable gland seal on the cable sheath must by steady.
    b) Check the base of the cable gland is firmly screwed into the junction box and does not turn loosely.
    c) Ensure the gasket of the junction box is correctly positioned. Periodically check the gasket. If the gasket is in poor condition, replace it immediately.
- All repair works and spare parts must be sourced from SOPEX Innovations Pte Ltd.

TROUBLESHOOTING

Symptom	Solution
Floodlight does not turn on	• Check for proper cable termination and good connection • Verify the power supplied has the right voltage • If connected to external controls, ensure the control is working properly
Floodlight is rocking	• Ensure the position locking mechanism is properly secured • Check the mounting screws are firmly tightened

DECLARATION OF CONFORMITY

We declare that the LED floodlight is designed to be used in potentially explosive atmospheres described below:

SOPEX Explosion Proof LED Floodlight
Types: SXF8011W/8011N/8012W/8012N/8013W/8013N
Ex II 2 G   Ex db eb op is IIC T6/T5/T4 Gb
Ex II 2 D   Ex tb op is IIIC T80°C / T100°C / T135°C Db

satisfies: - the provisions of Directive 2014/34/EU
                  - standards: EN 60079-0:2012+A11:2013
                                      EN 60079-1:2014
                                      EN 60079-7:2015
                                      EN 60079-28:2015
                                      EN 60079-31:2014
                  - the provisions of IEC 60533 (electromagnetic compatibility)
                  - the type and its variants have received the EC examination certification type:

EPS 18 ATEX 1 191 X / IECEx EPS 18.0097X

Subject to use for the purpose for which it is designed and installation in accordance with standards in force and with recommendations of the manufacturer.

The certification body is EPS - Bureau Veritas Consumer Products Services Germany GmbH.