



Petrel 9 Series LED Luminaire Range from Petrel Ltd
Standard & Emergency Versions
Installation, Operation and Maintenance Instructions



General Data

Certificate Nos. CML16ATEX 3397X, CML 17ATEX3049X, CML 21UKEX31019X, CML 21UKEX31020X & IECEx CML16.0149X
 Ex II 2G 3D
 Ex eb mb IIC T4/T5 Gb (Ta -20°C to +25°C = T5) (Ta -20°C to +55°C = T4)
 Ex to IIIB T86°C Dc IP54 (Ta -20°C to +55°C)
 Models available 2-foot, 4-foot and 5-foot equivalents - Standard and Emergency versions with integral battery.
 In accordance with Directive 2014/30/EU for Electromagnetic Compatibility.

WARNING

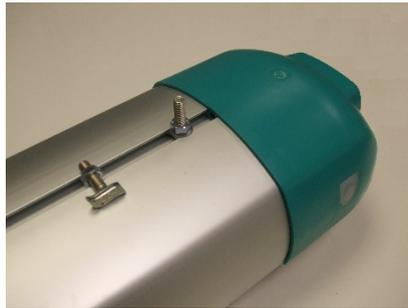
Under no circumstances must any additional holes be drilled in the equipment as this would invalidate certification. The luminaire should not be used in conditions of severe low frequency vibration (<5Hz, amplitude>1.5mm). If in doubt, contact the Manufacturer.
 Certification and specification data is shown on the equipment nameplate. Check that the equipment is suitable for the application concerned - i.e. that the gas grouping, temperature classification, equipment voltage etc. are appropriate to the application. This may be done by reference to BS EN60079-14 for UK installations or by equivalent Codes of Practice for other countries. The equipment must be installed by suitably trained and qualified personnel and as required by the applicable Codes of Practice for the country concerned.

Special Considerations

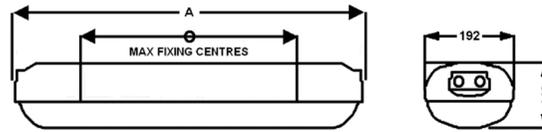
The equipment is designed and tested to meet IP65 but in order to maintain the validity of the certification the enclosure must maintain a rating of IP54 minimum. When re-closing the luminaire, care must be taken to ensure that the gasket is in good condition and fully functional and that the cover seats properly onto the gasket face. The enclosure material is principally polycarbonate with an EPDM gasket and the performance of these materials should be considered with regard to attack from aggressive substances which may be present in the hazardous area. Clean enclosure only with a damp cloth.

Mounting Arrangements

Mounting is by two retained M8 sliding lugs (supplied) which can be positioned to suit the installation. They should be positioned as required, rotated 90°, and then locked in the position using the lock nut provided. Mounting accessories are available – contact Petrel.



Model	A	B
2 foot	765	450
4 foot	1373	1060
5 foot	1675	1560



Access to the Enclosure

WARNING

Where emergency luminaires with internal battery back-up are involved the luminaire must be Isolated elsewhere before opening the enclosure.

Access to the enclosure is obtained by opening the sealing plug, rotating the hexagon head locking screw 180° only in the direction of the arrows and pulling the diffuser gently from the housing. The diffuser will remain suspended by the pre-installed straps. When re-fitting the diffuser ensure the straps are not trapped between the diffuser and gasket.



WARNING

DO NOT OPEN WHEN ENERGISED!

DO NOT test electrical insulation strength without disconnecting the internal electronics.

DISCHARGE TESTING (EMERGENCY MODELS ONLY)

When testing the emergency feature, ensure L AND L1 are isolated via emergency test switch or circuit breaker.

Electrical Connections

The electrical terminals are rated to accept up to 4mm² cable with looping facility for a single phase supply. **Cable cores either side of the cable clamp screw must be of the same size.**

Glanding must be made using an approved Ex 'e' device or suitable metal gland which will ensure an IP rating of IP54 minimum. Two M20 cable entries are provided at each end of the luminaire, three of which are fitted with certified sealing plugs to achieve a minimum rating of IP54. Ensure all unused entries are fitted with a certified sealing plug and that these are correctly fitted as per the manufacturer's instructions. The luminaire can be through wired with an additional 2.5mm² through wiring kit, which inter-connects the terminals at each end subject to a maximum circuit current of 15A. Contact Petrel before ordering. The luminaire is manufactured in accordance with EN 60598-1 and EN 60598-2-22 (emergency variants).

L is the permanent supply for emergency luminaires. L1 is the switch supply for standard and emergency models.

L2 and L3 are not used to power the luminaire.

Emergency luminaires may be wired as maintained or non-maintained luminaires. A switched live feed fed from the permanent live supply via an isolation switch, is required for maintained operation. For permanent, unswitched maintained mode, L and L1 can be linked together. Only part of the luminaire operates during emergency mode. Note, emergency lumen output is the same level on all size variants.

Maintenance & Repair

Other than the battery pack and terminal blocks, there are no electrical components that are serviceable.

The maintenance requirements are as set down in BS EN 60079 –17 for UK installations and by the applicable guidelines for other countries and site-specific areas.

As a general guide, all sealing gaskets must be in good condition to ensure IP54 is maintained. When fitting replacement components, ensure that all electrical connections are correctly made. Only identical components must be used for repair or replacement and these may be obtained from Petrel Ltd. Contact Petrel for spare part availability quoting serial number(s).



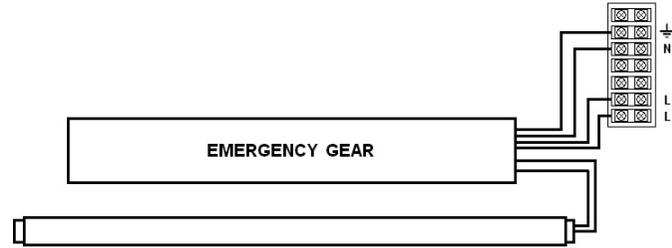
	Do not use
	Earth
N	Neutral
L3	(Spare)
L2	(Spare)
L1	Switched Live
L	Permanent Live

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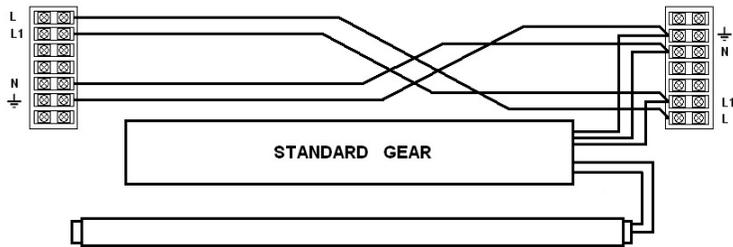
STANDARD FITTING WIRING CONFIGURATION



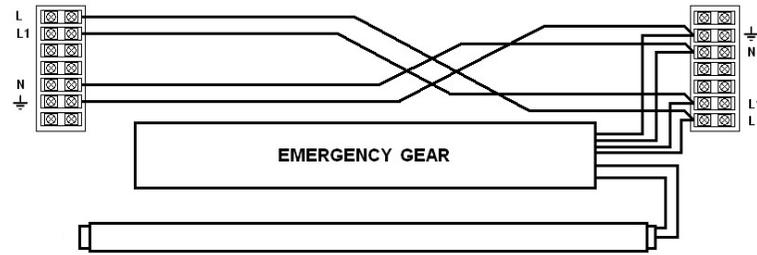
EMERGENCY FITTING WIRING CONFIGURATION



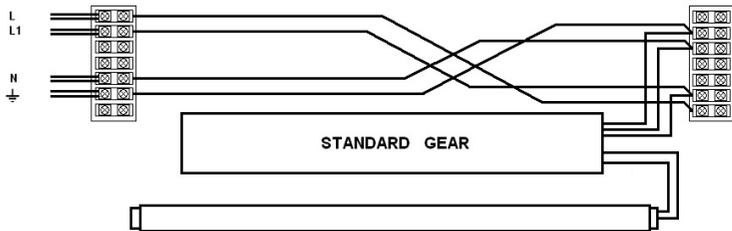
STANDARD FITTING WIRING CONFIGURATION (SHOWING THROUGH WIRING)



EMERGENCY FITTING WIRING CONFIGURATION (SHOWING THROUGH WIRING)



STANDARD FITTING WIRING CONFIGURATION (SHOWING LOOPING ON TERMINAL BLOCK USING THROUGH WIRING)



EMERGENCY FITTING WIRING CONFIGURATION (SHOWING LOOPING ON TERMINAL BLOCK USING THROUGH WIRING)

