



Lloyd's  
Register

## Type Approval Certificate Extension

This is to certify that Certificate No. 12/ 70035(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	Lopolight Aps
<b>PLACE OF PRODUCTION</b>	Bakkegaardsvej 513 Humblebaek DK-3050 Denmark
<b>DESCRIPTION</b>	Power supply unit for LED lights with monitoring and automatic voltage supply adjustment to maintain constant power output. The unit has built-in overcurrent protection set at 0.95A. In detection of a s/c the power will immediately be cut. The relay has internal monitoring and LED for read-out of status. Limited remote control/status indication by RS485
<b>TYPE</b>	P/N 400-018 Monitoring Relay
<b>APPLICATION</b>	Marine, offshore and industrial applications for use in environmental categories ENV1, as defined in Test Specification No.1:2015 in "Bridge and Deck Zone" where the test specification is satisfactory for the intended operation
<b>STANDARD</b>	IEC 60945

<b>Certificate No.</b>	12/ 70035(E2)
<b>Issue Date</b>	11 June 2018
<b>Expiry Date</b>	10 June 2023
<b>Sheet</b>	1 of 2



Andrei Petrov  
UK&I Technical Support Office  
Lloyd's Register EMEA

Lloyd's Register EMEA  
71 Fenchurch Street, London EC3M 4BS

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**ADDITIONAL TESTS**

Extreme variations in power supplies: 18.0 – 31.2 VDC  
Excessive conditions – Reverse polarity  
Low temperature -15°C – 16 hrs  
Compass safe distance  
Ingress Protection to IP2X

**OTHER CONDITIONS**

Generally electrical installations in LR Classed Ships are subject to compliance with LR Rules Part 6, Chapter 2

*“This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate.”*

*The attached Design Appraisal Document No. 12/70035(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate*

All other details remain as the previous Certificate No. 12/ 70035(E1) to which this extension should be attached.

**Certificate No.** 12/ 70035(E2)  
**Issue Date** 11 June 2018  
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**Sheet** 2 of 2



Andrei Petrov  
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