

DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. E-11961

This is to certify that the
Light Fitting

with type designation(s)
IL-80 ATEX, IL-800 zone 0, IL-800 zone 1

Manufactured by
Mica Elektro Oy Ltd.
HELSINKI, Finland


is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application
Portable Torch for use in hazardous areas on ships and mobile offshore units.


Vibration class	A
Enclosure class	IP 67
Class	IIC, IIIC
Temp. class	T4 or T100 °C
Voltage class	230 V
Ex class	Ex ia, ib, tb, op is, e

Høvik, 2012-10-15
for **Det Norske Veritas AS**

This Certificate is valid until
2015-12-31


Marit Laumann
Head of Section

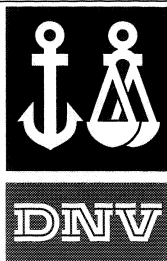
DNV local office:
Helsinki


Nicolay Horn
Surveyor

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Certificate No.: E-11961
File No.: 826.10
Job Id.: 262.1-005135-2

Product description

Light fitting (portable torch) for use in hazardous area with type designation:

Model IL-80 ATEX LED, Mica L200ExLED
Model IL-800 zone 0, 3x Ultra-bright LED
Model IL-800 zone 1, 3x Ultra bright LED

Application/Limitation

Operating temperature: $\div 20$ to $+ 45$ °C.

Operating limitations: Not to be charged inside any hazardous area and at higher ambient temperature than $+ 45$ °C.

The information related to Ex-certification from recognised test institution is given as information only. Ex installations to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Type Approval documentation

Technical info:

«mica IL-80 ATEX LED» and «mica IL-800 zone 0, IL-800 zone 1», brochure from Mica Electro Oy Ltd.

Drawings :

Name plates : Model IL-80 ATEX LED: Doc.: 002162, 07-02-2012; Model IL-800 zone 1: Doc.: 002055, 15-06-2011 & Model IL-800 Zone 1: Doc.: 002141, 15-06-2011

Test certificates / reports:

VTT EC Type Examination Certificate ref. VTT 12 ATEX 004X issued 2012-03-09.

IL-80 ATEX document kit no. AS-116 IL-80 ATEX documents, Rev. 2011-01-16.

Certificate of conformity VTT 12 ATEX 004X.

IL-80 ATEX Product description / instruction, doc. no. AS-116, Rev. 2011-01-16.

EMC test report, VTT report no. AUT/TES/1407/98.

Environmental test report, VTT report no. AUT/TES/223/99.

IL-800 Zone 0 EC Type Examination Certificate ref. TÜV 10 ATEX 7878 issued 2011-07-20.

IECEX Ex Certificate of Conformity IECEX TUR 11.0008

IL-800 Zone 1 EC Type Examination Certificate ref. TÜV 10 ATEX 7879 issued 2011-07-20.

IECEX Ex Certificate of Conformity IECEX TUR 11.0009

Tests carried out

CENELEC: EN 55011, EN60079-0, -7, -11, -28, -31 and EN 61000-4-2, 3, 4, 5 and 6. Vibration test, dry heat test, damp heat test and cold tests.

Marking of product

Manufacturer – Type designation – Ex class – Serial number



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Certificate Retention Survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE