



1. **EC-TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use
in Potentially explosive atmospheres
Directive 94/9/EC**
3. Reference: **VTT 13 ATEX 024 Issue 1**
4. Equipment: **Hand Lamp**
Certified type: **ML-808**
5. Manufactured by: **Atexor Oy
Puurtajantie 16
FI-60510 Hyllykallio
Finland**
6. This equipment or protective system and any acceptable variations thereto is specified in the schedule and possible supplement(s) to this Certificate and the documents therein referred to.
7. VTT Expert Services Ltd, notified body number 0537, in accordance with Article 9 of the Council Directive 94/9/EC of March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential report no. VTT-S-05039-13.
8. Compliance with the Essential Health and Safety Requirements has been assured by compliance with the standards:

**EN 60079-0 (2012)
EN 60079-11 (2012)
EN 60079-28 (2006)**
9. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
10. This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. This certificate does not cover these.



11. The marking of the equipment or protective system shall include the following:



II 2 G Ex ib IIC T4 Gb
II 2 D Ex ib IIIC T135 °C Db

Espoo, 10.09.2013
VTT Expert Services Ltd



Martti Siirola
Senior Expert



Kari Koskela
Expert



12.

Schedule

13.

EC-TYPE EXAMINATION CERTIFICATE VTT 13 ATEX 024 Issue 1

14.

Description of Equipment:

LED hand lamp ML-808 is rechargeable electronic hand lamp. Power of the LED light source is controlled electronically with a microcontroller. The lamp is operated with a push-button switch. Normal lamp functions are half- and full power. Continuous blinking light or safety light function can be factory preconfigured. The ML-808 shall be charged in non-hazardous area only with MICA MLC charger. The ML-808 hand lamp has no user replaceable parts.

Maximum voltage for external charge contacts is $U_m = 25 \text{ V DC}$.

Documents:

Title:	Drawing No.:	Rev.	Date:
ML-808 General description	-	4	2013-05-07
ML-808 BILL OF MATERIALS	002182 X	-	2013-05-24
ML-808 Main Assembly	002182 X	B	2013-05-17
ML-808 battery pack BOM	002184 X	-	2013-05-24
ML-808 battery pack Assy	002184 X	B	2013-05-17
ML-808 Main Board BOM	002201 X	D	2013-06-10

002201 X	D	2013-06-10	ML-808 Main Board BOM
002198 X	3	2013-06-10	ML-808 Main Board Schema
002200 X	D	2013-06-10	ML-808 Main Board PCB Layout and component placement
002201 X	C	2013-06-10	ML-808 Fuse Board Bill of Material
002197 X	4	2013-06-10	ML-808 Fuse Board Schematics
002199 X	C	2013-06-10	ML-808 Fuse Board PCB Layout and component placement
002211 X	A	2013-06-10	ML-808 Input Board Bill of Material
002210 X	1	2013-06-10	ML-808 Input Board Schematics
002212 X	A	2013-06-10	ML-808 Input Board PCB Layout and component placement
002236 X	-	2013-07-10	ML-808 Marking Label

15.

Report No. VTT-S-05039-13

16.

Special conditions for safe use:

None

17.

Essential Health and Safety Requirements:

Met by compliance with the standards referred in point 9

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Issue	Date	Report No.	Com
-	12.07.2013	VTT-S-05039-13	Prim

Espoo, 10.09.2013

VTT Expert Services Ltd



Martti Siirola
Senior Expert



Kari Koskela
Expert



Certificate without signatures shall not be valid

This certificate, including the schedule, may only be reproduced in its entirety and without change.