



Physical Technical Testing Institute  
Ostrava – Radvanice



## EC-Type Examination Certificate

- (1)  
(2) **Equipment or Protective Systems Intended for Use  
in Potentially Explosive Atmospheres  
(Directive 94/9/EC)**

(3) EC-Type Examination Certificate Number:

**FTZÚ 12 ATEX 0058**

- (4) Equipment or protective system: **Headlight LED type LS1, LS7..., LS12....**  
(5) Manufacturer: **MM GROUP, s.r.o.**  
(6) Address: **Veveří 20/1379, 735 64 Havířov – Horní Suchá, Czech republic**  
(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.  
(8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 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 systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°:

**12/0058 dated 07.06.2012**

- (9) Compliance with Essential Health and Safety Requirements has been assured by compliance with:  
**EN 60079-0:2009; EN 60079-11:2012; EN 60079-26:2007; EN 50303:2000**
- (10) 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.
- (11) This EC-Type Examination Certificate relates only to the design, examination and testing 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. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include following:



**I M1 Ex ia I Ma  
II 1G Ex ia IIB T4 Ga**

This EC-Type Examination Certificate is valid till: **08.06.2017**

Responsible person:

  
Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 08.06.2012

Page: 1/3

This certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute  
Ostrava – Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 12 ATEX 0058**

(15) Description of Equipment or Protective System:

Headlights LED LS7... a LS12... are designed to build into the mine devices or as a stationary headlight for lighting of areas with explosive atmospheres. Headlight LED LS1 is designed to build into enclosures with minimum ingrees protection IP54. Headlight LED is electronical apparatus with one, seven or twelf LED. Printed circuit board is put into stainless stell enclosure with attestest ingrees IP54. The enclosure is equiped with cable gland with minimum IP54 for power supply cable. Printed circuits board is equiped with terminal for connection of supply cable.

Intrinsically safe parameters:

Power supply\* terminals + -:

$U_i = 5 - 28 \text{ V}$ ,  $C_i = 0$ ,  $L_i = 0$ .

Ambient temperature range: Group I:  $0^\circ\text{C} \leq T_a \leq +60^\circ\text{C}$

Ambient temperature range: Group IIB:  $0^\circ\text{C} \leq T_a \leq +65^\circ\text{C}$

(16) Report No.: 12/0058

(17) Special conditions for safe use: none

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified and in the manufacturer's instruction for use.

Responsible person:

  
Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 08.06.2012

Page: 2/3

This certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute  
Ostrava – Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 12 ATEX 0058**

(19) List of Documentation:

<i>Documents/Drawings:</i>	<i>Rev./Ver.</i>	<i>Date:</i>	<i>Nr. of pages:</i>
Technical condition	Ver.1	01.04.2012	5
LS1 00-00-01	-	01.04.2012	1
LS1 00-00-02	-	01.04.2012	1
LS1 00-00-03	-	01.04.2012	1
LS1 00-00-04	-	01.04.2012	1
LS1 00-00-05	-	01.04.2012	1
LS7 00-00-01	-	01.04.2012	1
LS7 00-00-02	-	01.04.2012	1
LS7 00-00-03	-	01.04.2012	1
LS7 00-00-04	-	01.04.2012	1
LS7 00-00-05	-	01.04.2012	1
LS7 00-00-06	-	01.04.2012	1
LS12 00-00-01	-	01.04.2012	1
LS12 00-00-02	-	01.04.2012	1
LS12 00-00-03	-	01.04.2012	1
LS12 00-00-04	-	01.04.2012	1
LS12 00-00-05	-	01.04.2012	1
LS12 00-00-06	-	01.04.2012	1
LS12 00-00-07	-	01.04.2012	1
LS12 00-00-08	-	01.04.2012	1
LS12 00-00-08a	-	01.04.2012	1

Responsible person:

  
Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 08.06.2012

Page: 3/3

This certificate is granted subject to the general conditions of the FTZÚ, s.p.  
This certificate may only be reproduced in its entirety and without any change, schedule included.