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 0164

(4) Equipment or protective system: **Intrinsically safe power supply MM 0305 AC, MM 0312 AC, MM 0315 AC**

(5) Manufacturer: **MM GROUP, s.r.o.**

(6) Address: **Veveří 20/1378, 735 64 Havířov – Prostřední 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°:

12/0164 dated 17.06.2014

(9) Compliance with Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012; EN 60079-11:2012; EN 60079-26:2007

(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:

Ex I (M1) [Ex ia Ma] I

Ex II (1)G [Ex ia Ga] IIB

This EC-Type Examination Certificate is valid till: **19.06.2019**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue: 19.06.2014

FTZÚ, s.p., Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic,
tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) EC-Type Examination Certificate N° FTZÚ 12 ATEX 0164

(15) Description of Equipment or Protective System:

Intrinsically safe power supply MM 03xx AC je associated apparatus and it is designed to supply to intrinsically safe devices placed into explosive atmosphere.
The apparatus consists of PCB with electronics placed into plastic enclosure.

Technical parameters:
All versions MM 03xx AC: supply (terminals L, N)
Um=240V

Intrinsically safe parameters:
Output, terminals +Ucc, -Ucc

Version MM 0312 AC:
U_o=12.6 V, I_o = 0,56A, P_o = 3,53W
Group I: C_o = 10uF, L_o = 750uH
Group IIB: C_o = 3uF, L_o = 300uH

Version MM 0305 AC:
U_o=5,88 V, I_o = 0,56A, P_o = 1,65W
Group I: C_o = 10uF, L_o = 750uH
Group IIB: C_o = 3uF, L_o = 300uH

Version MM 0315 AC:
U_o=15,75 V, I_o = 0,56A, P_o = 4,41W
Group I: C_o = 5uF, L_o = 750uH
Group IIB: C_o = 1uF, L_o = 300uH

Ambient temperature:
T_a = 0°C to +60°C

(16) Report No.: 12/0164

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(13) **Schedule**

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(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.

(19) List of Documentation:

Document/Drawings:	*Rev./Ver.:*	*Date:*	*Nr. of Pages:*
Technical condition - user manual	Ver 1	08.12.2013	6
MM 0312 AC 00-00-01	-	20.11.2013	1
MM 0312 AC 00-00-02	-	20.11.2013	1
MM 0312 AC 00-00-03	-	20.11.2013	1
MM 0312 AC 00-00-04	-	20.11.2013	1
MM 0312 AC 00-00-05	-	20.11.2013	1
RJB 02		20.11.2013	9

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 19.06.2014

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