

(1) **EU-Type Examination Certificate**  
(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres**

**Directive 2014/34/EU**

(3) EU – Type Examination Certificate Number: **IEP 23 ATEX 1324X**

(4) Product: **M-SX Series, Junction Box**

(5) Firm Name: **MSM Mühendislik Elektromekanik San. Tic. Ltd. Şti.**

(6) Firm Address: **Barbaros Mah. Millet Cad. No: 38 Ataşehir / İSTANBUL - TÜRKİYE**

(7) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Sti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential Report Nr: IEP.Rp.Ex.10-2692 date 28.12.2023.

(9) Compliance with Essential Health and safety requirements has been assured by compliance with;

**IEC EN 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014**

(10) If the sign “ X “ is placed after the certificate number, it indicates that the product is subject to Specified Conditions of Safe Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

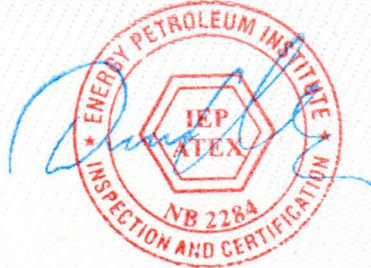
(12) The marking of the equipment or protective system shall include the following:



**II 2G Ex db IIC T3-T6 Gb**  
**II 2D Ex tb IIIC T180°C-T85°C Db, IP 66**

**Responsible Person :**

Nurettin Terzioglu  
Head of Certification Body



**Date of Issue: 29.12.2023**





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(13) Schedule

(14) Certificate Nr: **IEP 23 ATEX 1324X**

(15) Description of Equipment: M-SX series junction box consists of an enclosure in type of explosion protection flameproof "db" type, in which the electrical and mechanical apparatus is mounted. The main body is made of aluminum. Cable assembly must be performed by Ex d cable glands. There are up to 4 NPT, gas or metric threaded holes for entries on the body. Junction box is equipped with cable to use of external grounding cable 4 mm<sup>2</sup> (min) and HD 21.13.S1/HD.22.4.S4. NBR fireproof gasket is used for IP 66. Junction box is used as Zone 1 / 2 and Zone 21 / 22 that be used danger area determined in the EN 60079-10-1 and EN 60069-10-2 standard.

Rated cross section of terminals: 1,5 mm<sup>2</sup> to 70 mm<sup>2</sup>  
Rated AC Voltage of terminals : 750 V AC/DC max.  
Rated current of terminals : 8 A ~ 175 A max.  
Frequency : 50/ 60 Hz  
Protection degree of enclosure : IP 66 or IP 67  
Current density : 2.5 ~ 6.6 (A/mm<sup>2</sup>)

## Technical Detail: M-SX Series Junction Box

NPT Code	NPT	Gas Code	Gas	Metric Code	Metric	Number of Ways
M-SL-36N	1"	M-SL-36G	1"	M-SL-36M	M32x1,5	2
M-SL-46N	1 ¼"	M-SL-46G	1 ¼"	M-SL-46M	M40x1,5	2
M-SL-56N	1 ½"	M-SL-56G	1 ½"	M-SL-56M	M50x1,5	2
M-SL-66N	2"	M-SL-66G	2"	M-SL-66M	M63x1,5	2
M-SC-36N	1"	M-SC-36G	1"	M-SC-36M	M32x1,5	2
M-SC-46N	1 ¼"	M-SC-46G	1 ¼"	M-SC-46M	M40x1,5	2
M-SC-56N	1 ½"	M-SC-56G	1 ½"	M-SC-56M	M50x1,5	2
M-SC-66N	2"	M-SC-66G	2"	M-SC-66M	M63x1,5	2
M-ST-36N	1"	M-ST-36G	1"	M-ST-36M	M32x1,5	3
M-ST-46N	1 ¼"	M-ST-46G	1 ¼"	M-ST-46M	M40x1,5	3
M-ST-56N	1 ½"	M-ST-56G	1 ½"	M-ST-56M	M50x1,5	3
M-ST-66N	2"	M-ST-66G	2"	M-ST-66M	M63x1,5	3
M-SX-36N	1"	M-SX-36G	1"	M-SX-36M	M32x1,5	4
M-SX-46N	1 ¼"	M-SX-46G	1 ¼"	M-SX-46M	M40x1,5	4
M-SX-56N	1 ½"	M-SX-56G	1 ½"	M-SX-56M	M50x1,5	4
M-SX-66N	2"	M-SX-66G	2"	M-SX-66M	M63x1,5	4

T ambient temperature	Temperature of terminal operation	Temperature class	Max. surface temperature
-20 °C < Ta < +40 °C	≥ 80 °C	T6	85 °C
-40 °C < Ta < +40 °C	≥ 80 °C	T6	85 °C
-20 °C < Ta < +65 °C	≥ 100 °C	T5	100 °C
-40 °C < Ta < +65 °C	≥ 100 °C	T5	100 °C
-20 °C < Ta < +80 °C	≥ 180 °C	T3	180 °C
-40 °C < Ta < +80 °C	≥ 180 °C	T3	180 °C

**Responsible Person :**  
Nurettin Terzioglu  
Head of Certification Body



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(16) Certificate Nr: **IEP 23 ATEX 1324X**

(17) Specific Conditions of Use

17.1 Only the suitably certified cable glands can be used for fixing cables.

17.2 The unused holes must be closed with suitably certified stopping plugs.

17.3 The flameproof joint cannot be repaired.

17.4 The temperature class of the equipment T4...T6 is based on the power dissipation of the apparatus and components mounted in the flameproof enclosure. The maximum surface temperature according to EN 60079-0 is related to the temperature class of the equipment.

17.5 Use screw of quality A2-70 according UNI 7323 with ultimate tensile strength of at least 700 n/mm<sup>2</sup>.

(IEP 23 ATEX 1324X) X means: Installation must be done by authorized personnel according to the manual and EN 60079-14 standard. Periodic inspections and maintenance should be carried out by authorized establishment or personnel according to the EN 60079-17 standard. Temperature classes are between T3 and T6. It changes according to the working environment temperature and current. Internal equipment should be selected in accordance with the temperature class.

(18) Essential Health and Safety Requirements:

18.1 Are included in standards, which are mentioned in clause (9) of this certificate. The products were approved in accordance with above mentioned standards and manufacturer's instruction.

18.2 At the installation and the operation of the M-SX series junction box have to be observed manufacturer's manual 10 pages dated 12.2023.

(19) List of Documentation:

- ♦ M-SX series junction box user manual : 10 pages, dated 12.2023
- ♦ Component Lists : M-SX/5 dated 12.2023
- ♦ Gasket : Elastosil / Inoser UMR.FKM.0070.KH.10
- ♦ Body : Aluminum

(20) Drawings:

Drawing Nr;	Date;
M-SX-36/46/56/66	04.12.2023
M-SL-36/46/56/66	04.12.2023
M-SC-36/46/56/66	04.12.2023
M-ST-36/46/56/66	04.12.2023
M-SX-36/46/56/66	04.12.2023

For the validity of analysis type certificate, the parts that are used in M-SX series junction box are determined in confirmed 12.2023 date, section table M-SX-5. Routine tests should be carried out according to the EN 60079-1 standard for each product.

Responsible Person :

Nurettin Terzioglu  
Head of Certification Body



Date of Issue: 29.12.2023

