

Translation

EU-Type Examination Certificate

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

EU-Type Examination Certificate Number: **BVS 12 ATEX E 068 X** Issue: **01**

Equipment: **Solenoid type 148* and 168***

Manufacturer: **IMI INTERNATIONAL s.r.o.**

Address: **Evropská 852, 664 42 Modřice, CZECH REPUBLIC**

This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the 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 the confidential Report No. BVS PP 12.2141 EU. This issue of the EU-Type Examination Certificate replaces the previous issue of the EC-Type Examination Certificate BVS 12 ATEX E 068 X including supplement 1.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

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

General requirements
Flameproof enclosure "d"
Protection by Enclosure "t"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

This EU-Type Examination Certificate relates only to the technical design 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.

The marking of the product shall include the following:

II 2G Ex db IIC T4 Gb



II 2D Ex tb IIIC T 90°C Db Type 148*
II 2D Ex tb IIIC T 105°C Db Type 168*

DEKRA Testing and Certification GmbH
Bochum, 2023-02-21

Signed: Dr. Rolf Krökel

Managing Director



13 **Appendix**

14 **EU-Type Examination Certificate**

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15 **Product description**

15.1 **Subject and type**

Solenoid type 148* and 168*

The mark * indicates the type

type	rated voltage			rated power	nominal power	thread	fuse build-in	type of protection category
	DC [V]	UC [V] 0...60 Hz	AC [V] 40...60 Hz					
1480	12...250			20 W	23.5 W	1/2-14NPT	no	II 2G Ex db IIC T4 Gb II 2D Ex tb IIIC T 90 °C Db
1481		24	25...400	24 VA	27 VA	1/2-14NPT	no	
1482	12...250			20 W	23.5 W	M20x1.5	no	
1483		24	25...400	24 VA	27 VA	M20x1.5	no	
1484	12...125			20 W	23.5 W	1/2-14NPT	yes	
1485		24	25...250	24 VA	27 VA	1/2-14NPT	yes	
1486	12...125			20 W	23.5 W	M20x1.5	yes	
1487		24	25...250	24 VA	27 VA	M20x1.5	yes	
1680	12...250			39 W	42 W	1/2-14NPT	no	II 2G Ex db IIC T4 Gb II 2D Ex tb IIIC T 105 °C Db
1681		24	25...400	42 VA	48 VA	1/2-14NPT	no	
1682	12...250			39 W	42 W	M20x1.5	no	
1683		24	25...400	42 VA	48 VA	M20x1.5	no	
1684	12...125			39 W	42 W	1/2-14NPT	yes	
1685		24	25...250	42 VA	48 VA	1/2-14NPT	yes	
1686	12...125			39 W	42 W	M20x1.5	yes	
1687		24	25...250	42 VA	48 VA	M20x1.5	yes	

15.2 **Description**

The solenoid valve comprises an enclosure body with a screw-type cover. The solenoid valve is used for activation of valves. The solenoid valve in the type of protection Flameproof Enclosure 'd' and Protection by Enclosure 't'. The top of the solenoid valve enclosure is closed with a cover and the underside is with a sleeve. Inside the enclosure are coil and electronic components. At the side of the housing, there is a thread for tested and certified cable glands. The mounting and the mechanical design of the valves are not part of the test.

Reason for this issue

- Change to Directive 2014/34/EU
- Updating to standards EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-31:2014
- Change of the manufacturer name to IMI INTERNATIONAL s.r.o.

15.3 Parameters

For the following parameters see clause 15.1

Rated voltage
Rated voltage
Nominal power

Ambient temperature range

$-40\text{ °C} \leq T_a \leq 60\text{ °C}$

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17 Specific Conditions of Use

17.1 The dimensions of the flameproof joints are in parts other than the relevant minimum or maximum values of EN 60079-1:2014. For information on the dimensions of the flameproof joints contact the manufacturer.

17.2 Fasteners with a minimum property class of 8.8 must be used for the closing of the flameproof enclosure.

17.3 For category 2G separately certified cable entries are to be used, which also meet the requirements of EN 60079-14 for direct cable entry devices into flameproof enclosures.

18 Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

19 Remarks and additional information

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2023-02-21
BVS-Pz/Mu A 20220679 / 342803700



Managing Director