

1 United Kingdom 'Ex' Conformity Assessment

- 2 Product Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended by UKSI 2019:696)
- 3 Certificate Number: ExVeritas 22UKEX1421X Issue: 0
- 4 Product: Pneumatic Diaphragm Actuator MSD III 250/290/370/480/550
- 5 Manufacturer: IMI Critical Engineering Korea
- 6 Address: 14 Dangdong 2- ro, Munsan-eup, Paju-si, Gyeonggi-do, Korea Republic of, 10816
- 7 This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to. The assessments are recorded in ExVeritas project file number EXV4197A.
- 8 The product has been assessed against the following Standards and found to comply:

EN 80079-36:2016

EN 80079-37:2016

- 9 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 10 ExVeritas takes no responsibility for the validity of any information or data supplied by the manufacturer on which parts of the assessment may be based upon.
- 11 The marking of the equipment shall include the following:

🖾 II 2 G Ex h IIB T6 Gb X		For all options
🖾 II 2 G Ex h IIB T6 Gb	-29°C ≤ Ta ≤ +80°C	For standard product or
𝔅ًၗ ⊂ II 2 G Ex h IIB T6 Gb	-45°C ≤ Ta ≤ +80°C	For option 1 or
(Ex) II 2 G Ex h IIB T6 Gh	-55°C < Ta < +80°C	For option 2



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On behalf of ExVeritas

S Clarke CEng MSc FIET Managing Director

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Schedule

12 Description of Product

Pneumatic Diaphragm Actuator Series MSD III... is a multi-spring return diaphragm actuator. Air pressure, in response to a control signal, positions the valve to the desired location.

There are two different acting directions:

Direct acting (DA) with function air fail open, or Reverse acting (RA) with function air fail close

Type Codes:

MSD III 250/290/3740/480/550

The numbers represent the outer diameter of the housing in (mm)

Mechanical Data:

Operating medium: compressed air

Set pressure: 5 bar

Design pressure: 6.2 bar

Max stroke: 30 to 130mm (depends on type)

13 Descriptive Documents

13.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R4197/A/1	24-11-2022	0	Initial issue of the Prime Certificate

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13.2 Compliance Drawings:

Title:	Drawing No.:	Rev. Level:	Date:
Type Examination Certificate	TÜV-A 16ATEX0010X	1	23.01-2017
Letter on the change of the company name	Company name change	-	02.209
Cover sheet for the "Technical Documentation according	TCF-0	0	24.06.2019
ATEX 2014/34/EU Annex III EC-Type Examination" for			
both series of actuators MSD III and SP			
Contents of the Technical Documentation Actuators MSD	TCF-Content_MSDIII&SP	2	31.05.2019
III & SP (list of documents)			
General description, Operation and application of control	TCF-3	2	-
valves and actuators			
Product Catalogue MSD-III Diaphragm Actuator	1CF-4.1	-	-
Product specification, Construction details		4	-
Drawings/Parts list for MSD series	TCF-6.1 MSD III Actuator	-	-
Essential Health & safety Requirements	10F-8	5	23.04.2019
Product compliance to narmonised protection Standards	TCF-9.0	4	23.01.2019
	TGF-9.2_RA-20	4	-
Ignition Pick assessment for oil and gas service valves	TCE-0.3 RA-20-1	6	_
MSD III actuators	TCF-9.3_KA-20-1	0	-
Product compliance to barmonised protection Standards -		0	22.04.2019
FN ISO 80079-36: 2016		0	22.04.2013
Product compliance to harmonised protection Standards -	TCF-9.6 MSDIII & SP	0	16.05.2019
EN ISO 80079-37: 2016		Ŭ	10.00.2010
Inspection and Testing SP	TCF 10 MSD III	1	11.06.2016
Test Report	MSD III 250 RA	-	06.08.2009
	Diaphragm Actuator Test		
	Result Report		
Test Report	MSD III 290 RA	-	06.08.2009
	Diaphragm Actuator Test		
	Result Report		
Test Report	MSD III 370 RA	-	06.08.2009
	Diaphragm Actuator Test		
	Result Report		
Test Report	MSD III 480 RA	-	06.08.2009
	Diaphragm Actuator Test		
Tast Papart			06.08.2000
	Diaphragm Actuator Test	-	00.00.2009
	Result Report		
Surface temperature of actuator models MSD III & SP	TCF 10-1	2	28.05.2019
Piston		-	_0.00.2010
MSD III Temperature check on cylinder, Lower and Upper	MSD III Temperature	-	02.11.2015
end cap	check on cylinder, Lower		
	and Upper end cap		
Standard quality plan	QA-DWI-002	3	01.02.2019
Standard inspection and test plan	QA-DWI-003	2	01.02.2019
References to European Directives, Standards & Codes	TCF-12	3	23.04.2019
Operations & maintenance manual	MSD III Operations and	-	29.05.2019
	Maintenance Manual		
Declaration of conformity with European directives	Declaration of conformity	-	-
	with European directives		
UKCA DoC for Actuator	UKCA DoC for Actuator	-	-
Name plate	7207153000	A	25/Oct/2022
I est reports and certificates on particular components	Various documents	-	-

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Schedule

- 14 Specific Conditions of Use
- 14.1 Special Conditions for Safe Use
 - The temperature class of Pneumatic Diaphragm Actuator Series MSD III 250/290/370/480/550 is rated T6 for:
 - Standard product versions in an ambient temperature range of -29°C \leq Ta \leq +80°C and
 - Option 1 in an ambient temperature range of $-45^{\circ}C \le Ta \le +80^{\circ}C$
 - Option 2 in an ambient temperature range of $-55^{\circ}C \le Ta \le +80^{\circ}C$

Remark:

The temperature class of the complete valve assembly (actuator combined with valve) depends significantly on the medium temperature and shall be determined for each single case of application and marked accordingly. This is not covered by this certificate.

- 14.2 Routine tests
 - None

15 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 8 and where required the report listed in section 13.1

The manufacturer shall inform the ExVeritas of any modifications to the design of the product described by this schedule.

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