सीएसआईआर- केन्द्रीय खनन एवं ईंघन अनुसंघान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंघान परिषद) बरवा रोह, धनबाद - 826015, **झारखण्ड**, भारत



CSIR-Central Institute of Mining & Fuel Research

(Council of Scientific & Industrial Research)

Barwa Road, Dhanbad - 826015, Jharkhand, India

मूल प्रति ORIGINAL COPY

SPEED POST/COURIER SERVICE

Test & Assessment Report No.: IN/CIMFR/TR21/ H 3 19

Dated: 14 January, 2021

Equipment ID No.: 726/20

JAMNAGAR - 361 004

ULR No.: TC596221000000015F

CODE NO. FES/111/20-21

To M/s. SIGMA INDUSTRIES SPECIAL SHED NO. 15/2/A, GIDC-I, SHANKER TEKRI,

Subject: Type Examination Certificate along with test assessment report of FLP-WP (IP-66) Double Compression type Cable Gland, in Aluminium Alloy LM-6 construction as designated by Cat No.: CGF01 SS A (M12) to CGF016 (M110) as per IS/IEC 60079-1:2014 for use in Gas Group: IIB, EPL Gb atmosphere.

- (Test Report)

Your Ref. Appli. No.: SI/FLP/001/20-21

Dated: 26/05/2020

Dear Sir.

Please find the enclosed Type Examination Certificate along with test assessment report of the above sample submitted by you.

This Institute reserves the right to review, amend or withdraw this 'Test Report' at any time, if considered necessary in the interest of safety.

Charges of Rs. 1,36,668/- (Rupees One Lakh Thirty Six Thousand Six Hundred Sixty Eight Only) including applicable GST involved towards the testing have been adjusted against the advance deposit made by you.

Kindly arrange to collect the sample within 90 days from the date of receipt of this letter failing which CIMFR would dispose of the samples by public auction without any further NOTICE to you.

Kindly acknowledge the receipt.

Thanking you.

Yours faithfully,

Encl: As above.

1. Test assessment report in Triplicate

2. Type Examination Certificate

Copy to: L'Head, Flameproof & equipment Safety

2. Bill section

(S. K. MONDAL) HOS

TESTING CELL

EPABX: 0091-326-229-6027/6028/6029

Fax: 0091-326-229-6025

Working Days: Monday to Friday - Website: www.cimfr.nic.in



सीएसआईआर - केंद्रीच्छान्तु हुनं ईधन अनुसंधान संस्थान SIR - CENTRAL INSTATUTE OF MIXING AND FUEL RESEARCH

तज्यालमाद्यापाक अनेब्रिधान परिषद्)

(COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH)

रवा रोड, धनबाद, झारखेंडू - 8≱6छ ई, भारत

BARWARDAD, PHANBAD, JHARKHAND-826015, INDIA

ज्वालासह एवं उपकरणोप्संक्षोर FEAMEPROOF & EQUIPMENT SAFETY

परीक्षण प्रसीण पत्र+TEST CERTIFICATE



ORIGINAL COP

FORMAT NO.: (CIMFR: DQM: FLP02: F-01:REV-01)

(Flameproof & Equipment Safety)

Equipment ID No.: 726/20 ULR No.: TC596221000000015F Code No.: FES/111/20-21

Test & Assessment Report No.: IN/CIMFR/TR21/ | 3 19

Dated: 4

January, 2021

Dated: 26/05/2020

Application Ref. No.: SI/FLP/001/20-21

1. Applicant

M/S. SIGMA INDUSTRIES.

SPECIAL SHED No. 416/1, G.I.D.C-1 SHANKER TEKRI, JAMNAGAR-361004

Manufacturer : Same as above.

3. Equipment : FLP-WP (IP-66) Double Compression type Cable Gland.

4. Designated by : Cat No.: CGF01 SS A (M12) to CGF016 (M110).

5. Type of Protection : Ex d for Gas Group IIB, EPL Gb.

6. Electrical ratings : NA.

7. Temperature Class : NA.

8. Degree of Ingress Protection : 1P-66.

Material of Construction : Aluminium Alloy LM-6.

- 10. Description of the equipment: The FLP-WP (IP-66) Double Compression type Cable Gland, Cat No.: CGF01 SS A (M12) to CGF016 (M110) in Aluminium Alloy LM-6 construction mainly consists of Gland body nut, Neoprene seal for inner seath, skid nylon washer. Armour clamping ring, gland nipple, Armour clamping cone, etc. as given in relevant design drawings. The minimum uncompressed axial sealing height of neoprene rubber inner sealing ring provided in the cable gland. The cable gland is fitted with cable entry (hole) of a tested & certified FLP enclosure and maintaining 25mm axial length and min. 15 full thread of 1.5mm pitch engaged thread internal entry size.
- 11. Name plate and warning inscription: The name-cum-warning inscription plate and rating plate made of Aluminium Alloy LM-6 is permanently encarved on the body of enclosure.
- 12. Drawings: The unit is designed and constructed as flameproof and weatherproof in accordance with the following drawing conforming to the requirements of IS/IEC 60079-0:2011, IS/IEC 60079-1: 2014 and IS/IEC 60529-2001 (Reaffirmed 2014).

Sl. No.	Drg. No.	Title	Rev.	Sheet	Date
L.	SI/CGF/2012-	CGS MAKE FLAMEPROOF (IP-66) DOUBLE	0	1 of 1	06/11/2019
	13/REV-1	COMPRESSION CABLE GLANDS FOR			
		GROUP LIB			,`

13. Any other relevant information:

i) As per Clause 4.2 Note – 2 of IS/IEC 60079-0:2011 the equipment mark IIB is suitable for application requiring IIA equipment.

Continuation Sheet

सीएसआईआर-वेद्धीय जानहीं एवं क्रियन अनुसंधान संस्थान CSIR-Central Institute of Mining and Fuel Research

(वैज्ञानिक तथा औद्योगिक पश्चिम्सन प्री बरवा रोड, धनबाद – 826015, अर्थिक

etinoi of Scientific & Industrial Research) inve Road, Dhanbad - 826015, Jharkhand, India

ज्वालासह एवं उपकरण शुल्मा EllaMIPROOF & EQUIPMENT SAFETY

परीक्षण रिपोर्ट / TEST REPORT

मूल प्रति RIGINAL COPY

FORMAT NO.: (CIMFR: DQM: FLP02: F-01:REV-01)

(Flameproof & Equipment Safety)

Equipment ID No.: 726/20 ULR No.: TC596221000000015F Code No.: FES/111/20-21

ii) The material of construction of the equipment may be Cl/MS/SS/Brass instead of Aluminium Alloy LM-6 construction.

iii) Equal and equivalent medium class fit NPT threads of medium class fit conforming to requirements of ANSI/ASME B1.20.1 may be used instead of metric threads conforming to ISO 965-1 & 965-3 as per Clause No. 5.3 & 13 of IS/IEC 60079-1:2014.

iv) As per clause no. C.2.2.1, Note-1 of Annex-C of IS/IEC 60079-1:2014, the allowance for use of "other external thread types" is for the manufacture of replacement entry devices for equipment in existing installations only that incorporate internal thread types that are no longer permitted by the current addition of IEC 60079-1.

v) Cable Glands with following sizes and Cat. No. may be used:

Gland Size (Cat. No.)	Dia "A" (min.)	Nipple/Thread	Length "D"	Suitable cable
1:		size (mm)	(max.) mm	overail dia
CGF 01 SS A	8.00	M 12	25.00	10.00
CGF 01 SS B	8.00	M 16	25.00	12.50
CGF 01 SS	8.50	M 20	25.00	12.50
CGF 01 \$	10.00	M 20	25.00	16.00
CGF 01	12.00	M 20	25.00	17.50
CGF 01 A	12.00	M 25	25.00	17.50
CGF 02	14.00	M 25	25.00	19.50
CGF 02 A	14.00	M 20	25.00	19.50
CGF 03	17.00	M 25	25.00	22.00
CGF 04	20.00	M 25	25.00	25.00
CGF 04 A	20.00	M 32	25.00	25.00
CGF 05	24.00	M 32	25.00	29.00
CGF 05 A	24.00	M 40	25.00	29.00
CGF 06	27.00	M 40	25.00	32.00
CGF 06 A	27.00	M 32	25.00	32.00
CGF 07	30.00	M 40	25.00	36.00
CGF 08	35.00	M 50	25.00	40.00
CGF 09	40.00	M 50	25.00	45.00
CGF 010	44.00	M 50	25.00	51.00
CGF 010 A	44.00	M 50	25.00	51.00
CGF 011 A	50.00	M 63	25.00	56.00
CGF 011	54.00	M 63	25.00	59.00
CGF 012	60.00	M 63	25.00	66.00
CGF 013 A	66.00	M 75	25.00	71.00
CGF 013	72.00	M 82	25.00	77.00 ,
CGF 014	78.00	M 90	25.00	83.00
CGF 015	88.00	M 100	25.00	93.00
CGF 016	98.00	M 110	25.00	104.00

and Fuel Research CSIR-Central

Scientific & Industrial Research) विज्ञानिक तथा औद्योगिक अनुसंध बरवा रोड, धनबाद - 826015,

ज्वालासह एवं उपव

ad Dhanbad - 826015, Jharkhand, India

FORMAT NO.: (CIMFR: DOM: FLP02: F-01:REV-01)

(Flameproof & Equipment Safety)

Equipment ID No.: 726/20 ULR No.: TC596221000000015F Code No.: FES/111/20-21

14. Declaration by the Applicant/Manufacturer:

- (i) As to standards with which the equipment complies in respect of:
 - a) Electrical equipment for Potentially Explosive atmosphere General requirements: IS/IEC 60079-0: 2011
 - b) As to flameproof protection IS/IEC 60079-1: 2014
 - Ingress protection as per IS/IEC 60529: 2001 (Reaffirmed 2014).
- (B) Declaration by the manufacturer ate as follows:
 - Tensile test and sealing test of cable glands are conducted at manufacturer site as per Annexure 'A' of i) IS/IEC 60079-0:2011 and complies.
 - Ageing test of cable glands are conducted at manufacturer site as per Annexure 'A' of IS/IEC 60079ii) 0:2011 and complies.
 - (iii Torque test (Mechanical Test) of cable glands are conducted at manufacturer site as per Annexure 'A' of IS/IEC 60079-0:2011 and complies.

However no sample of the alloy was drawn from the prototype enclosure for verifying its chemical composition declared by the manufacturer.

- 15. Documents/Samples Submitted: i) Application form ii) Drawings iii) Prototype sample
- 16. Condition of sample received: Good
- 17. Compliance of prototype or sample with documents: The test sample of cable glands submitted for the type tests complies with the manufacturers documents referred above.

Note: CIMFR has however not checked and tested the compliance of the equipment to any standard other than the above standards.

SCOPE OF THE TEST CERTIFICATE

The Test Certificate issued by CIMFR certifies that the equipment has been found to comply with the definition of Flameproof-Weatherproof equipment contained in the relevant Standard specifications. They do not vouch for the quality of the equipment in any other respect. The present test report pertains to the sample received only.

This Institute reserves the right to review, amend or withdraw this Test Report at any time if considered necessary in the interest of safety.

[Continuation Sheet]

सीएसआईआर-केन्द्रीय स्नान पूर्व ईधूर्च श्रुतसंघान संस्थान CSIR-Central Institute of Miningran Puel Research

(वैज्ञानिक तथा औद्योगिक अनुसंघान परिष्यु) बरवा रोड, धनबाद — 826015, ज्ञारखण्ड, मोरहे ज्वालासह एवं उपकरण सुरक्षा (Council of Scientific & Industrial Research)

Barwa Road, Dhahbar 926015, Jharkhand, India

HAMILTON DE LEVER DE LA COMPANIONE DE LA

मूल प्रति ORIGINAL COPY

FORMAT NO.: (CIMFR: DQM: FLP02: F-01:REV-01)

(Flameproof & Equipment Safety)

Equipment ID No.: 726/20 ULR No.: TC596221000000015F Code No.: FES/111/20-21

REPORT OF TEST

Date of Test: 14/12/2020

Result #A: Tests as per IS/IEC 60079-0: 2011:

(1)	Type Tests		
Clause	Tests	Remarks	Result
		1 1	(Complies
			P- Pass
			A-Not Applicable
1	Coope		F-Fail) Reference
2	Scope Normative references	 	Complie
$-\frac{2}{3}$	Terms and definitions		Complie
4	Equipment grouping	Con Constant HD CDL CL	Complie
		Gas Group: IIB, EPL Gb	Complie
5.1.1	Temperature	20 00	
	Ambient Temperatures	- 20 °C to +50 °C Amb.	Complie
6	Requirements for all electrical equipment	 	Complie
6.6	Electromagnetic and ultrasonic energy radiating equipment.	ļ	N/
7	Non-metallic enclosures and non-metallic parts of enclosures.		Complie
7.2	Thermal Endurance		Complie
8	Metallic Enclosure and metallic part of End	Aluminium Alloy LM-6	Complie
9	Fasteners		N
10	Interlocking devices		N/
11	Bushings		N/
12	Materials used for cementing		N/
13	Ex components		Complie
14	Connection facilities and terminal compartments		N.
15	Connection facilities for earthing and bonding conductors		N
16	Entries into enclosures		Complie
17	Supplementary requirements for rotating machines		N _i
18	Supplementary requirements for switchgear		N.
19	Supplementary requirements for fuses		N
20	Supplementary requirements for plugs and socket outlets and connectors		N/
21	Supplementary requirements for luminaries		
22	Supplementary requirements for cup lights and hand lights		N
23	Equipment incorporating cells and batteries		N
24	Documentation		. Complie
25	Compliance of prototype or sample with documents	,	Complie
26	Type tests		Complie
26.3	Tests in explosive test mixtures		
26.3	Tests for Flameproof (Ex 'd') protection	Verification for Compliance to 'd' requirements as per IS/IEC 60079-1: 2014	Ex Complie

[Continuation Sheet]

सीएसआईआर-केन्द्रीय स्वन प्रवृद्धिन अनुसंधान संस्थान CSIR-Central Institute of Mining and Fuel Research

(वैज्ञानिक तथा औद्योगिक अनुसंघानच्याचिष्ट्) / (Council of Scientific & Industrial Research) बरवा रोड, धनबाद – 826015, झारखाई सारत किल्लाक रिवेर Dhambad - 826015, Jharkhand, Ind

OGIGIRIE DE GARAGE MANTE LAMEPROOF & ROVIPMENT SAI

परीक्षण रिपाएं TEST REPORT

मूल प्रति

FORMAT NO.: (CIMFR: DQM: FLP02: F-01:REV-01)

(Flaineproof & Equipment Safety)

Equipment ID No.: 726/20 ULR No.: TC596221000000015F Code No.: FES/111/20-21

26.4	Test of enclosures			
26.4.2	Resistance to Impact	Refer Result#A1		
26.4.3/26	Drop test	(not a handheld equipment or portable device)		
.4.4			NA	
26.4.5	Degree of protection (IP) by Enclosures			
26.4.5	Test of IP of equipment	IP 66 Re	efer Result#A2	
26.5	Thermal tests		<u> </u>	
26.5.1	Temperature measurement		NA	
26.5.2	Thermal shock test		NA	
26.6	Torque test for bushings	<u> </u>	NA	
26.7	Non- metallic enclosures or non-metallic parts of enclosure	8		
26.8	Thermal endurance to heat]	Complies	
26.9	Thermal endurance to cold			
26.10 -	Resistance to light	·	IVA	
26.11	Resistance to chemical agents for Group I Electrical		NA	
	Equipment			
26.12	Earth continuity test in non-metallic enclosure		NA.	
26.13	Surface resistance test of parts of enclosures of Non		NA	
	metallic materials			
26.14	Measurement of capacitance			
26.15	Verification of ratings of ventilating fans		NA	
26.16	Alternative qualification of elustomeric sealing O-rings		<u> </u>	
27	Routine tests	Manufacturer's responsibility: C		
j			and physicaí	
		ineasurement of gap and fl		
		overpressure test at the pressure 30kg/cm² given		
_		in earlier Test Report for every sar		
28	Manufacturer's responsibility	Conformity of the equipment to	Complies	
	<u> </u>	the applicable standards		
29	Marking		(Ex d IIB Gb)	
30	Instructions	Instruction related to use,	installation.	
		maintenance, adjustment to be pr		
i		manufacturer along with the equip	ment, ,	

Result#Ai: I kg mass of harden steel fallen vertically on the surface of the Ex'd' enclosure to create impact energy for Group I and II equipment.

Result#A2: Neoprene gasket (@3mm thick) is provided at the end of the each joint for weatherproof (IP-66) degree of protection. Tests have been conducted as per IS/IEC 60529:2001 (Reaffirmed 2014) as tabulated below for IP-66 degree of protection.

or prove	MOR.			
SI.		Type tests	3	Results
No				'
<u> </u>	Dust Test (First Numeral 6)	Clause	No dust had accumulated inside	Pass
		13.4 & 13.6	the enclosure.	
2.	Water Test (Second Numeral 6)	Clause 14.2.6	No water had accumulated inside	Pass
!			the enclosure.	

Page 5 of 7

[Continuation Sheet]

तीएसआईआर-केन्द्रीय की न एकंन्ड्रीय अनुसंधान संस्थान CSIR-Central Institute of Miniffy and Fuel Research

(वैज्ञानिक तथा औरागिक अनुसंघान पश्चिद) 🥍 (Council of Scientific & Industrial Research) बरवा रोड, धनबाद – 826015, झारखण्ड, पश्चि, 🗙 Barwa Road, Drangar - 826015, Jharkhand, India

परीक्षण रिपोर्ट-/TEST REPORT

CIMER

FORMAT NO.: (CIMFR: DQM: FLP02: F-01:REV-01)

(Flameproof & Equipment Safety)

Equipment ID No.: 726/20 ULR No.: TC596221000000015F Code No.: FES/111/20-21

Result #B: Tests in explosive mixtures: Tests for type of protection Ex. 'd' as per IS/IEC 60079-1:2014.

	Type 1	lests esta		
Clause No.	Description and relevant tests	Remarks	Res (Complies,P- Pass,NA- Applicable, F-Fail) Referen	
1	Scope			Complie
2	Normative references			Complie
3	Terms and definitions			Complie
4	Level of protection (Equipment Protection Level, EPL)	Gas Group ItB, EPL Gt		Complies
5	Flameproof joints	Threaded joint		Complie
6	Sealed joints			
6.1	Cemented joints			<u>N</u> .
6.1.2	Mechanical strength			N,
77	Operating rods			N
- 8	Supplementary requirements for shafts and bearings			N
9	Light transmitting parts			N ₁
10	Breathing and draining devices which form part of a flar	neproof enclosure		N _i
11	Fasteners and openings			N,
12	Materials	Aluminium Alloy LM-6	<u> </u>	Complie
13	Entries for flameproof enclosures			Complie
14	Verification and tests			Complie
15	Type Tests			
15.1	General Transfer of the service was a with the service of the serv			N
15.2.1	Tests of ability of the enclosure to withstand pressure General			Complie
15.2.2	Determination of Explosion Pressure (Reference Pressur			Compile
15.2.3	Overpressure Test	-		Complie
15.3	Test for non-transmission of an internal ignition			Соприс
15.3.1	General			Complie
15.3.2	Electrical equipment of Groups IIB	(Refer Result #B1)		Complie
15.3.3	Electrical equipment of Group IIC	(Ketel Result #B1)		N,
15.4	Tests of flameproof enclosures with breathing and draining	ing devices		
15.4.1	General			
16	Routine tests	To be conducted by the manu pressure 30kg/cm ² given in ev		
17	Switchgear for Group I			N.
18	Lamp holders and lamp caps			N
19	Non-metallic enclosures and non-metallic parts of enclosures	sures		
19.1	General			N/
19.2	Resistance to tracking and creepage distances on interna surfaces of the enclosure walls			. N
19.3	Requirements for type test			; N
19.4	Test of erosion by flame			. N
20	Marking			Ex d IIB Gt
20.2	Caution and warning markings			. N
21	Instruction	The manufacturer shall su equipment complying IS/I		

सीएसआईआर-केन्द्रीय खनमू एवं ईंधन छन्तु रहिंदी न संस्थान CSIR-Central Institute of श्रीकांng and Fuel Research

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) /

Council of Setensorie & Industrial Research)

बरवा रोड, घनबाद — 826015, झारखण्ड, भारत / Barwa Road, Dhanbad - 825015, Jharkhand, India

ज्वालासह एवं उपकरण सुरक्षा / FLAMEPROOF & EQUIPMENT SAFETY

परीक्षण रिपोर्ट / TEST REPORT

मृल प्रति ORIGINAL COPY

FORMAT NO.: (CIMFR: DQM: FLP02: F-01:REV-01)

खनन एवं

(Flameproof & Equipment Safety)

Equipment ID No.: 726/20 ULR No.: TC596221000000015F

Code No.: FES/111/20-21

Result #B1: Test for Non transmission of internal ignition:

Gas Mixture: Test with 37% Hydrogen in air for Gas Gr. IIB

No. of Tests: 5 tests of each cable gland fitted with enclosure.

Test Condition: Clause 15.2. Table 6 and 15.2.1.1 (No recompression required)

Five tests for non-transmission of flame were conducted on a Group IIB FLP/WP enclosure fitted with FLP/WP (IP-66) Cable glands. The gas mixture used for this test is as given below. In each test the outer explosive mixture of the FLP/WP enclosure in the test chamber was not ignited when an internal explosion occurred inside FLP/WP enclosure.

Cable Gland	Test Ref. Nos.	Gas Group	Gas Mixture	No. of	Result
			% in Air	Test	
Cat. CGF 01SS A	EIT/7262001 to EIT/7262005	IIB	37% of Hydrogen	Five	Pass
Cat. CGF 04	EIT/7262006 to EIT/72620010	II,B	37% of Hydrogen	Five	Pass
Cat. CGF 09	EIT/7262011 to EIT/7262015	IIB	37% of Hydrogen	Five	Pass
Cat. CGF 012	EIT/7262016 to EIT/7262020	ΙΙΒ	37% of Hydrogen	Five	Pass
Cat. CGF 016	EIT/7262021 to EIT/7262025	JIB	37% of Hydrogen	Five	Pass

<u>CONCLUSION</u>: The FLP-WP (IP-66) Double Compression type Cable Gland, in Aluminium Alloy LM-6 construction as designated by Cat No.: CGF01 SS A (M12) to CGF016 (M110) requirements for flameproofness as per IS/IEC 60079-1:2014 and general requirements as per IS/IEC 60079-0:2011 is deemed to be suitable for use in Gas Group: IIB, EPL Gb.

Reported By

(A. KUMAR)

Technical Officer
Dated: January, 2021
Flameproof & Equipment Safety

CSIR - Central Institute of Mining & Fuel Research

Barwa Road, DHANBAD - 826 015,

(JHARKHAND), INDIA

Checked & Approved By

(A. K. SINGH) Chief Scientist & HORG

Flameproof & Equipment Safety

सीएसआईआर- केन्द्रीय खनन एवं ईंघन अनुसंघान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंघान परिषद) बरवा रोड, धनबाद - 826015, झारखण्ड, भारत



CSIR-Central Institute of Mining & Fuel Research

(Council of Scientific & Industrial Research) Barwa Road, Dhanbad - 826015, Jharkhand, India



SPEED POST/COURIER SERVICE

No. CIMFR/FES/Amend/20-21/73

Dated: 02/02/2021

To M/S. SIGMA INDUSTRIES, SPECIAL SHED No. 416/1, G.I.D.C-1 SHANKER TEKRI, JAMNAGAR-361004

Subject: Amendment to FLP-WP (IP-66) Double Compression Type Cable Gland, in Aluminium Alloy LM-6 construction designated by Cat. No. CGF01 SS A (M12) to CGF016 (M110) as per IS/IEC 60079-1:2014 suitable for use in Gas Group: IIB, EPL Gb atmosphere.

- AMMENDMENT

Dated: Nil

Your Ref. No.: E-mail

Dear Sir.

There is a typographical error in the CIMFR Test & Assessment Report No.: IN/CIMFR/TR21/H319 dated: 11/01/2021 and Test Certificate No. No.: CMF 21 INEx0015 dated: 07/01/2021 in applicant address should be read as M/S. SIGMA INDUSTRIES, SPECIAL SHED No. 416/1, G.I.D.C-1 SHANKER TEKRI, JAMNAGAR-361004 instead of M/S. SIGMA INDUSTRIES, SPECIAL SHED No. 15/2/A, G.I.D.C-I, SHANKER TEKRI, JAMNAGAR-361004.

This Amendment should be read in conjunction with CIMFR Test & Assessment Report No.: IN/CIMFR/TR21/H319 dated: 11/01/2021 and Test Certificate No. No.: CMF 21 INEx0615 dated: 07/01/2021.

Yours faithfully.

Chief Scientist & HORG Flameproof & Equipment Safety

CC: Head, Testing Cell

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