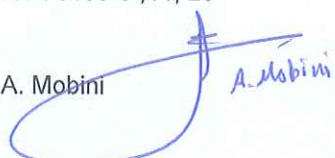


TEST REPORT COVER

ExTR Reference Number.....:	H1-70489-0 ,11, 26
Prepared by + signature (ExTL).....:	A. Mobini 
Reviewed by + signature (ExTL).....:	M. Ghanbariha 
Approved by + signature (ExTL).....:	S.M. Mirfalah 
Date of issue	February 21, 2026
Ex Testing Laboratory (ExTL).....:	Ex EPIL
Address	Kavosh research city, supa blv, 8th km . karaj-Qazvin freeway , iran.
Applicant's name	Control System Co. (PrismaTech)
Address	PrismaTech Company, 8th Street, Phase II, Payam Special Economic Zone, Mehrshahr, Karaj
Standards	IEC 60079-0:2017, IEC 60079-11:2023, IEC 60079-26: 2021
Test procedure.....:	IEC 60079-0:2017, IEC 60079-11:2023, IEC 60079-26: 2021
Equipment.....:	Coriolis Mass Flowmeter Sensor
Model/type reference.....:	PTMS
Code (e.g. Ex II T).....:	Ex ia IIC T6..T1 Ga Ex ia IIIC Txxx °C Db/Ga
 Technical Department ISO/IEC 17025 Accredited Lab	
Refer to report description for details of applicable ambient temperature	

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرچ - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

Manufacturer's name.....: Control System Co. (PrismaTech)
 Address: PrismaTech Company, 8th Street, Phase II, Payam Special
 Economic Zone, Mehrshahr, Karaj

Trademark: **PrismaTech®**

Classification of installation and use	Stationary
Ingress protection	IP66/67
ambient temperature range (°C).....	-20°C ≤ Ta ≤ +60°C

General remarks:

The test results presented in this Test Report relate only to the item or product tested.

- "(Refer to Appendix #)" refers to additional information appended to this document.
- "(Refer appended Doc #)" refers to a document table that is linked to this document.
- Throughout this document, a point is used as the decimal separator.

The technical content of this Ex Test Report shall not be reproduced except in full without the written approval of the Issuing NB and TL.

The statement of conformity decision on the measured values is made based on guard band w=U, r=1 (ISO/IEC Guide 98-4). The specific false accept/reject risk is up to 2.5%.

Copy of Marking Plate:

Manufacturer: Control System Co. (PrismaTech)	Product: Coriolis Flowmeter Sensor
Type: PTMS	Connect only to certified Transmitter PTMT
additional application condition- see instruction	
Date of production: 20XX	Ex ia IIC T6..T1 Ga Ex ia IIIC Txxx °C Db/Ga
-20°C ≤ Tamb ≤ +60°C	
IP: 66/67	Sr. No.: XXXXXXXXXX
Control System Co. (PrismaTech)	
PrismaTech Company, 8th Street, Phase II, Payam Special Economic Zone, Mehrshahr, Karaj	
Tel: +98(26) 34095091-3 Fax: +98(26) 34095094	

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن پست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.

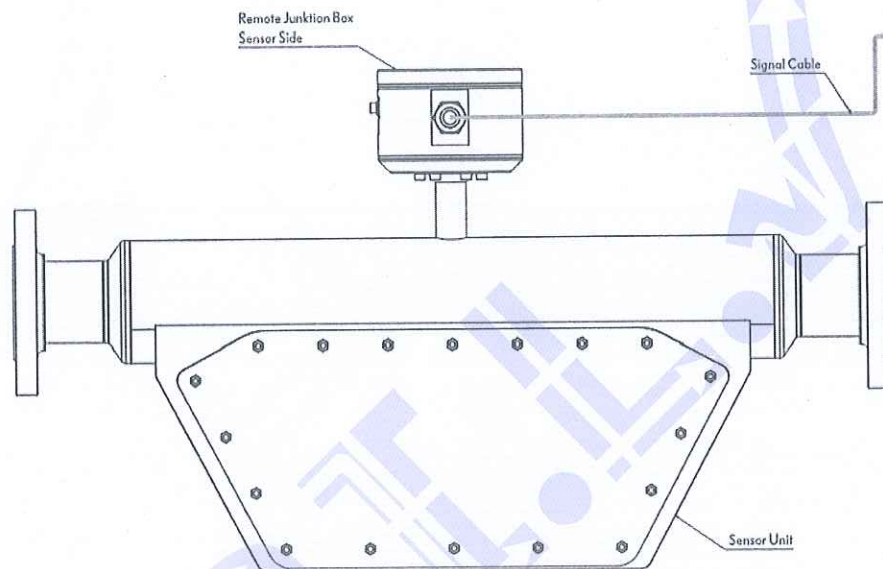
کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)

آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.

کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

General product information:

The Coriolis Mass Flowmeter Sensor is used as part of a mass flow measuring system to determine the mass flow rate of flammable and non-flammable liquids and gases. The equipment comprises a process tube to which coils and sensors are attached. The coils and sensors are wired to a junction box which incorporates the terminals for connection to external equipment and protection circuits.



Sketch of products

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.

کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)

آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.

کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

TEST REPORT IEC 60079-0:2017 Explosive atmospheres – Part 0: Equipment – General requirements	
ExTR Reference Number.....:	H1-70489-0
Prepared by + signature (ExTL).....:	A. Mobini <i>A. Mobini</i>
Reviewed by + signature (ExTL).....:	M. Ghanbariha <i>M. Ghanbariha</i>
Approved by + signature (ExTL).....:	S.M. Mirfalah <i>S.M. Mirfalah</i>
Date of issue	February 21, 2026
Ex Testing Laboratory (ExTL).....:	Ex EPIL
Address	Kavosh research city, supa blv, 8th km . karaj-Qazvin freeway , iran.
Applicant's name	Control System Co. (PrismaTech)
Address	PrismaTech Company, 8th Street, Phase II, Payam Special Economic Zone, Mehrshahr, Karaj
Standard.....	IEC 60079-0:2017
Test procedure	IEC 60079-0:2017

Technical Department
 ISO/IEC 17025
 Accredited Lab

Possible test case verdicts: - test case does not apply to the test item:N/A - test item does meet the requirement:Pass
General remarks: The test results presented in this Test Report relate only to the item or product tested. "(Refer to Appendix #)" refers to additional information appended to this document. "(Refer appended Doc #)" refers to a document table that is linked to this document. - Throughout this document, a point is used as the decimal separator. The technical content of this Ex Test Report shall not be reproduced except in full without the written approval of the Issuing NB and TL. The statement of conformity decision on the measured values is made based on guard band $w=U$, $r=1$ (ISO/IEC Guide 98-4). The specific false accept/reject risk is up to 2.5%.

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
1	Scope		
2	Normative references		
3	Terms and definitions		
4	Equipment grouping		
4.1	General	The equipment is intended for Group II.	Pass
4.2	Group I	The equipment is not intended for Group I.	N/A
4.3	Group II	The equipment is intended for Group II.	Pass
4.4	Group III	The equipment is intended for Group III.	Pass
4.5	Equipment for a particular explosive gas atmosphere	The equipment is not tested and verified for a particular explosive gas atmosphere.	N/A
5	Temperatures		
5.1	Environmental influences		
5.1.1	Ambient temperature	The equipment is intended for use in the ambient temperature range of -20°C to +60°C.	Pass
5.1.2	External source of heating or cooling	The equipment is not intended to be physically connected to or influenced by a separate external source of heating or cooling.	N/A
5.2	Service temperature	Refer to 26.5.1.	Pass
5.3	Maximum surface temperature		

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می‌باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - (+۹۸۲۱) - فکس: ۶۶۱۷۴۲۸۳ - (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰-۱۴ - (+۹۸۲۶) - فکس: ۳۴۹۹۶۷۱۵ - (+۹۸۲۶)

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
5.3.1	Determination of maximum surface temperature	The selected maximum surface temperatures are T6. Refer to 26.5.1 for details.	Pass
5.3.2	Limitation of maximum surface temperature		
5.3.2.1	Group I electrical equipment	The equipment is not intended for Group I.	N/A
5.3.2.2	Group II electrical equipment	Refer to 5.3.1.	Pass
5.3.2.3	Group III electrical equipment		
5.3.2.3.1	Maximum surface temperature for EPL Da	The equipment is not intended for group III.	N/A
5.3.2.3.2	Maximum surface temperature for EPL Db	The equipment is intended for Group III.	Pass
5.3.2.3.3	Maximum surface temperature determined without a layer of dust for EPL Dc	The equipment is not intended for group III.	N/A
5.3.3	Small component temperature for Group I or Group II electrical equipment	The equipment is not considered a small component.	N/A
5.3.4	Component temperature of smooth surfaces for Group I or Group II electrical equipment	Not relevant for this case.	N/A

6	Requirements for all electrical equipment		
---	---	--	--

6.1	General	The balance of this report describes compliance with Clause 6.1. Compliance with 6.1 is the manufacturer's responsibility and is so indicated by marking the equipment enclosure in accordance with Clause 29 and by stating the basis of compliance in the documentation according to Clause 28.	Pass
-----	---------	---	------

6.2	Mechanical strength of equipment	The equipment described in this report meets the requirements of Clause 26.4. The equipment samples were subjected to the related tests of 26.4 and the results were satisfactory.	Pass
-----	----------------------------------	---	------

6.3	Opening times	Not applicable.	N/A
-----	---------------	-----------------	-----

Page 6 of 45

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری سفت، پلاک ۲، طبقه ۳، واحد ۱۲.

کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)

آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.

کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
6.4	Circulating currents in enclosures (e.g. of large electric machines)	No circulation current is possible due to construction	N/A
6.5	Gasket retention	The O-ring/gaskets used in components meet the requirements for mechanical retention. For details see manufacturer's drawings.	Pass
6.6	Electromagnetic and ultrasonic energy radiating equipment		
6.6.1	General	The equipment is not a source of these types of energy.	N/A
6.6.2	Radio frequency sources	Refer to 6.6.1	N/A
6.6.3	Ultrasonic sources	Refer to 6.6.1	N/A
6.6.4	Lasers, luminaires, and other non-divergent continuous wave optical sources	Refer to 6.6.1	N/A
7	Non-metallic enclosures and non-metallic parts of enclosures		
7.1	General		
7.1.1	Applicability	The equipment contains no non-metallic enclosure parts except for the, Epoxy Resin, Silicon Rubber, Wires Gasket.	Pass
7.1.2	Specification of materials		
7.1.2.1	General	Epoxy Resin specifications: Volume: 3.5 cm3 Resin Type: Epoxy Density= 1.1 g/cc Hardness Shore D= 60 Flexural Strength= 145MPa For more details see related datasheet.	Pass
7.1.2.2	Plastic materials	Not used.	N/A
7.1.2.3	Elastomers	Refer to 7.1.2.1.	Pass
7.1.2.4	Materials used for cementing	Not used.	N/A
7.2	Thermal endurance		

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری سفت، پلاک ۱۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - ۶۱۹۷۱ (+۹۸۲۱) - فکس: ۶۶۱۷۴۲۸۳ - ۶۶۱۷۴۲۸۳ (+۹۸۲۱)
 آزمایشگاه: ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰ - ۳۴۹۹۶۷۰۰ (+۹۸۲۶) - فکس: ۳۴۹۹۶۷۱۵ - ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
7.2.1	Tests for thermal endurance	The endurance to heat and cold of the enclosures or parts of enclosures of non-metallic materials was satisfactory (see 26.8 and 26.9).	Pass
7.2.2	Material selection	Refer to 7.1.2.1.	Pass
7.2.3	Alternative qualification of elastomeric sealing O-rings	Alternative qualification of elastomeric sealing O-rings was not used.	N/A
7.3	Resistance to ultraviolet light	The equipment does not contain any non-metallic materials which are exposed to UV light in service with regard to this clause.	N/A
7.4	Electrostatic charges on external non-metallic materials		
7.4.1	Applicability	This clause applies to the painted equipment enclosures. The requirements of 7.4 also apply to non-metallic parts which are applied to the external surface of an enclosure.	Pass
7.4.2	Avoidance of a build-up of electrostatic charge for Group I or Group II	The maximum thickness of non-metallic layer is 0.17 mm and is in compliance with table 8 limitation.	Pass
7.4.3	Avoidance of a build-up of electrostatic charge for Group III	See Appendix A.	Pass
7.5	Attached external conductive parts	All accessible metal parts of the component body are connected to ground. After installation, the equipotential bonding shall be considered.	Pass
8	Metallic enclosures and metallic parts of enclosures		
8.1	Material composition	The manufacturer's documents according to Clause 24 provide the material specifications of the equipment parts.	Pass
8.2	Group I	The equipment is not intended to Group I.	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
8.3	Group II	The equipment is intended to group II. The equipment materials of construction do not contain, by weight, 10 % in total of aluminium, magnesium, titanium and zirconium, with no more than 7,5 % in total of magnesium, titanium and zirconium for EPL Ga. See Material analysis reports.	Pass
8.4	Group III	for EPL Db 7,5 % in total of magnesium, titanium and zirconium; See Material analysis reports.	Pass
8.5	Copper Alloys	Not used.	N/A
9	Fasteners		
9.1	General	All equipment entries details including thread form, location and number of entries are specified in the manufacturer's dimensional drawings. Thread size of entries: one M20×1.5. For more details see manufacturer's drawings.	Pass
9.2	Special fasteners	Not relevant.	N/A
9.3	Holes for special fasteners		
9.3.1	Thread engagement	Refer to 9.2.	N/A
9.3.2	Tolerance and clearance	Refer to 9.2.	N/A
9.4	Hexagon socket set screws	Not used.	N/A
10	Interlocking devices	Not relevant.	N/A
11	Bushings	Not relevant	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
12	(Reserved for future use)		
13	Ex Components		
13.1	General	The equipment is not an Ex component, but the manufacturer shall use the suitable Ex d component for cable gland, Stopping plug.	N/A
13.2	Mounting	Refer to 13.1.	N/A
13.3	Internal mounting	Refer to 13.1.	N/A
13.4	External mounting	Refer to 13.1.	N/A
13.5	Ex Component certificate	Refer to 13.1.	N/A
14	Connection facilities		
14.1	General	For connecting to external circuits suitable Ex cable gland with at least IP66 protection shall be used.	Pass
14.2	Type of protection	Refer to 14.1.	Pass
14.3	Creepage and clearance	Not relevant.	N/A
15	Connection facilities for earthing or bonding conductors		
15.1	Equipment requiring earthing or bonding		
15.1.1	Internal earthing	Meet the requirements. Provided on PCB connection. For more details see manufacturer's drawings.	Pass
15.1.2	External bonding	Meet the requirements. Provided on main bodies of enclosures.	Pass

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
15.2	Equipment not requiring earthing	Not relevant.	N/A
15.3	Size of protective earthing conductor connection	Meet the requirements.	Pass
15.4	Size of equipotential bonding conductor connection	Meet the requirements.	Pass
15.5	Protection against corrosion	The earthing connection materials of construction provide suitable protection against corrosion.	Pass
15.6	Secureness of electrical connections	The arrangement of the earthing connection parts provides suitable protection against loosening and twisting.	Pass
15.7	Internal earth continuity plate	Not relevant.	N/A
16	Entries into enclosures		
16.1	General	All equipment entries details including thread form, location and number of entries are specified in the manufacturer's dimensional drawings. Thread size of entries: one M20×1.5. For more details see manufacturer's drawings.	Pass
16.2	Identification of entries	Refer to 16.1.	Pass
16.3	Cable glands	The EUT is a not cable gland but suitable certified cable glands shall be used in the EUT entries.	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
16.4	Blanking elements	The EUT is not a blanking element but suitable certified blanking elements shall be used in the EUT entries.	N/A
16.5	Thread adapters	Not used.	N/A
16.6	Temperature at branching point and entry point	Not relevant.	N/A
16.7	Electrostatic charges of cable sheaths	This clause contains no requirements.	N/A
17	Supplementary requirements for electric machines		
17.1	General	The equipment is not a rotating machine.	N/A
17.2	Ventilation		
17.2.1	Ventilation openings	Not relevant.	N/A
17.2.2	Materials for external fans	Not relevant.	N/A
17.2.3	Cooling fans of rotating electric machines	Not relevant.	N/A
17.2.3.1	Fans and fan hoods	Not relevant	N/A
17.2.3.2	Construction and mounting of the ventilating systems	Not relevant.	N/A
17.2.3.3	Clearances for the ventilating system	Not relevant.	N/A
17.2.4	Auxiliary motor cooling fans	Not relevant.	N/A
17.2.5	Room ventilating fans		
17.2.5.1	Applicability	Not relevant.	N/A
17.2.5.2	General	Not relevant.	N/A
17.2.5.3	Fan and fan hoods	Not relevant.	N/A
17.2.5.4	Construction and mounting	Not relevant.	N/A
17.2.5.5	Clearances for rotating parts	Not relevant.	N/A
17.3	Bearings	Not relevant.	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
18	Supplementary requirements for switchgear		
18.1	Flammable dielectric	Not relevant.	N/A
18.2	Disconnectors	Not relevant.	N/A
18.3	Group I – Provisions for locking	Not relevant.	N/A
18.4	Doors and covers	Not relevant.	N/A
19	Reserved for future use		
20	Supplementary requirements for external plugs, socket outlets and connectors for field wiring connection		
20.1	General	Not relevant.	N/A
20.2	Explosive gas atmospheres	Not relevant.	N/A
20.3	Explosive dust atmospheres	Not relevant.	N/A
20.4	Energized plugs	Not relevant.	N/A
21	Supplementary requirements for luminaires		
21.1	General	Not relevant.	N/A
21.2	Covers for luminaires of EPL Mb, EPL Gb, or EPL Db	Not relevant.	N/A
21.3	Covers for luminaires of EPL Gc or EPL Dc	Not relevant.	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
21.4	Sodium lamps	Not relevant.	N/A
22	Supplementary requirements for caplights and handlights		
22.1	Group I caplights	Not relevant.	N/A
22.2	Group II and Group III caplights and handlights	Not relevant.	N/A
23	Equipment incorporating cells and batteries		
23.1	General	Not used.	N/A
23.2	Interconnection of cells to form batteries	Not used.	N/A
23.3	Cell types	Not used.	N/A
23.4	Cells in a battery	Not used.	N/A
23.5	Ratings of batteries	Not used.	N/A
23.6	Interchangeability	Not used.	N/A
23.7	Charging of primary batteries	Not used.	N/A
23.8	Leakage	Not used.	N/A
23.9	Connections	Not used.	N/A
23.10	Orientation	Not used.	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
23.11	Replacement of cells or batteries	Not used.	N/A
23.12	Replaceable battery pack	Not used.	N/A
24	Documentation	The manufacturer provides a full and correct specification of the safety aspects of the electrical equipment. See drawings and other technical files.	Pass
25	Compliance of prototype or sample with documents	The samples of the equipment submitted by the manufacturer complied with the definitive documents referred to in Clause 24.	Pass
26	Type tests		
26.1	General	All necessary tests contained in this standard were conducted and recorded. Full justifications have been provided for omitted tests.	Pass
26.2	Test configuration	Each test on the equipment test samples was conducted under the conditions considered to be the most unfavorable.	Pass
26.3	Tests in explosive test mixtures	The required tests from IEC 60079-11 and IEC 60079-26 have been addressed. See EN 60079-11, IEC 60079-26 assessment.	Pass
26.4	Tests of enclosures		
26.4.1	Order of tests		
26.4.1.1	Metallic enclosures, metallic parts of enclosures and glass parts of enclosures	Tests on the equipment were conducted in the order as per this clause.	Pass
26.4.1.2	Non-metallic enclosures or non-metallic parts of enclosures		
26.4.1.2.1	General	Tests for non-metallic enclosures or non-metallic parts of enclosures were performed according the requirements of this standard.	Pass
26.4.1.2.2	Group I equipment	The equipment is not intended to Group I.	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
26.4.1.2.3	Group II and Group III equipment	Thermal endurance to heat/cold, Impact and IP tests have been performed.	Pass
26.4.2	Resistance to impact	The metallic of the equipment enclosures satisfied the 70 cm to body of enclosure impact tests. Refer to relevant test record.	Pass
26.4.3	Drop test	The equipment is not intended to be hand held.	N/A
26.4.4	Acceptance criteria	The impact tests did not produce damage that would invalidate the component Type of Protection.	Pass
26.4.5	Degree of protection (IP) by enclosures		
26.4.5.1	Test procedure	The equipment enclosures were verified for an IP66/67 ingress rating.	Pass
26.4.5.2	Acceptance criteria	The acceptance criteria were in accordance with EN 60529 and EN IEC 60079-0. No penetration of dust or water was seen after tests.	Pass

26.5	Thermal tests		
26.5.1	Temperature measurement		
26.5.1.1	General	Temperature measurement tests were successfully carried out in accordance with 26.5.1.	Pass
26.5.1.2	Service temperature	Service temperatures was measured and the result of test was satisfactory.	Pass
26.5.1.3	Maximum surface temperature	The maximum surface temperature was measured for EUT models corresponding to temperature classes T6, in accordance with the applicable test requirement.	Pass
26.5.2	Thermal shock test	Not relevant	N/A
26.5.3	Small component ignition test (Group I and Group II)		
26.5.3.1	General	Not relevant	N/A
26.5.3.2	Procedure	Not relevant	N/A
26.5.3.3	Acceptance criteria	Not relevant	N/A

26.6	Torque test for bushings		
26.6.1	Test procedure	Not relevant	N/A
26.6.2	Acceptance criteria	Not relevant	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ - (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۰۰۱۴ - (+۹۸۲۶) ۳۴۹۹۶۷۰۰ فکس: ۳۴۹۹۶۷۱۵ - (+۹۸۲۶)

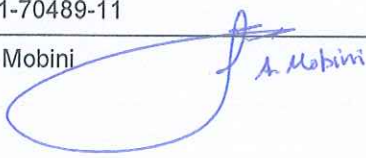
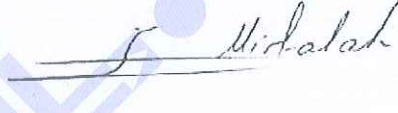
IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
26.7	Non-metallic enclosures or non-metallic parts of enclosures		
26.7.1	General	The equipment contains no non-metallic enclosure parts except for the epoxy resin, gasket and O-ring.	Pass
26.7.2	Test temperatures	During performing the related tests the requirements of this clause have been considered.	Pass
26.8	Thermal endurance to heat	Meet the requirements	Pass
26.9	Thermal endurance to cold	Meet the requirements	Pass
26.10	Resistance to UV light		
26.10.1	General	The EUT does not contain any non-metallic materials which are exposed to UV light in service with regard to this clause.	N/A
26.10.2	Light exposure	Refer to 26.10.1	N/A
26.10.3	Acceptance criteria	Refer to 26.10.1	N/A
26.11	Resistance to chemical agents for Group I equipment	Group II.	N/A
26.12	Earth continuity	Not relevant.	N/A
26.13	Surface resistance test of parts of enclosures of non-metallic materials	Not relevant.	N/A
26.14	Measurement of capacitance		
26.14.1	General	Not relevant	N/A
26.14.2	Test procedure	Not relevant	N/A
26.15	Verification of ratings of ventilating fans	Not relevant.	N/A
26.16	Alternative qualification of elastomeric sealing O-rings	Not relevant.	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
26.17	Transferred charge test		
26.17.1	Test equipment	Not relevant.	N/A
26.17.2	Test sample	Not relevant.	N/A
26.17.3	Test procedure	Not relevant.	N/A
27	Routine tests	Not relevant.	N/A
28	Manufacturer's responsibility		
28.1	Conformity with the documentation	The manufacturer's responsibility to ensure that the component produced complies with the documentation will be indicated by placing the relevant marking on the product. The manufacturer shall carry out the verifications or tests necessary to ensure that the equipment produced complies with the documentation.	Pass
28.2	Certificate	The manufacturer shall prepare, or have prepared, a certificate confirming that the equipment is in conformity with the requirements of this standard along with its other applicable parts.	Pass
28.3	Responsibility for marking	The manufacturer's responsibility will be indicated by placing the relevant marking on the product. By marking the equipment, the manufacturer attests that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and the routine verification and tests (if applicable) have been successfully completed and that the product complies with the documentation.	Pass
29	Marking		

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
29.1	Applicability	The manufacturer shall assure that the marking system indicated in this clause are only applied to product which comply with IEC 60079-0, IEC 60079-11 and IEC 60079-26	Pass
29.2	Location	The marking plate is placed on the component body and it is fully legible. See manufacturer's instruction and drawings for more details.	Pass
29.3	General	Marked with: 1-manufacturer name 2-type identification 3-serial number 4-year of construction 5-Equipment group and category 6-type of protection 7-temperature range See manufacturer's instruction and drawings for more details.	Pass
29.4	Ex marking for explosive gas atmospheres	Ex ia IIC T6..T1 Ga	Pass
29.5	Ex marking for explosive dust atmospheres	Ex ia IIIC Txxx °C Db/Ga	Pass
29.6	Combined types (or levels) of protection	Meet the requirements	Pass
29.7	Multiple types of protection	No Multiple types of protection were used.	Pass
29.8	Ga equipment using two independent Gb types (or levels) of protection	Not relevant.	N/A
29.9	Boundary wall	See IEC 60079-26 section	Pass

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
29.10	Ex Components	Equipment.	Pass
29.11	Small Ex Equipment and small Ex Components	Not relevant.	N/A
29.12	Extremely small Ex Equipment and extremely small Ex Components	Not relevant.	N/A
29.13	Warning markings	Not used.	N/A
29.14	Cells and batteries	Not used.	N/A
29.15	Electric machines operated with a converter	Not relevant	N/A
29.16	Examples of marking	The clause contains examples of marking.	N/A
30	Instructions		
30.1	General	The instruction Manual contains the required Information. For details see manufacturer's Instructions.	Pass
30.2	Cells and batteries	Not relevant.	N/A
30.3	Electrical machines	Not relevant.	N/A
30.4	Ventilating fans	Not relevant.	N/A
30.5	Cable glands	Not relevant.	N/A

IEC 60079-0:2017			
Clause	Requirement – Test	Result – Remark	Verdict
Annex A (Normative)	Supplementary requirements for cable glands		
A.1	General	No cable glands.	N/A
Annex B (Normative)	Requirements for Ex Components		
Table B.1	Applicability of clauses to Ex Components	Equipment.	Pass
Annex C (Informative)	Example of rig for resistance to impact test		
Annex D (Informative)	Electric machines connected to converters		
Annex E (Informative)	Temperature evaluation of electric machines		
Annex F (Informative)	Guideline flowchart for tests of non-metallic enclosures or non-metallic parts of enclosures (26.4)		
Annex G (Informative)	Guidance flowchart for tests of cable glands		
Annex H (Informative)	Shaft voltages resulting in motor bearing or shaft brush sparking Discharge energy calculation		

TEST REPORT IEC 60079-11:2023 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "I"	
Test Report Number.....:	H1-70489-11
Prepared by + signature (ExTL).....:	A.Mobini 
Reviewed by + signature (ExTL).....:	M. Ghanbariha 
Approved by + signature (ExTL).....:	S.M. Mirfalah 
Date of issue	February 21, 2026
Ex Testing Laboratory (ExTL).....:	Ex EPIL
Address	Kavosh research city, Supa blv, 8th km . Karaj-Qazvin freeway , Iran.
Applicant's name	Prismatech
Address	Karimkhan Zand Ave., Ghaemmaghmagh Farahani St., Sanaei St., Ghaemmaghmagh, Tehran City, central Dist., Tehran City, Tehran Province, Iran.
Standards	IEC 60079-11:2023
Test procedure.....:	IEC 60079-11:2023


 Technical Department
 ISO/IEC 17025
 Accredited Lab

Possible test case verdicts: - test case does not apply to the test item..... :N/A - test item does meet the requirement..... :Pass
General remarks: The test results presented in this Test Report relate only to the item or product tested. ▪ "(Refer to Appendix #)" refers to additional information appended to this document. ▪ "(Refer appended Doc #)" refers to a document table that is linked to this document. ▪ Throughout this document, a point is used as the decimal separator. The technical content of this Ex Test Report shall not be reproduced except in full without the written approval of the Issuing NB and TL.

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
1	Scope		
2	Normative references		
3	Terms and definitions		
4	Equipment grouping, classification and Levels of Protection of apparatus	This Equipment has been divided into the following Group. Group II. Group III.	Pass
5	Ignition compliance requirements		
5.1	General	In level of protection "ia".	Pass
5.2	Conditions for assessment		
5.2.1	General		
5.2.2	Level of Protection "ia"	In level of protection "ia".	Pass
5.2.3	Level of Protection "ib"	Refer to 5.2.2	N/A
5.2.4	Level of Protection "ic"	Refer to 5.2.2	N/A
5.2.5	Non-shock hazard equipment or systems	Not applicable.	N/A
5.3	Spark ignition compliance		
5.3.1	General	Refer to Appendix A for details	Pass
5.3.2	Levels of Protection "ia" and "ib"	In level of protection "ia".	Pass
5.3.3	Level of Protection "ic"	Refer to 5.3.2	N/A
5.3.4	Application of safety factors		
5.3.4.1	Safety factor 1,0	Refer to 5.3.4.2	N/A
5.3.4.2	Safety factor 1,5	level of protection "ia".	Pass
5.3.5	Circuits without controlled semiconductor limitation	Not used.	N/A
5.3.6	Circuits with controlled semiconductor limitation	Not used.	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - ۶۱۹۸۲۱ - فکس: ۶۶۱۷۴۲۸۳ - ۹۸۲۱ (+)
 آزمایشگاه: ۸ کیلومتر اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰ - ۳۴۹۹۶۷۱۵ - فکس: ۳۴۹۹۶۷۱۵ - ۹۸۲۶ (+)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
5.4	Thermal ignition compliance		
5.4.1	General	Ref. Below.	Pass
5.4.2	Temperature of small components for Group I and Group II	The equipment has small components and Requirements for temperatures of small components used in Group II equipment are met by assessment based on Table 3 & Table 4 of 60079-0	Pass
5.4.3	Wiring within intrinsically safe apparatus for Group I and Group II	Meet the requirements.	Pass
5.4.4	PCB tracks for Group I and Group II	Meet the requirements.	Pass
5.4.5	Intrinsically safe apparatus and component temperature for dusts	The equipment is intended for Group II	N/A
5.5	Simple apparatus	Not applicable.	N/A
6	Apparatus construction		
6.1	General		
6.2	Enclosures		
6.2.1	General	The degree of protection IP66/67	Pass
6.2.2	Apparatus complying with Table 7	based on Table 7	Pass
6.2.3	Apparatus complying with Table 8 or Table 9	Refer to 6.2.2	N/A
6.2.4	Enclosures for Group IIIC intrinsically safe apparatus	The equipment is intended for Group II.	N/A
6.2.5	Protection of separations		
6.2.5.1	Protection by enclosure	Refer to 6.2.2	N/A
6.2.5.2	Protection by other means	Refer to 6.2.2	N/A
6.3	Connection facilities for external circuits		
6.3.1	Terminals	It is essential that the installation includes a proper earth ground connection to the transmitter's body and cable shield for both safety and noise immunity.	Pass

Page 24 of 45

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱ – (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ – (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج – قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۰۰۱۴ – ۳۴۹۹۶۷۰۰ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
6.3.2	Earth Terminals	It is essential that the installation includes a proper earth ground connection to the transmitter's body and cable shield for both safety and noise immunity.	Pass
6.3.3	Plugs and sockets	Not used.	N/A
6.3.4	Permanently connected cable	Not applicable, does not have permanently connected cables.	N/A
6.3.5	Connections and accessories for intrinsically safe apparatus for use in non-hazardous area		
6.3.5.1	General	Not applicable.	N/A
6.3.5.2	Protection against spark ignition while in the hazardous area	Not applicable.	N/A
6.3.5.3	Protection of components on which intrinsic safety depends	Not applicable.	N/A

6.4	Internal connections and connectors		
6.4.1	General	For Levels of Protection "ia", if not complying with Clause 6.4.2, the open-circuit failure of any conductor, connector, or PCB track (including its connections) is considered as a non-countable fault.	Pass
6.4.2	Infallible connections		
6.4.2.1	General		
6.4.2.2	Connectors	Connectors are not considered infallible and their faults considered as a non-countable fault.	N/A
6.4.2.3	Wiring	Meet the requirements	Pass
6.4.2.4	Printed circuit boards	open-circuit failure of PCB track (including its connections) is considered as a non-countable fault. Solder Mask : LPI Solder Mask (Green) Taiyo PSR-4000 CTI ≥ 600V	Pass
6.4.2.5	Other connections	Other connections are not considered infallible and their faults considered as a non-countable fault.	N/A
6.4.3	Connectors for internal connections, plug-in cards and components	Not used.	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می‌باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ - (+۹۸۲۱)
 آزمایشگاه: ۸ کیلومتر اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰ - ۱۴ - (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ - (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
6.4.4	Earth conductors and connections	Earth conductors and connections are not considered infallible and their faults considered as a non-countable fault.	Pass

6.5	Separation of conductive parts		
6.5.1	Separations on which intrinsic safety depends	All distance requirements (including clearance and creepage) have been fulfilled in compliance with the standard for Protection Level "ia"	Pass
6.5.2	Separation distances according to Table 7	All separations are based on Table 7	Pass
6.5.3	Reduced separation distances		
6.5.3.1	General	Refer to 6.5.2	N/A
6.5.3.2	Reduced separation distances according to Table 8	Refer to 6.5.2	N/A
6.5.3.3	Reduced separation distances for Level of Protection "ic"	level of protection "ia" and Refer to 6.5.2	N/A
6.5.4	Failure of separations		
6.5.4.1	General		
6.5.4.2	Infallible separations	Separation distances are in accordance with the values given in Table 7.	Pass
6.5.4.3	Distances according to Table 7	Refer to 6.5.4.2	Pass
6.5.4.4	Distances according to Table 8	Refer to 6.5.4.2	N/A
6.5.4.5	Distances according to Table 9	Refer to 6.5.4.2	N/A
6.5.5	Voltage between conductive parts	5 VDC	Pass
6.5.6	Types of separation		
6.5.6.1	Clearance	Clearance between the isolated and the non-isolated circuitries is about 1mm.	Pass
6.5.6.2	Separation distances through casting compound	Not used.	N/A
6.5.6.3	Separation distances through solid insulation	Not applicable, solid insulation distances not Considered.	N/A
6.5.6.4	Creepage distance	Meet the requirements.	Pass
6.5.6.5	Separations distances protected by coating	Not used.	N/A
6.5.7	Composite separations	Not used.	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری مفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ - (+۹۸۲۱)
 آزمایشگاه: ۸ کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰-۱۴ - (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ - (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
6.5.8	Printed circuit board assemblies	The printed circuit board layout adheres to required creepage and clearance distances.	Pass
6.5.9	Separation by metal parts		
6.5.9.1	General	Not applicable, metal parts are not used.	N/A
6.5.9.2	Levels of Protection "ia" and "ib"	Not applicable.	N/A
6.5.9.3	Level of Protection "ic"	Level protection is "ia"	N/A
6.5.10	Separation by non-metallic insulating partitions	Not applicable.	N/A
6.5.11	Insulation of internal wiring		
6.5.11.1	General		
6.5.11.2	Insulation between intrinsically safe and non-intrinsically safe circuits	Non-intrinsically safe circuits don't exist.	N/A
6.5.11.3	Insulation between separate intrinsically safe circuits	Only a single intrinsically safe circuit is present. there are no multiple distinct circuits.	N/A

6.6	Encapsulation		
6.6.1	General	Not used.	N/A
6.6.2	Encapsulation used for the exclusion of explosive atmospheres		
6.6.2.1	Protection against spark ignition	Not applicable.	N/A
6.6.2.2	Additional requirements for protection against thermal ignition	Not applicable.	N/A
6.6.3	Mechanical protection to avoid access to parts	Not applicable.	N/A
6.6.4	Encapsulation used for protection of a fuse	Not applicable.	N/A
6.6.5	Encapsulation used to provide separation	Not applicable	N/A
6.6.6	Encapsulation used to enhance the rating of protective components	Not applicable.	N/A
6.6.7	Free space within the encapsulation		
6.6.7.1	General	No Free space within the encapsulation.	N/A
6.6.7.2	Volume of free space	Refer to 6.6.7.1	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱ – (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ – (+۹۸۲۱)
 آزمایشگاه: ۸ کیلومتر اتوبان کرج – قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۰۰-۱۴ – (+۹۸۲۶) ۳۴۹۹۶۷۰۰ فکس: ۳۴۹۹۶۷۱۵ – (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
6.6.7.3	Protection of free space	Refer to 6.6.7.1	N/A
6.7	Specification of coating, encapsulation materials	Not used.	N/A
6.8	Protection against polarity reversal	Not used.	N/A
6.9	Dielectric strength requirement	All equipment is subject to an electric strength test using a test voltage of at least 500Vac applied between the field terminals and the enclosure for 60s.	Pass
7	Characteristics and failure of components and assemblies		
7.1	Rating of components on which intrinsic safety depends	Not relevant.	N/A
7.2	Failure of components	Not relevant.	N/A
7.3	Manufacturing variation	Not applicable, Not applicable, there are no components on which intrinsic safety depends.	N/A
7.4	Resistors		
7.4.1	General	See Appendix	Pass
7.4.2	Resistors on which intrinsic safety depends	Not used.	N/A
7.5	Capacitors		
7.5.1	General	Refer to Appendix A	Pass
7.5.2	Capacitors on which intrinsic safety depends	Not used.	N/A
7.5.3	Blocking capacitors	Not used.	N/A
7.5.4	Infallible filter capacitors	Not used.	N/A
7.6	Inductors and windings		

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
7.6.1	General	Refer to Appendix A.	Pass
7.6.2	Inductors on which intrinsic safety depends	Not used.	N/A
7.6.3	Infallibly insulated inductors	Not used.	N/A
7.6.4	Damping windings	Not used.	N/A
7.6.5	Common mode choke coils (EMI suppression filters)		
7.6.5.1	General	Not used.	N/A
7.6.5.2	Infallible common mode chokes	Not used.	N/A

7.7	Semiconductors		
7.7.1	Failure of semiconductors	Not used.	N/A
7.7.2	Semiconductors on which intrinsic safety depends	Not used.	N/A
7.7.3	Transient effects on semiconductors on which intrinsic safety depends	Not applicable.	N/A
7.7.4	Semiconductors in shunt voltage limiters	Not used.	N/A
7.7.5	Shunt assembly on which intrinsic safety depends	Not used.	N/A
7.7.6	Safety assemblies infallible against failure to limit voltage	Not used.	N/A
7.7.7	Semiconductor current limiters	Not used.	N/A
7.7.8	Use of programmable components	Not used.	N/A

7.8	Transformers		
7.8.1	General	Not used.	N/A
7.8.2	Transformers on which intrinsic safety depends	Refer to 7.8.1	N/A
7.8.3	Construction of transformers on which intrinsic safety depends	7.8.1	N/A
7.8.4	Protective measures for transformers on which intrinsic safety depends for Levels of Protection "ia" and "ib"		
7.8.4.1	Mains transformers	Not applicable.	N/A
7.8.4.2	Transformers galvanically isolated from the mains supply	Refer to 7.8.1	N/A

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
7.8.5	Requirements for transformers for Level of Protection "ic"	Not applicable.	N/A

7.9	Relays		
7.9.1	General	Not used.	N/A
7.9.2	Relays on which intrinsic safety depends	Refer to 7.9	N/A

7.10	Signal isolators		
7.10.1	General	Not used.	N/A
7.10.2	Signal isolators on which intrinsic safety depends	Refer to 7.10.1	N/A
7.10.3	Signal isolators between intrinsically safe and non-intrinsically safe circuits	Refer to 7.10.1	N/A
7.10.4	Signal isolators between separate intrinsically safe circuits	Not applicable.	N/A

7.11	Fuses	Not used.	N/A
------	-------	-----------	-----

7.12	Primary and secondary cells and batteries		
7.12.1	General	Not used.	N/A
7.12.2	Construction of cells and batteries used in intrinsically safe apparatus	Refer to 7.12.1	N/A
7.12.3	Electrolyte leakage	Refer to 7.12.1	N/A
7.12.4	Ventilation	Refer to 7.12.1	N/A
7.12.5	Cell voltages	Refer to 7.12.1	N/A
7.12.6	Batteries in equipment protected by different Types of Protection	Refer to 7.12.1	N/A
7.12.7	Batteries used and replaced in explosive atmospheres	Refer to 7.12.1	N/A
7.12.8	Replaceable batteries used but not replaced in explosive atmospheres	Refer to 7.12.1	N/A
7.12.9	External contacts for charging batteries	Refer to 7.12.1	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ - (+۹۸۲۱)
 آزمایشگاه: ۸ کیلومتر اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰ - ۱۴ - (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ - (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
7.13	Piezoelectric devices	Not used.	N/A
7.14	Cells for the detection of gases		
7.14.1	Electrochemical	Not used.	N/A
7.14.2	Catalytic	Not used.	N/A
7.15	Supercapacitors	Not used.	N/A
7.16	Thermal devices		
7.16.1	General	Not used.	N/A
7.16.2	Thermal devices used to limit temperature		
7.16.2.1	General	Not used.	N/A
7.16.2.2	Temperature sensors	Not used.	N/A
7.16.2.3	Switching thermal devices	Not used.	N/A
7.16.2.4	PTC devices used to limit temperature	Not used.	N/A
7.16.3	PPTC devices used to limit current	Not used.	N/A
7.17	Mechanical switches	Not used.	N/A
8	Supplementary requirements for specific apparatus		
8.1	Diode safety barriers		
8.1.1	General	Not used.	N/A
8.1.2	Construction		
8.1.2.1	Mounting	Refer to 8.1.1	N/A
8.1.2.2	Facilities for connection to earth	Refer to 8.1.1	
8.1.2.3	Protection of components	Refer to 8.1.1	N/A
8.2	FISCO apparatus	Not used.	N/A
9	Type verifications and type tests		

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
9.1	Spark ignition test		
9.1.1	General	Normal and fault conditions shall be simulated during the tests. The spark test apparatus shall be inserted in the circuit under test at each point where it is considered that an interruption, short circuit, or earth fault may occur.	Pass
9.1.2	Spark test apparatus and its use		
9.1.3	Test gas mixtures and spark test apparatus calibration current		
9.1.3.1	Explosive test mixtures and calibration currents for safety factor 1,0	Refer to 9.1.3.2	N/A
9.1.3.2	Explosive test mixtures and calibration currents for safety factor 1,5	Compositions of explosive test mixtures adequate for 1,5 safety factors: Oxygen-hydrogen mixture for IIC gas group: $60 \pm 0,5$ (Hydrogen) and $40 \pm 0,5$ (Oxygen)	Pass

9.2	Spark ignition assessment using reference curves and tables		
9.2.1	General	Refer to Appendix	Pass
9.2.2	Assessment of simple resistive circuit		
9.2.2.1	General	Refer to Appendix A.	Pass
9.2.2.2	Example simple resistive circuit assessment	Refer to Appendix A.	Pass
9.2.3	Assessment of simple capacitive circuits		
9.2.3.1	General	Not used.	N/A
9.2.3.2	Example of simple capacitive circuit assessment	Not used.	N/A
9.2.3.3	Permitted reduction of effective capacitance when protected by a series resistance	Not used.	N/A
9.2.4	Assessment of simple inductive circuits		
9.2.4.1	General	Refer to Appendix A.	Pass
9.2.4.2	Example of simple inductive circuit assessment	Refer to Appendix A.	Pass
9.2.5	Determination of Lo/Ro for resistance limited power source	Not applicable.	N/A
9.2.6	Circuits with both inductance and capacitance	Not applicable.	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.

کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ - (+۹۸۲۱)

آزمایشگاه: ۸ کیلومتر از اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت

آزمایشگاه‌های صنایع انرژی. کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰ - (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ - (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
9.3	Temperature tests	Refer Appendix A	Pass

9.4	Mechanical tests		
9.4.1	Casting compound	Not used.	N/A
9.4.2	Acceptability of encapsulated or coated fuses	Not used.	N/A
9.4.3	Partitions	Not used.	N/A
9.4.4	Cable pull test	Not used.	N/A

9.5	Current carrying capacity of infallible printed circuit board connections	The current carrying capacity of the connection was tested in accordance with the requirements for Levels of Protection "ia" and "ib". The test was performed for a duration of 1 hour at the maximum service temperature, applying a test current equal to 1.5 times the maximum continuous current that can flow in the connection under the conditions specified in Clause 5.2. During and after the test, no open-circuit failure occurred, and no separation of the connection from its substrate was observed at any point. The connection remained mechanically and electrically intact.	Pass
-----	---	---	------

9.6	Dielectric strength tests	All equipment is subject to an electric strength test using a test voltage of at least 500Vac applied between the field terminals and the enclosure for 60s	Pass
-----	---------------------------	---	------

9.7	Qualification of solid insulation and distance through casting compound for application of reduced separations		
9.7.1	General	Distances are based on Table 7.	N/A
9.7.2	Preconditioning		
9.7.2.1	Dry heat preconditioning	Refer to 9.7.1	N/A
9.7.2.2	Dry heat cycle preconditioning	Refer to 9.7.1	N/A
9.7.2.3	Rapid change of temperature preconditioning	Refer to 9.7.1	N/A
9.7.2.4	Humidity preconditioning	Refer to 9.7.1	N/A
9.7.3	AC power frequency voltage test	Refer to 9.7.1	N/A

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
9.7.4	Partial discharge test	Refer to 9.7.1	N/A
9.8	Type tests for PCB coatings	Distances are based on Table 7.	N/A
9.9	Differential Leakage current tests for signal isolators	Not used.	N/A
9.10	Isolator tests		
9.10.1	General	Not used.	N/A
9.10.2	Thermal conditioning and dielectric test		
9.10.2.1	General	Refer to 9.10.1	N/A
9.10.2.2	Overload test at the receiver side	Refer to 9.10.1	N/A
9.10.2.3	Overload test at the transmitter side	Refer to 9.10.1	N/A
9.10.2.4	Thermal conditioning and dielectric strength test	Refer to 9.10.1	N/A
9.10.3	Dielectric and short circuit test		
9.10.3.1	General	Refer to 9.10.1	N/A
9.10.3.2	Pre-test dielectric	Refer to 9.10.1	N/A
9.10.3.3	Short circuit current test	Refer to 9.10.1	N/A
9.10.3.4	Dielectric strength test	Refer to 9.10.1	N/A
9.11	Tests for intrinsically safe apparatus containing piezoelectric devices	Not used.	N/A
9.12	Tests for PTC devices	Not used.	N/A
9.13	Determination of parameters of loosely specified components	Not used.	N/A
9.14	Tests for cells, batteries and supercapacitors		
9.14.1	Conditions for testing		
9.14.1.1	General	Not used.	N/A
9.14.1.2	Tests without dust layers	Refer to 9.14.1.1	N/A

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
9.14.1.3	Tests with dust layers	Refer to 9.14.1.1	N/A
9.14.1.4	Additional tests	Refer to 9.14.1.1	N/A
9.14.2	Electrolyte leakage test for cells, batteries and supercapacitors	Refer to 9.14.1.1	N/A
9.14.3	Spark ignition and surface temperature of cells, batteries or supercapacitors		
9.14.3.1	General	Refer to 9.14.1.1	N/A
9.14.3.2	Spark ignition assessment	Refer to 9.14.1.1	N/A
9.14.3.3	Thermal ignition assessment	Refer to 9.14.1.1	N/A
9.14.4	Battery container pressure tests	Refer to 9.14.1.1	N/A
9.14.5	Battery resistance	Refer to 9.14.1.1	N/A
9.15	Determination of storable energy in common mode chokes	Not used.	N/A
9.16	Type tests for components protected by time dependent current limitation	Not used.	N/A
9.17	Transformer tests		
9.17.1	General	Not used.	N/A
9.17.2	Mains transformers for Level of Protection "Ia" and "Ib"		
9.17.2.1	Mains transformers operated at mains frequency	Refer to 9.17.1	N/A
9.17.2.2	Mains transformers operated at non-mains frequency	Refer to 9.17.1	N/A
9.17.2.3	Acceptance criteria	Refer to 9.17.1	N/A
9.17.3	Transformers galvanically isolated from the mains supply for Levels of Protection "Ia" and "Ib"	Refer to 9.17.1.	N/A
9.17.4	Transformers for Level of Protection "Ic"	Refer to 9.17.1	N/A
10	Routine verifications and tests		
10.1	Alternative reduced spacings	Not applicable.	N/A

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
10.2	Routine tests for diode safety barriers		
10.2.1	Completed barriers	Not applicable.	N/A
10.2.2	Diodes for 2-diode "ia" barriers	Not applicable.	N/A
10.3	Routine tests for transformers		
10.3.1	Levels of Protection "ia" and "ib"	applicable.	Pass
10.3.2	Level of Protection "ic"	Not applicable.	N/A
10.4	Routine verification of conformal coating and encapsulation	Not applicable.	N/A
11	Marking		
11.1	Intrinsically safe apparatus and associated apparatus		
11.1.1	General	It complies with the requirements. This Intrinsically safe apparatus is marked according to requirements specified in IEC 60079-0: 2017 Ex ia IIC T6..T1 Ga Ex ia IIIC Txxx °C Db/Ga	Pass
11.1.2	Intrinsic safety parameters	See Appendix	Pass
11.1.3	FISCO	Not applicable.	N/A
11.1.4	Marking of connection facilities	Not applicable.	N/A
11.1.5	Non-hazardous area accessory	Not applicable.	N/A
11.2	Warning markings	Not used.	N/A
12	Instructions		

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن پست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱ – (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ – (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج – قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰ – (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ – (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict
12.1	General	The Coriolis Mass Flowmeter Sensor is used as part of a mass flow measuring system to determine the mass flow rate of flammable and non-flammable liquids and gases. The equipment comprises a process tube to which coils and sensors are attached. The coils and sensors are wired to a junction box which incorporates the terminals for connection to external equipment and protection circuits.	Pass
12.2	Specific Conditions of Use	- The Mass Flow Sensors shall be included in the equipotential bonding System of the hazardous area. -For relationship between maximum permissible ambient temperature, maximum medium temperature, maximum surface temperature and temperature class for sensor, refer to the tables given in the equipment description. -The enclosure is manufactured from aluminium alloy. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation if the equipment is installed in an area requiring EPL Ga. -The equipment shall only be connected to the Measuring Transmitter PTMT (PrismaTech Company) - When installed in areas requiring EPL Db under certain extreme circumstances, the painted surfaces of the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth. - Any cable used to connect this equipment to other equipment shall be Type A in accordance with IEC 60079-14 Clause 16.2.2.8. The temperature at the cable entry point may be up to +92°C	Pass

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری مفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ - تلفن: ۶۱۹۷۱ - (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ - (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ - تلفن: ۳۴۹۹۶۷۰۰ - (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ - (+۹۸۲۶)

IEC 60079-11:2023			
Clause	Requirement – Test	Result – Remark	Verdict

Page 38 of 45

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

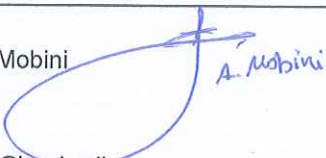
هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.

کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)

آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.

کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

TEST REPORT IEC 60079-26:2021 Explosive atmospheres – Part 26: Equipment with Separation Elements or combined Levels of Protection	
Test Report Number	H1-70489-26
Prepared by + signature (ExTL)	A. Mobini 
Reviewed by + signature (ExTL) ...	M. Ghanbariha 
Approved by + signature (ExTL)....	S.M. Mirfalah 
Date of issue.....	February 21, 2026
Ex Testing Laboratory	Ex EPIL
Address	Kavosh research city, supa blv, 8th km . karaj-Qazvin freeway , iran.
Applicant's name	Prismatech
Address	Karimkhan Zand Ave., Ghaemmagham Farahani St., Sanaei St., Ghaemmagham, Tehran City, central Dist., Tehran City, Tehran Province, Iran.
Standard	IEC 60079-26:2021
Test procedure	IEC 60079-26:2021



Possible test case verdicts: - test case does not apply to the test item:N/A - test item does meet the requirement:Pass	General remarks: The test results presented in this Test Report relate only to the item or product tested. ▪ "(Refer to Appendix #)" refers to additional information appended to this document. ▪ "(Refer appended Doc #)" refers to a document table that is linked to this document. ▪ Throughout this document, a point is used as the decimal separator. The technical content of this Ex Test Report shall not be reproduced except in full without the written approval of the Issuing NB and TL.
--	--

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد.
 نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۱- (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

IEC 60079-26:2021			
Clause	Requirement – Test	Result – Remark	Verdict
1	Scope		
2	Normative references		
3	Terms and definitions		
4	Ex Equipment with two combined Types of Protection		
4.1	General	Not relevant	N/A
4.2	Basic requirements	Not relevant	N/A
4.3	Electrical Connections	Not relevant	N/A
5	Ex Equipment containing parts with different EPLs and a separation element		
5.1	General	Db/Ga is applicable Ex ia IIIC Txxx °C Db/Ga	Pass
5.2	Separation elements		
5.2.1	General	Separation element consists of a mechanical partition wall, which may be supplemented with a flameproof joint (Sealed bushing)	Pass
5.2.2	Basic requirements	Separation element has provided a boundary between different areas or parts of the equipment complying with different EPLs to avoid a migration of flammable gasses, vapours or dusts from parts of the equipment with higher EPL into parts of the equipment with lower EPL	Pass
5.2.3	Mechanical partition walls	Sealed bushing has been considered by manufacturer	Pass
5.2.4	Metallic partition walls with gas-tight conductor bushings	Sealed bushing has been considered by manufacturer	Pass
5.2.5	Partition wall supplemented with a joint	Sealed bushing has been considered by manufacturer (According to 60079-1)	Pass
5.2.6	Partition wall for explosive gas atmospheres supplemented with natural ventilation	Not relevant	N/A
5.2.7	Requirements depending on the thickness of the partition wall	Not relevant	N/A

IEC 60079-26:2021			
Clause	Requirement – Test	Result – Remark	Verdict
6	Process connection	According to construction, explosive gas atmospheres or explosive dust atmospheres cannot be released from one hazardous area to the other and in case of an ignition of an explosive atmosphere in the surrounding area there is no flame propagation into the containment with higher EPL.	Pass
7	Type tests		
7.1	Standardized Types of Protection	Ex ia IIIC Txxx °C Db/Ga	Pass
7.2	Separation elements	Overpressure test has been performed See 60079-1	Pass
7.3	Temperature evaluation	See 60079-0	Pass
8	Marking		
8.1	General	Ex ia IIIC Txxx °C Db/Ga	Pass
8.2	Ex Equipment with two combined Types of Protection	Not relevant	N/A
8.3	Ex Equipment containing parts with different EPLs	Ex ia IIIC Txxx °C Db/Ga	Pass
8.4	Examples of marking:	No requirements	N/A
9	Instructions		
9.1	Separation elements	Will be assessed in certification stage	N/A
9.2	Process connection	Will be assessed in certification stage	N/A
9.3	EPL allocation	Will be assessed in certification stage	N/A

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

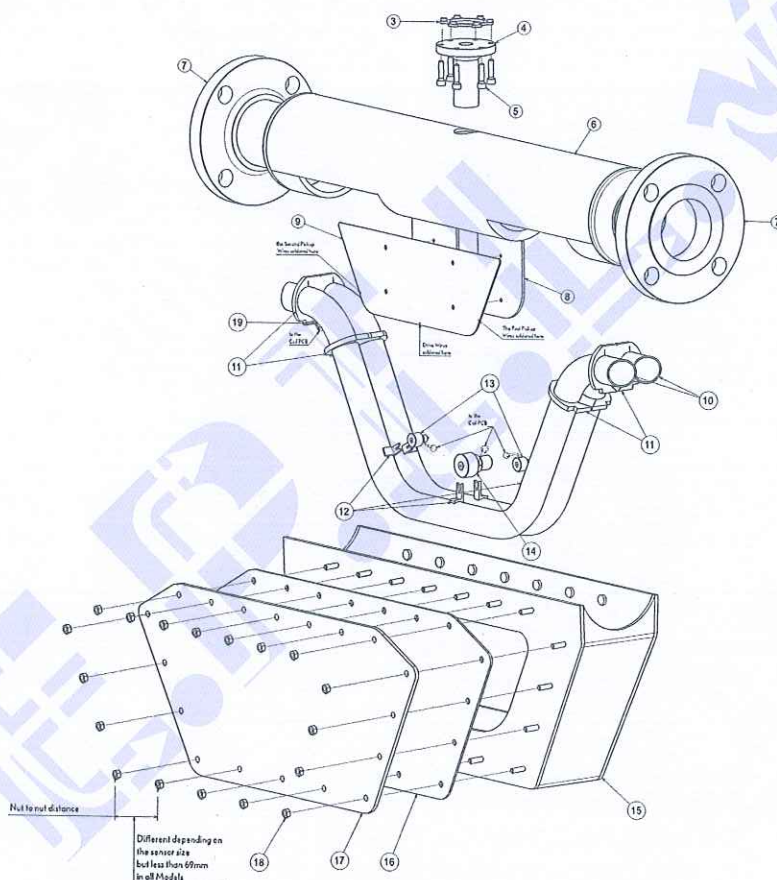
Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.
 Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283
Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.
 Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.
 دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.
 کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱ – ۶۱۹۷۱ (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳ – ۶۶۱۷۴۲۸۳ (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج – قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.
 کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰ – ۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ – ۱۴ (+۹۸۲۶)

APPENDIX A: Description of product

A.1 General overview

The Coriolis Mass Flowmeter Sensor is used as part of a mass flow measuring system to determine the mass flow rate of flammable and non-flammable liquids and gases. The equipment comprises a process tube to which coils and sensors are attached. The coils and sensors are wired to a junction box which incorporates the terminals for connection to external equipment and protection circuits.



different parts of PrismaTech Coriolis Mass Flowmeter sensor

A.2 Spark ignition considerations

The safety of the sensor circuit in Zone 0 depends on the use of an "Associated Apparatus," i.e., a certified intrinsically safe barrier installed outside the hazardous area (Safe Area) and within the certified transmitter enclosure specifically for this purpose. The output parameters of the barrier must be compatible with the input parameters of the sensor (as per the technical specifications section) to ensure the intrinsic safety of the sensor.

Page 42 of 45

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری سفت، پلاک ۲، طبقه ۳، واحد ۱۲.

کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)

آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت آزمایشگاه‌های صنایع انرژی.

کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

No Manipulation in Zone 0: In general, no wiring operations, connection/disconnection, opening of the housing, or repairs on the sensor and its housing in Zone 0 are permitted while the system is energized.

Maintain Enclosure Integrity: Always ensure that all covers, cable glands, and blanking plugs are properly and securely fastened to maintain the Ingress Protection (IP Rating) and the Ex-protection type.

Electrostatic Hazards: Certain surfaces of the device (e.g., non-metallic enclosure parts, labels) may be subject to electrostatic charging. Prevent electrostatic discharge by avoiding cleaning with dry cloths and only using a damp cloth for cleaning.

Cable entries to the sensor housing (certified for Zone 0 and Ex ia) must be made using glands or cable entry methods specified in the device's certificate or associated technical documentation. These glands must be certified for intrinsically safe circuits and maintain the appropriate IP Rating of the enclosure (e.g., IP66/IP67) and comply with Ex ia installation requirements in EN/IEC 60079-14. Special certified glands may be required as stated in 'X' conditions.

All unused cable entries in the sensor housing must also be securely sealed with appropriate certified blanking plugs.

The equipment may contain the certified cable gland and stop plug auxiliary equipment. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

M20*1.5_ Explosion Proof Glands, Thread Pitch=1.5mm, minimum number of engaged teeth= 8, Ex db IIC

The maximum permissible cable length between the sensor and the transmitter is 20 meters.

Junction Box

The Junction Box serves as a robust and safe intermediary connection point, primarily used in remote configurations to connect the sensor unit to the transmitter unit. terminal connections for the sensor signal cables, power, and communication lines between the sensor and the remote transmitter. In some cases, it may house intrinsic safety barriers or additional electronics required for signal integrity over long cable runs.

Enclosure: Designed for industrial environments, offering protection against dust and water ingress (e.g., IP66/67). Its robust construction ensures integrity in harsh conditions.

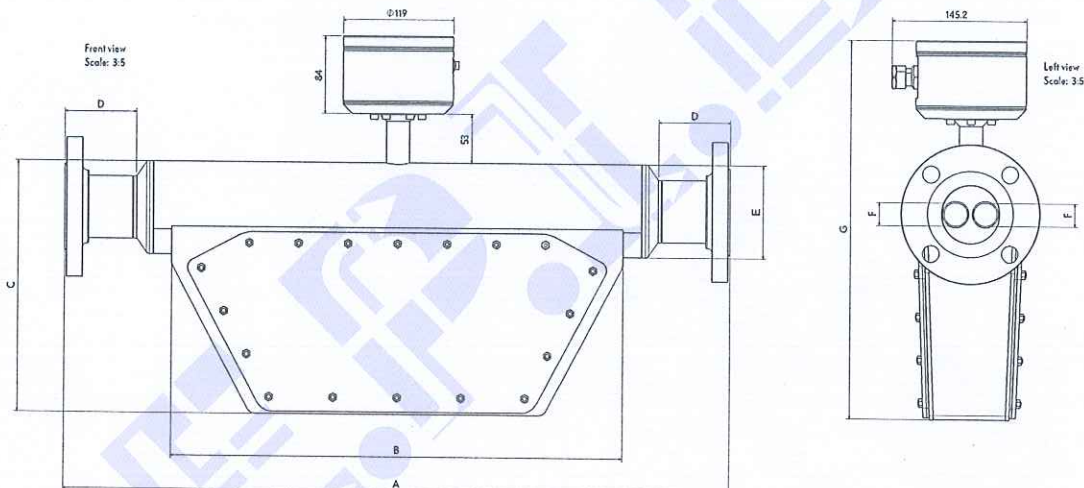
The manufacturer shall ensure that the helium leakage rate through the gas-tight bushing is less than 10^{-2} Pa.l/s at a pressure difference of 105 Pa.

For relationship between maximum permissible ambient temperature, maximum medium temperature, maximum surface temperature and temperature class, reference is made to the following table:

Temperature Limits

Ambient Temp. T _{amb} °C	Max Medium Temp. T _m °C	Temp. Class °C	Max Surface Temp. °C
-20...+60	75	T6 – T1	80
-20...+60	90	T5 – T1	95
-20...+60	125	T4 – T1	130
-20...+60	150	T3 – T1	155

Model Dimensions



This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.

کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)

آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت

آزمایشگاه‌های صنایع انرژی. کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)

Sensor Nominal Size	Dimension						
	A	B	C	D	E	F	G
DN08	387	240	120	39	41.5	5.7	311
DN15	418	245	146	49	47.5	8	337
DN25	454	276	148	48	59	12	339
DN40	560	372	207	61	71	18	398
DN50	720	488	271	78	100	25	462
DN80	900	598	331	96	140.5	39	522
DN100	1127	775	400	250	218	57.1	591

Dimensions of the PrismaTech Coriolis Mass Flowmeter Sensor and Junction Box

Material Construction:

- Measurement Tubes: Constructed from high-grade materials such as AISI 316L Stainless Steel, Titanium, or Hastelloy (available upon request), selected for excellent corrosion resistance and durability.
- Sensor Wetted Parts: All parts coming into direct contact with the process fluid are made from AISI 316L Stainless Steel, ensuring chemical compatibility and long-term reliability.
- Sensor Body: Encased in robust AISI 304 Stainless Steel for structural integrity and protection.

This report should not be reproduced in extracts without written approval by EPIL. Test result pertain to tested sample only. This report is not valid without Lab stamp.

Head-office: Unit 12, No. 2, Boujari Sefat Dead-End, Corner of Fariman St., Bozorgmehr St., Vali-Asr Ave., Tehran-Iran.

Postal Code: 1416854523 Tel: (+9821) 61971 Fax: (+9821) 66174283

Lab: Kavosh Research City, Supa Blvd., 8th km of Karaj-Qazvin Freeway, Iran.

Postal Code: 3365166551 Tel: (+9826) 34996700-14 Fax: (+9826) 34996715

هرگونه تکثیر این گزارش به صورت جزئی یا کلی بدون تایید کتبی اپیل ممنوع می باشد. نتایج آزمون‌ها تنها در رابطه با نمونه آزمون شده معتبر است. این گزارش بدون مهر فاقد اعتبار است.

دفتر مرکزی: تهران، خیابان ولیعصر، خیابان بزرگمهر، نبش فریمان، بن بست بوجاری صفت، پلاک ۲، طبقه ۳، واحد ۱۲.

کد پستی: ۱۴۱۶۸۵۴۵۲۳ تلفن: ۶۱۹۷۱- (+۹۸۲۱) فکس: ۶۶۱۷۴۲۸۳- (+۹۸۲۱)
 آزمایشگاه: کیلومتر ۸ اتوبان کرج - قزوین، بلوار سوپا، شهرک تحقیقاتی کاوش، شرکت
 آزمایشگاه‌های صنایع انرژی.

کد پستی: ۳۳۶۵۱۶۶۵۵۱ تلفن: ۳۴۹۹۶۷۰۰-۱۴ (+۹۸۲۶) فکس: ۳۴۹۹۶۷۱۵ (+۹۸۲۶)