Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

0327

Accredited to ISO/IEC 17025:2017

CSA Group Testing UK Ltd

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Testing performed at the above address only

Flexible Scope:- In house method: CSA Group Testing UK Ltd Quality manual Appendix 6 and Flexible Scope Master List 17025

The laboratory is accredited to ISO/IEC17025:2017 for testing activities in accordance with the standards included in the section highlighted below. This may also include tests on the same or similar product types against standards, or customer-specified methods, that are not specifically listed in this Schedule, providing that:

(1) The method or standard does not introduce new principles of measurement.

(2) The method or standard does not require measurements to be made outside the parametric boundaries defined within the standard specifications already accredited and detailed within this Schedule of Accreditation.

Information about flexible scopes of accreditation is available in UKAS document GEN 4:EA 2/15 M:2019 and ILAC document G18:04/2010

All sections are covered by this flexible scope

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 1: Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in potentially Explosive Atmospheres	<u>Electrical Product Tests</u>	
Electrical Apparatus for explosive gas atmospheres and explosive dust atmospheres: General requirements,	Construction, safety and marking Thermal Stability min temp – 80°C Max enclosure size for Thermal Stability test 1500 x 1000 x 1000 mm	IEC 60079-0:2017 IEC 60079-0:2011 (withdrawn IEC 60079-0:2007 (withdrawn) IEC 60079-0:2004 (withdrawn) Excluding: Resistance to light on Non-metallic enclosures
Tests for Apparatus in Flameproof Enclosures (Exd)	Construction, safety and marking Clause 15.1.2/15.1.3, min temp - 80 °C Clause 15.2, max temp 300 °C	IEC 60079-1:2014 IEC 60079-1:2007 (withdrawn) Excluding: Flammability tests
Tests for Pressurised and Purged Apparatus (Exp)	Construction, safety and marking	IEC 60079-2:2014 IEC 60079-2:2007 (withdrawn)
Tests for Sand Filled Apparatus (Exq)	Construction, safety and marking	IEC 60079-5:2022 IEC 60079-5:2015 (withdrawn) IEC 60079-5:2007 (withdrawn)
Tests for Liquid Immersed Apparatus (Exo)	Construction, safety and marking	IEC 60079-6:2020 IEC 60079-6:2015 IEC 60079-6:2007 (withdrawn)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 1: Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in potentially Explosive Atmospheres (cont'd)	Electrical Product Tests (cont'd)	
Tests for Increased Safety Apparatus (Exe)	Construction, safety and marking	IEC 60079-7:2017 IEC 60079-7:2015 (withdrawn) IEC 60079-7:2006 (withdrawn) Excluding: Interturn voltage test as IEC 60044-6 Mechanical shock tests Sulphur dioxide tests Vibration tests Tests for high-voltage machines
Tests for Intrinsically Safe Apparatus, Associated Apparatus and Systems (Exi)	Construction, safety and marking	IEC 60079-11:2011 IEC 60079-11:2006 (withdrawn)
Tests for Electrical Apparatus for Explosive Atmospheres with Type of Protection n (Exn)	Construction, safety and marking	IEC 60079-15:2017 IEC 60079-15:2010 (withdrawn) IEC 60079-15:2005 (withdrawn) Excluding: Tests for ballasts in circuits with ignitors Mechanical shock for batteries Ignition tests for large high-voltage machines
Tests for Encapsulated Apparatus (Exm)	Construction, safety and marking	IEC 60079-18:2017 IEC 60079-18:2014 (withdrawn) IEC 60079-18:2009 (withdrawn)
Intrinsically safe systems	Construction, safety and markings	IEC 60079-25:2020 IEC 60079-25:2010 (withdrawn) IEC 60079-25:2003 (withdrawn)
Special requirements for construction, Test and Marking of Electrical Apparatus of Equipment Group II, Category 1G	Construction, safety and markings	IEC 60079-26:2021 IEC 60079-26:2014 (withdrawn) IEC 60079-26:2006 (withdrawn)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 1: Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in potentially Explosive Atmospheres (cont'd)	Electrical Product Tests (cont'd)	
Tests for Fieldbus intrinsically safe concept (FISCO)	Construction, safety and markings	IEC 60079-27:2005 (withdrawn) IEC TS 60079-27:2002 (withdrawn)
Protection of equipment and transmission systems using optical radiation	Construction, safety and markings	IEC 60079-28:2015 Excluding: Clause 6, Ignition tests
Electrical Trace Heating Tapes	Tests to demonstrate compliance with constructional requirements and prove thermal performance Clause 5.1.7 Min temp - 80 °C	IEC/IEEE 60079-30-1:2015 IEC 62086-1:2001 (withdrawn) Excluding: Flammability test Verification of rated output (Method b)
Equipment dust ignition protection by enclosure "t"	Construction, safety and marking	IEC 60079-31:2022 IEC 60079-31:2013 (withdrawn) IEC 60079-31:2008 (withdrawn)
Caplights for use in mines susceptible to firedamp	Construction, safety and marking	IEC 60079-35-1:2011 Excluding: Resistance to fire
Tests for Electrical Apparatus with Protection by Enclosure for use in the presence of Combustible Dusts	Construction, safety and marking Thermal Stability min temp – 80°C Max enclosure size for Thermal Stability test 1500 x 1000 x 1000 mm	IEC 61241-0:2004 (withdrawn) Excluding: Resistance to light Ageing of materials IEC 61241-1-1:1999 (withdrawn) EN 50281-1-1:1998 (withdrawn) Excluding: Clause 6.10 Radiating equipment BS 6467:Part 1:1985 (withdrawn) Excluding: Appendix H.2

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 1: Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in potentially Explosive Atmospheres (cont'd)	Electrical Product Tests (cont'd)	
Protection by enclosure "tD"	Construction, safety and marking	IEC 61241-1:2004 (withdrawn)
Protection by enclosure "pD"	Construction, safety and marking	IEC 61241-4:2001 (withdrawn)
Protection by enclosure "iD"	Construction, safety and marking	IEC 61241-11:2005 (withdrawn)
Protection by enclosure "mD"	Construction, safety and marking	IEC 61241-18:2004 (withdrawn)
Petrol filling stations - Construction and performance of automatic nozzles for use on fuel dispensers	Construction and performance	EN 13012:2021 EN 13012:2012 (withdrawn) Excluding: Clauses B5, B7, B8, B9, B10, B12, B13
Petrol filling stations Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units	Construction and performance	EN 13617-1:2021 EN 13617-1:2012 (withdrawn) Excluding: Stability test
Petrol filling stations Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers.	Construction and performance	EN 13617-2:2021 EN 13617-2: 2012 (withdrawn) Excluding: Clauses B.7, B.8, B.9, B.10, B.11, B.12, B.13
Petrol filling stations Part 3: Safety requirements for construction and performance of shear valves.	Construction and performance	EN 13617-3:2021 EN 13617-3:2012 (withdrawn) Excluding : Clauses B.12, B.13

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 1: Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in potentially Explosive Atmospheres (cont'd)	Electrical Product Tests (cont'd)	
Petrol filling stations Part 4: Safety requirements for construction and performance of swivels for use on metering pumps and dispensers.	Construction and performance	EN 13617-4:2021 EN 13617-4:2012 (withdrawn) Excluding: Endurance
General requirements – Canadian Electrical Code, Part II	Construction, safety and marking	C22.2 No. 0-10
Bonding of electrical equipment	Construction, safety and marking	C22.2 No. 0.4-04 (R 2013)
Explosion-proof enclosures for use in class I hazardous locations	Construction, safety and marking	C22.2 No. 30 – M1986 (R 2020) Excluding: Arc-Rupturing Flammability Gastight Joints – Type Test
Enclosures for electrical equipment, non-environmental conditions	Construction, safety and marking	C22.2 No 94.1-07 (R 2015) CSA C22.2 No. 94.1:15 UL 50:2012 UL 50:2015 Excluding: Crushing resistance tests for both listed standards
Enclosures for electrical equipment, environmental conditions	Construction, safety and marking	C22.2 No 94.2-07 (R 2012) C22.2 No. 94.2-20 UL 50E:2012 UL 50E:2020Clauses 8.6, 8.10, 8.11, 8.14 & 8.15 for both listed standards
Process Control Equipment	Construction, safety and marking	C22.2 No 142-M1987 (R 2009) C22.2 No.142-M1987 (R2014) Excluding: Overload (Control Devices) Endurance (Control Devices) Flammability of Polymeric Enclosures Flaming Oil (Perforated Panels)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 1: Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in potentially Explosive Atmospheres (cont'd)	Electrical Product Tests (cont'd)	
Electrical Equipment for Use in Hazardous (Classified) Locations General Requirements	Construction, safety and marking	FM 3600:2022 FM 3600:2018 FM 3600:2011 Excluding: Rubber or neoprene tests
Explosionproof Electrical Equipment General Requirements	Construction, safety and marking	FM 3615:2022 FM 3615:2018 FM 3615:2006 Excluding: Flammability tests
Dust-Ignitionproof Electrical Equipment General Requirements	Construction, safety and marking	FM 3616:2022 FM 3616:2011
Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations	Construction, safety and marking	UL 1203:2013 Excluding: Clauses 21.5, 21.6, 21.7, 21.8, 21.9, 24, 31, 34, 41, 43.9, 44.9, 45 & 56

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 1: Electrical and Non-Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in potentially Explosive Atmospheres (cont'd)	Non-Electrical Product Tests	
Non-electrical equipment for explosive atmospheres - Basic method and requirements	Construction, safety and marking	ISO 80079-36:2016
Explosive atmospheres. Non-electrical equipment for explosive atmospheres. Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k"	Construction, safety and marking	ISO 80079-37:2016
Basic Methods and Requirements	Construction, safety and marking	EN 13463-1:2009 (withdrawn) Excluding: Clause 8.3, Flammability Clause 8.4.4, Protective coating Clause 8.5.6, Chemical Substances Appendix D, Charging test
Protection by flow restricting enclosure "fr"	Construction, safety and marking	EN 13463-2:2004
Protection by flameproof enclosure 'd'	Construction, safety and marking	EN 13463-3:2005
	Dimensional Tests	
Mechanical Cable Glands	Tests to demonstrate compliance with Constructional Requirements	BS 6121:Part 1:1989 (withdrawn) BS 6121:Part 2:1989 (withdrawn) Excluding: Seal Compression and Hardness Tensile Tests

In the above Section 1, where IEC or EN standards have exact equivalents in BS, EN or BS EN, CSA, UL, ISA or UL/ANSI standards, these BS, EN or BS EN, CSA, UL, ISA or UL/ANSI standards are also included in the accreditation.

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 2: INGRESS PROTECTION TESTS	Ingress Protection Tests	
Enclosures for Electrical Equipment	IP1X Protected against solid objects greater than 50 mm diameter IP2X Protected against solid objects greater than 12 mm diameter IP3X Protected against solid objects greater than 2.5 mm diameter IP4X Protected against solid objects greater than 1.0 mm diameter IP5X Dust Protected Excluding: Objects greater than 950 x 920 x 860 mm IP6X Dust Tight Excluding: Objects greater than 950 x 920 x 860 mm IPX2 Protected against dripping water when tilted up to 15° IPX3 Protected against spraying water IPX4 Protected against splashing water IPX5 Protected against water jets IPX6 Protected against heavy seas IPX7 Protected against the effects of immersion Excluding: Objects greater than 1800 x 950 x1300 mm	IEC 60529 :1989/AMD2 :2013 / COR1:2019 IEC 60529:1989 /AMD2 :2013 / COR1:2019

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 2: INGRESS PROTECTION TESTS (cont'd) Enclosures for Electrical Equipment (cont'd)	Ingress Protection Tests (cont'd) IPX8 Protected against submersion Excluding: Objects greater than Ø 350 x 500 mm	
In the above Section 2, where IEC standards have exact equivalents in BS, EN or BS EN, CSA, UL, ISA or UL/ANSI standards, these BS, EN or BS EN, CSA, UL, ISA or UL/ANSI standards are also included in the accreditation.		
	Dust chamber dimensions 1800 x 870 x 860 mm	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 3: GAS DETECTORS ELECTRICAL APPARATUS FOR THE DETECTION AND MEASUREMENT OF FLAMMABLE GASES	<u>Performance Tests</u>	
Performance requirements of detectors for flammable gases	Performance tests	IEC 60079-29-1:2016/AMD1:2020 CSA-C22.2 No. 60079-29-1:2017 Excluding: Vibration Electromagnetic compatibility Software function IEC 60079-29-1:2007 (withdrawn) CSA-C22.2 No.60079-29-1:2012 UL 60079-29-1:2019 ANSI/ISA-12.13.01:2013 Excluding: Vibration Voltage transients Electromagnetic immunity Software verification CSA-C22.2 No.152-M1984 CSA-C22.2 No.152-M1984 (R2016) Excluding: Bounce and vibration ANSI/ISA-12.13.01:2002 Excluding: Air velocity Vibration Voltage transients Electromagnetic compatibility ANSI/ISA-12.13.01:2000 Excluding: Vibration Electromagnetic interference
Electrical apparatus for the detection of combustible gases in domestic products	Performance tests	BS EN 50194-1:2009 Excluding: Electromagnetic compatibility Alarm sound level Mechanical strength

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 3: GAS DETECTORS (cont'd) ELECTRICAL APPARATUS FOR THE DETECTION AND MEASUREMENT OF OXYGEN	<u>Performance Tests</u> (cont'd)	
Test Methods and performance requirements	Performance tests	BS EN 50104:2010Excluding: Vibration Electromagnetic compatibility Verification of software and digital components EN 50104:2019 Excluding: Vibration Electromagnetic compatibility Verification of software and digital components
ELECTRICAL APPARATUS USED FOR THE DIRECT DETECTION AND DIRECT CONCENTRATION MEASUREMENT OF TOXIC GASES AND VAPOURS	For the following types of detector:- Carbon Monoxide, CO Carbon Dioxide, CO_2 Hydrogen Sulphide, H_2S	
Part 1: General requirements and test methods	Performance tests	EN 45544-1:2015Excluding: Vibration Electromagnetic compatibility Verification of software and digital components IEC 62990-1:2019 Cor 1:2019 Excluding: Vibration Electromagnetic compatibility Verification of software and digital components
Part 2: Performance requirements for apparatus used for exposure measurements	Performance tests	EN 45544-2:2015 Excluding: Vibration Electromagnetic compatibility Verification of software and digital components

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
SECTION 3: GAS DETECTORS (cont'd) ELECTRICAL APPARATUS USED FOR THE DIRECT DETECTION AND DIRECT CONCENTRATION MEASUREMENT OF TOXIC GASES AND VAPOURS (cont'd)	<u>Performance Tests</u> (cont'd)	
Part 3: Performance requirements for apparatus used for general gas detection	Performance tests	EN 45544-3:2015 Excluding: Vibration Electromagnetic compatibility Verification of software and digital components
Electrical apparatus for the detection of carbon monoxide in domestic premises	Performance tests	BS EN 50291-1:2018 Excluding: Electromagnetic compatibility Alarm sound level Inter-connectable apparatus Apparatus using radio links BS EN 50291-1:2010 Excluding: Electromagnetic compatibility Alarm sound level Mechanical strength
In the above Section 3, where IEC or EN standards have exact equivalents in BS, EN or BS EN,CSA,UL,ISA or UL/ANSI standards, these BS, EN or BS EN CSA,UL,ISA or UL/ANSI standards are also included in the accreditation.		
END		