

## BUREAU OF INDIAN STANDARDS

### Program of Work

#### ETD 22 : Electrical Apparatus For Explosive Atmosphere

**Scope:** To prepare guidelines and requirements for electrical apparatus for use where there is a hazard due to the possible presence of ignitable gas, vapour liquid particles or dust in the atmosphere.

**Liaison:** **IEC TC-31 (P): Equipment for explosive atmospheres IEC TC-31 SC-31G (P): Intrinsically-safe apparatus IEC TC-31 SC-31J (P): Classification of hazardous areas and installation requirements IEC TC-31 SC-31M (P): Non-electrical equipment and protective systems for explosive atmospheres**

### Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 11333 : 1985 <i>Reviewed In : 2021</i> BS 5067 : 1974	Specification for flameproof dry type transformers for use in mines	January, 2021	-	Indigenous
2	IS 16724 : 2018 IEC 60079-14 : 2013 <i>Reviewed In : 2023</i> IEC 60079-14 : 2013	Explosive atmospheres - Electrical installations design, selection and erection	June, 2023	-	Modified/Technically Equivalent
3	IS 2772 : 1982 <i>Reviewed In : 2022</i>	Specification for non - Flameproof mining transformers for use below ground (First Revision)	September, 2022	-	Indigenous
4	IS 4051 : 1967 <i>Reviewed In : 2022</i>	Code of practice for installation and maintenance of electrical equipment in mines	June, 2022	1	Indigenous
5	IS 5572 : 2009 IEC 60079-10:2002 <i>Reviewed In : 2024</i> IEC 60079-10: 2002	Classification of hazardous areas (Other Than Mines) having flammable gases and vapours for electrical installation (Third Revision)	January, 2024	1	Modified/Technically Equivalent
6	IS/IEC 60079-0 : 2017 IEC 60079-0 : 2017 <i>IEC 60079-0 : 2017</i>	Explosive Atmospheres Part 0 Equipment — General Requirements ( Third Revision )	-	-	Identical under single numbering
7	IS/IEC 60079-1 : 2014 IEC 60079-1 : 2014 <i>IEC 60079-1:2014</i>	Explosive Atmospheres - Part 1 : Equipment Protection by Flameproof Enclosures "d"	-	-	Identical under single numbering
8	IS/IEC 60079-2 : 2014 IEC 60079-2 : 2014 <i>Reviewed In : 2022</i> IEC 60079-2:2014	Explosive atmospheres: Part 2 equipment protection by pressurized enclosure "p" (First Revision)	September, 2022	1	Identical under single numbering
9	IS/IEC 60079-5 : 2015 IEC 60079-5:2015	Explosive atmospheres: Part 5 equipment protection by powder filling "q" (First Revision)	December, 2022	-	Identical under single numbering

	Reviewed In : 2022 IEC 60079-5:2015				
10	IS/IEC 60079-6 : 2015 IEC 60079-6 : 2015 IEC 60079-6:2020(Ed 4.1)	Explosive atmospheres: Part 6 equipment protection by liquid immersion "O" (First Revision)	March, 2016	-	Identical under single numbering
11	IS/IEC 60079-6 : 2020 IEC 60079-6:2020(Ed 4.1) IEC 60079-6:2020(Ed 4.1)	Explosive atmospheres - Part 6: Equipment protection by liquid immersion "o" (Second Revision)		-	Identical under single numbering
12	IS/IEC 60079-7 : 2017 IEC 60079-7:2017 (Ed 5.1) IEC 60079-7:2017 (Ed 5.1)	Explosive atmospheres - Part 7: Equipment protection by increased safety "e" (Second Revision)		-	Identical under single numbering
13	IS/IEC 60079-10-2 : 2015 IEC 60079-10-2 : 2015 Reviewed In : 2022 IEC 60079 : Part 10 : Sec 2 : 2015	Explosive atmospheres: Part 10 classification of areas: Sec 2 explosive dust atmospheres (First Revision)	December, 2022	-	Identical under single numbering
14	IS/IEC 60079-11 : 2011 IEC 60079-11 : 2011 IEC 60079-11:2011	Explosive Atmospheres Part 11 Equipment Protection by Intrinsic Safety "i" (First Revision)		-	Identical under single numbering
15	IS/IEC 60079-13 : 2017 IEC 60079-13 : 2017 IEC 60079-13 : 2017	Explosive Atmospheres Part 13 Equipment Protection by Pressurized Room "p" and Artificially Ventilated Room "v" ( First Revision )		-	Identical under single numbering
16	IS/IEC 60079-15 : 2017 IEC 60079-15:2017 IEC 60079-15 : 2017	EXPLOSIVE ATMOSPHERES PART 15 EQUIPMENT PROTECTION BY TYPE OF PROTECTION "n" (Second Revision)		-	Identical under single numbering
17	IS/IEC 60079-16 : 1990 IEC 60079-16 : 1990 Reviewed In : 2023 IEC 60079-16:1990	Electrical apparatus for explosive gas atmospheres: Part 16 artificial ventilation for the protection of analyzer(S) houses	April, 2023	-	Identical under single numbering
18	IS/IEC 60079-17 : 2013 IEC 60079-17 : 2013 IEC 60079-17 : 2013	Explosive atmospheres: Part 17 electrical installations inspection and maintenance (First Revision)	December, 2022	-	Identical under single numbering
19	IS/IEC 60079-18 : 2014 IEC 60079-18 : 2014 IEC 60079-18:2014	Explosive atmospheres: Part 18 equipment protection by encapsulation "m" (Second Revision)	December, 2022	1	Identical under single numbering
20	IS/IEC 60079-19 : 2019	Explosive atmospheres - Part 19: Equipment repair overhaul and		-	Identical under single numbering

	IEC 60079-19:2019 IEC 60079-19:2019	reclamation (Second Revision)			
21	IS/IEC 60079-20-1 : 2010 Reviewed In : 2018 IEC 60079-20-1:2010	Explosive atmospheres: Part 20 material characteristics for gas and vapour classification: Sec 1 test methods and data	March, 2018	-	Identical under single numbering
22	IS/IEC 60079-25 : 2010 IEC 60079-25 : 2010 Reviewed In : 2019 IEC 60079-25:2020	Explosive atmospheres: Part 25 intrinsically safe electrical systems (First Revision)		-	Identical under single numbering
23	IS/IEC 60079-25 : 2020 IEC 60079-25:2020 IEC 60079-25:2020	Explosive atmospheres - Part 25: Intrinsically safe electrical systems (Second Revision)		-	Identical under single numbering
24	IS/IEC 60079-26 : 2021 IEC 60079-26:2021 IEC 60079-26:2021	Explosive atmospheres - Part 26: Equipment with Separation Elements or combined Levels of Protection (Second Revision)		-	Identical under single numbering
25	IS/IEC 60079-28 : 2015 IEC 60079-28 : 2015 Reviewed In : 2023 IEC 60079-28:2015	Explosive atmospheres: Part 28 protection of equipment and transmission systems using optical radiation (First Revision)	October, 2023	1	Identical under single numbering
26	IS/IEC 60079-29-4 : 2009 IEC 60079-29-4 : 2009 Reviewed In : 2024 IEC 60079-29-4:2009	Explosive atmospheres: Part 29 gas detectors: Sec 4 performance requirements of open path detectors for flammable gases	December, 2024	-	Identical under single numbering
27	IS/IEC 60079-29-1) : 2016 IEC 60079-29-1 : 2016 IEC 60079-29-1 : 2016	Explosive atmospheres Part 29 Gas detectors Section 1 Performance Requirements of Detectors for Flammable Gases (First Revision)	June, 2024	1	Identical under single numbering
28	IS/IEC 60079-29-2 : 2015 IEC 60079-29-2 : 2015 Reviewed In : 2022 IEC 60079-29-2:2015	Explosive atmospheres: Part 29 gas detectors: Sec 2 selection, installation, use and maintenance of detectors for flammable gases and oxygen (First Revision)	December, 2022	-	Identical under single numbering
29	IS/IEC/IEEE 60079-30-2) : 2015 IEC/IEEE 60079-30-2:2015 IEC/IEEE 60079-30-2:2015	Explosive atmospheres - Part 30 Electrical resistance trace heating Section 2 Application guide for design, installation and maintenance (First revision)		-	Identical under single numbering
30	IS/IEC/IEEE 60079-30-1 : 2015 IEC/IEEE60079-30- 1 : 2015 Reviewed In : 2023 IEC/IEEE 60079-30-1 : 2015	Explosive Atmospheres Part 30 Electrical Resistance Trace Heating Section 1 General and testing requirements ( First Revision )	July, 2023	-	Identical under single numbering
31	IS/IEC 60079-31 :	Explosive atmospheres: Part 31		-	Identical under single

	2013 IEC 60079-31 : 2013 IEC 60079-31:2022	equipment dust ignition protection by enclosure "T" (First Revision)			numbering
32	IS/IEC 60079-31 : 2022 IEC 60079-31:2022 IEC 60079-31:2022	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t" (Second Revision)		-	Identical under single numbering
33	IS/IEC 60079-33 : 2012 IEC 60079-33 : 2012 IEC 60079-33 : 2012	Explosive Atmospheres Part 33 Equipment Protection by Special Protection 's'		-	Identical under single numbering
34	IS/IEC 60079-35-1) : 2011 IEC 60079-35-1 : 2011 IEC 60079-35-1 : 2011	Explosive Atmospheres Part 35 Caplights for Use in Mines Susceptible to Firedamp Section 1 General requirements - Construction and testing in Relation to the risk of explosion		-	Identical under single numbering
35	IS/IEC 60079-35-2 : 2011 IEC 60079-35-2 : 2011 Reviewed In : 2024 IEC 60079-35-2:2011	Explosive Atmospheres Part 35 Caplights for use in Mines Susceptible to Firedamp Section 2 Performance and other safety related matters	January, 2024	-	Identical under single numbering
36	IS/IEC/TS 60079-40 : 2015 IEC 60079-40 : 2015 IEC 60079-40 : 2015	Explosive atmospheres Part 40: Requirements for process sealing between flammable process fluids and electrical systems		-	Identical under single numbering
37	IS/IEC/TS 60079-46 : 2017 IEC TS 60079-46 : 2017 IEC TS 60079-46 : 2017	Explosive Atmospheres Part 46 Equipment Assemblies		-	Identical under single numbering
38	IS/ISO/IEC 80079-20-1) : 2017 ISO/IEC 80079-20-1:2017 ISO/IEC 80079-20-1:2017	Explosive atmospheres - Part 20 Material characteristics for gas and vapour classification Section 1 Test methods and data		-	Identical under single numbering
39	IS/ISO/IEC 80079-20- 2 : 2016 ISO/IEC 80079-20-2 : 2016 Reviewed In : 2022 ISO/IEC 80079-20-2 : 2016	Explosive atmospheres: Part 20 material characteristics: Sec 2 combustible dusts test methods	October, 2022	-	Identical under single numbering
40	IS/ISO/IEC 80079-34 : 2018 ISO/IEC 80079-34 : 2018 ISO/IEC 80079-34 : 2018	Explosive Atmospheres Part 34 Application of Quality Management Systems for Ex Product Manufacture		-	Identical under single numbering
41	IS/ISO/IEC 80079-36 : 2016 ISO/IEC 80079-36 : 2016	Explosive Atmospheres Part 36 Non-electrical Equipment for Explosive Atmospheres - Basic Method and Requirements		-	Identical under single numbering

	ISO/IEC 80079-36 : 2016				
42	IS/ISO/IEC 80079-37 : 2016 ISO/IEC 80079-37 : 2016 ISO/IEC 80079-37 : 2016	Explosive Atmospheres Part 37 Non-electrical Equipment for Explosive Atmospheres - Non Electrical Type of Protection		-	Identical under single numbering
43	IS/ISO/IEC 80079-38 : 2016 ISO/IEC 80079-38 : 2016 ISO/IEC 80079-38 : 2016	Explosive Atmospheres Part 38 Equipment and Components in Explosive Atmospheres in Underground Mines		-	Identical under single numbering
44	IS 9559 : 1980 Reviewed In : 2020	Guide for selection of electrical and electronic equipment for coal mines	October, 2020	-	Indigenous
45	IS 9836 : 1981 Reviewed In : 2021	Specification for exploders	August, 2021	-	Indigenous

### Standards under Development

#### Projects Approved

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Drafts Standards in WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	ETD 22 (22810)	CODE OF PRACTICE FOR INSTALLATION AND MAINTENANCE OF ELECTRICAL EQUIPMENT IN MINES First Revision
2	ETD 22 (22815)	Guide for Selection of Electrical and Electronic Equipment for Coal Mines First Revision

#### Finalized Draft Indian Standard

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	ETD 22 (22393) Revision of: IS/IEC 60079:2015	Explosive Atmospheres Part 5 Equipment Protection by Powder Filling q Second Revision
2	ETD 22 (22394) Revision of: IS/IEC 60079:2011	Explosive Atmospheres Part 11 Equipment Protection by Intrinsic Safety i Second Revision

3	ETD 22 (22395)	Explosive Atmospheres Part 29 Gas Detectors Section 3 Guidance on Functional Safety of Fixed Gas Detection Systems
4	ETD 22 (22396)	Explosive Atmospheres Part 32 Electrostatic Hazards Section 1 Guidance
5	ETD 22 (22397)	Explosive Atmospheres Part 32 Electrostatics Hazards Section 2 Tests
6	ETD 22 (22398)	Explosive atmospheres Part 42 Electrical Safety Devices for the Control of Potential Ignition Sources from Ex-Equipment
7	ETD 22 (22399)	Explosive Atmospheres Part 43 Equipment in adverse service conditions
8	ETD 22 (24723)	Explosive Atmospheres Part 39 Intrinsically Safe Systems with Electronically Controlled Spark Duration Limitation
9	ETD 22 (24724)	Explosive Atmospheres Part 47 Equipment Protection by 2-Wire Intrinsically Safe Ethernet Concept 2-Wise

**Total Published Standards:40 Total Standards Under development:11**

### Aspect Wise Report

Product : 25  
Code of Practices : 10  
Methods of Test : 3  
Terminology : 0  
Dimensions : 0  
System Standard : 0  
Safety Standard : 0  
Others : 2  
Service Specification : 0  
Process Specification : 0  
Unclassified : 0

### Annexure-I :List of Indian Standards Withdrawn/Superseded

Sl. No.	IS No. & Year	Title
1	IS 10398 : 1982 Reviewed In : 2016	Specification for zener barrier for intrinsically safe process control instruments
2	IS 10406 : 1983	Intrinsically Safe Transformers Primarily For Bell Signalling Circuits
3	IS 11005 : 1984	Dust Tight Ignition Proof Enclosures Of Electrical Equipment
4	IS 11064 : 1984 IEC 60079-13 Reviewed In : 2016	Guide for construction and use of rooms or buildings protected by pressurization for installation of electrical apparatus for explosive gas atmospheres
5	IS 12315 (Part 1) : 1988 IEC 61241-1 Reviewed In : 2008	Methods of determining the minimum ignition temperature of dusts Part 1 Dust layer on a heated surface at a constant temperature
6	IS 12315 (Part 2) : 1988 IEC 61241-2-1 Reviewed In : 2008	Methods of determining the minimum ignition temperature of dusts Part 2 Dust cloud in a furnace at a constant temperature
7	IS 13346 : 2004	Electrical Apparatus for Explosive Gas Atmospheres - General Requirements
8	IS 13408 (Part 1) : 1992 Reviewed In : 2008	Code of Practice for the Selection Installation and Maintenance of Electrical Apparatus for Use in Potentially Explosive Atmospheres Other than Mining Applications or Explosives Processing and Manufacture - Part 1 General
9	IS 14154 (Part 1) : 1996 Reviewed In : 2006	Electrical Apparatus with Protection By Enclosure for Use in the Presence of Combustible Dusts - Part 1 Classification for Apparatus
10	IS 14154 (Part 2) : 1997	Electrical apparatus with protection by enclosure for use in presence of combustible dust Part 2 Guide to election installation and maintenance
11	IS 14774 (Part 1) : 2000 IEC 62086-1 Reviewed In : 2010	Resistance Trace Heating in Potentially Explosive Atmospheres - Part 1 General and Testing Requirements
12	IS 14774 (Part 2) : 2000	Resistance Trace Heating in Potentially Explosive Atmospheres - Part 2 Informative Application

	IEC 62086-2 Reviewed In : 2010	Guide for Design Installation and Maintenance
13	IS 15142 : 2002 Reviewed In : 2012 BS 7535:1992	Guide to the use of Electrical Apparatus for Potentially Explosive Atmospheres in the Presence of Combustible Dust
14	IS 15451 : 2004	Electrical Apparatus For Explosive Gas Atmospheres - Encapsulation m
15	IS 2148 : 2004	Electrical Apparatus for Explosive Gas Atmospheres - Flameproof Enclosures d
16	IS 2206 (Part 1) : 1984 Reviewed In : 2005 BS: 889-1965	Specification for flameproof electric lighting fittings Part 1 well - Glass and bulkhead types First Revision
17	IS 2206 (Part 2) : 1976 Reviewed In : 2003	Flameproof electric lighting fittings Part 2 Fittings using glass tubes
18	IS 2206 (Part 4) : 1987 Reviewed In : 2003	Flameproof Electric Lighting Fittings - Part 4 Portable Flame-proof Handlamps and Approved Flexible Cables
19	IS 4821 : 1968	Cable glands and cable sealing boxes for use in mines
20	IS 5571 : 2009 IEC 60079-14 Reviewed In : 2014	Guide for selection and installation of electrical equipment in hazardous areas Other Than Mines Third Revision
21	IS 5679 : 1986 Reviewed In : 2016	Miners cap lamp assemblies incorporating lead acid type batteries
22	IS 5780 : 2002	Electrical Apparatus for Explosive Gas Atmospheres - Intrinsic Safety i
23	IS 5833 : 1970	Flameproof air-break electrically operated gate-end boxes
24	IS/IEC 60079-1 : 2007 Reviewed In : 2014	Explosive Atmospheres - Part 1 Equipment Protection by Flameproof Enclosures d
25	IS/IEC 60079-11 : 2006 NULL ISO 7240 Part 22:201	Explosive Atmospheres Part 11 Equipment Protection by Intrinsic Safety i First Revision
26	IS/IEC 60079-20 : 1996 Reviewed In : 2012 IEC 60079-20:1996	Electrical apparatus for explosive gas atmospheres Part 20 Data for flammable gases and vapours relating to the use of electrical apparatus
27	IS/IEC 60079-27 : 2008 IEC 60079-27 : 2008 IEC 60079 - 27 : 2008	Explosive atmospheres - Part 27 Fieldbus intrinsically safe concept FISCO
28	IS/IEC 60079-30-1 : 2007 Reviewed In : 2012 IEC 60079-30-1:2015	Explosive atmospheres Part 30 electrical resistance trace heating Sec 1 general and testing requirements
29	IS/IEC 60079-30-2 : 2007 Reviewed In : 2012 IEC 60079-30-2:2007	Explosive atmospheres Part 30 electrical resistance trace heating Sec 2 application guide for design installation and maintenance
30	IS/IEC 61241-0 : 2004 Reviewed In : 2014 IEC 61241-0:2004	Electrical apparatus for use in the presence of combustible dust Part 0 General requirements
31	IS/IEC 61241-1 : 2004 Reviewed In : 2014 IEC 61241-1:2004	Electrical apparatus for use in the presence of combustible dust Part 1 Protection by enclosures tD
32	IS/IEC 61241-2-1 : 1994 Reviewed In : 2014 IEC 61241-2-1:1994	Electrical Apparatus for use in the Presence of Combustible Dust Part 2 Test Methods Section 1 Methods for Determining the Minimum Ignition Temperatures
33	IS/IEC 61241-2-3 : 1994 Reviewed In : 2014 IEC 61241-2-3:1994	Electrical Apparatus for use in the presence of combustible dust Part 2 Test Methods Section 3 Method for determining minimum ignition energy of dust air mixtures
34	IS/IEC 61241-4 : 2001 Reviewed In : 2014 IEC 61241-4:2001	Electrical apparatus for use in the presence of combustible dust Part 4 type of protection PD



35	IS/IEC 61241-10 : 2004 Reviewed In : 2014 IEC 61241-10:2004	Electrical apparatus for use in the presence of combustibile dust Part 10 Classification of areas where combustibe dusts are or may be present
36	IS/IEC 61241-11 : 2005 Reviewed In : 2014 IEC 61241-11:2005	Electrical apparatus for use in the presence of combustibile dust Part 11 Protection by intrinsic safety ID
37	IS/IEC 61241-14 : 2004 Reviewed In : 2014 IEC 60079-30-2:2015	Electrical apparatus for use in the presence of combustibile dust Part 14 selection and installation
38	IS/IEC 61241-18 : 2004 Reviewed In : 2014 IEC 61241-18:2004	Electrical apparatus for use in the presence of combustibile dust Part 11 Protection by encapsulation mD
39	IS 6381 : 2004	Electrical Apparatus for Explosive Gas Atmospheres - Increased Safety e
40	IS 6539 : 1972	Intrinsically Safe Magneto Telephones for Use in Hazardous Atmospheres
41	IS 6789 : 1972	Bolted flameproof cable coupler and adaptors
42	IS 7389 : 2004	Electrical Apparatus for Explosive Gas Atmospheres - Pressurized Enclosures p
43	IS 7389 (Part 1) : 1976	Pressurized enclosures of electrical apparatus for use in explosive atmospheres Part 1 Pressurized enclosures with no internal source of flammable gas or vapour
44	IS 7693 : 2004 Reviewed In : 2009	Electrical Apparatus for Explosive Gas Atmospheres - Oil-Immersion o
45	IS 7724 : 2004	Electrical Apparatus for Explosive Gas Atmospheres - Powder Filling q
46	IS 7820 : 2004 IEC 60079-4 Reviewed In : 2009	Electrical Apparatus for Explosive Gas Atmospheres - Method of Test for Ignition Temperature
47	IS 8224 : 1976 Reviewed In : 2003	Electric Lighting Fittings For Division 2 Areas
48	IS 8239 : 1976 Reviewed In : 1991	Classification of maximum surface temperatures of electrical equipment for use in explosive atmospheres
49	IS 8240 : 1976 Reviewed In : 1991	Guide for electrical equipment for explosive atmosphere
50	IS 8241 : 1976 Reviewed In : 1991	Method of Marking for Identifying Electrical Equipment for Explosive Atmospheres
51	IS 8289 : 1976 Reviewed In : 2006	Electrical equipment with type of protection n
52	IS 8945 : 1987 Reviewed In : 2020	Specification for electrical measuring instruments for explosive gas atmospheres First Revision
53	IS 9166 : 1979	Spark Test Apparatus for Intrinsically-safe Circuits
54	IS 9570 : 1980 IEC 60079--12 Reviewed In : 2011	Classification of flammable gases or vapours with air according to their maximum experimental safe gaps and minimum igniting currents
55	IS 9735 : 2003 IEC 60097-1-1 Reviewed In : 2008	Electrical Apparatus for Explosive Gas Atmospheres - Flameproof Enclosures d - Method of Test for Ascertainment of Maximum Experimental Safe Gap

### Annexure-II :List of Indian Product Standards

Sl. No.	IS No. & Year	Title
1	IS 11333 : 1985 Reviewed In : 2021 BS 5067 : 1974	Specification for flameproof dry type transformers for use in mines
2	IS 2772 : 1982 Reviewed In : 2022	Specification for non - Flameproof mining transformers for use below ground First Revision
3	IS/IEC 60079-0 : 2017	Explosive Atmospheres Part 0 Equipment General Requirements Third Revision



	IEC 60079-0 : 2017 IEC 60079-0 : 2017	
4	IS/IEC 60079-2 : 2014 IEC 60079-2 : 2014 Reviewed In : 2022 IEC 60079-2:2014	Explosive atmospheres Part 2 equipment protection by pressurized enclosure 39 39 p 39 39 First Revision
5	IS/IEC 60079-5 : 2015 IEC 60079-5:2015 Reviewed In : 2022 IEC 60079-5:2015	Explosive atmospheres Part 5 equipment protection by powder filling 39 39 q 39 39 First Revision
6	IS/IEC 60079-6 : 2020 IEC 60079-6:2020(Ed 4.1)	Explosive atmospheres - Part 6 Equipment protection by liquid immersion 34 o 34 Second Revision
7	IS/IEC 60079-7 : 2017 IEC 60079-7:2017 (Ed 5.1)	Explosive atmospheres - Part 7 Equipment protection by increased safety 34 e 34 Second Revision
8	IS/IEC 60079-13 : 2017 IEC 60079-13 : 2017	Explosive Atmospheres Part 13 Equipment Protection by Pressurized Room 39 39 p 39 39 and Artificially Ventilated Room 39 39 v 39 39 First Revision
9	IS/IEC 60079-15 : 2017 IEC 60079-15:2017	EXPLOSIVE ATMOSPHERES PART 15 EQUIPMENT PROTECTION BY TYPE OF PROTECTION 39 39 n 39 39 Second Revision
10	IS/IEC 60079-18 : 2014 IEC 60079-18 : 2014 IEC 60079-18:2014	Explosive atmospheres Part 18 equipment protection by encapsulation 39 39 m 39 39 Second Revision
11	IS/IEC 60079-25 : 2020 IEC 60079-25:2020	Explosive atmospheres - Part 25 Intrinsically safe electrical systems Second Revision
12	IS/IEC 60079-26 : 2021 IEC 60079-26:2021	Explosive atmospheres - Part 26 Equipment with Separation Elements or combined Levels of Protection Second Revision
13	IS/IEC 60079-28 : 2015 IEC 60079-28 : 2015 Reviewed In : 2023 IEC 60079-28:2015	Explosive atmospheres Part 28 protection of equipment and transmission systems using optical radiation First Revision
14	IS/IEC 60079-29-4 : 2009 IEC 60079-29-4 : 2009 Reviewed In : 2024 IEC 60079-29-4:2009	Explosive atmospheres Part 29 gas detectors Sec 4 performance requirements of open path detectors for flammable gases
15	IS/IEC/IEEE 60079-30-1 : 2015 IEC/IEEE60079-30-1 : 2015 Reviewed In : 2023 IEC/IEEE 60079-30-1 : 2015	Explosive Atmospheres Part 30 Electrical Resistance Trace Heating Section 1 General and testing requirements First Revision
16	IS/IEC 60079-31 : 2022 IEC 60079-31:2022	Explosive atmospheres - Part 31 Equipment dust ignition protection by enclosure 39 39 t 39 39 Second Revision
17	IS/IEC 60079-33 : 2012 IEC 60079-33 : 2012 IEC 60079-33 : 2012	Explosive Atmospheres Part 33 Equipment Protection by Special Protection s
18	IS/IEC 60079-35-1) : 2011 IEC 60079-35-1 : 2011 IEC 60079-35-1 : 2011	Explosive Atmospheres Part 35 Caplights for Use in Mines Susceptible to Firedamp Section 1 General requirements - Construction and testing in Relation to the risk of explosion
19	IS/IEC 60079-35-2 : 2011 IEC 60079-35-2 : 2011 Reviewed In : 2024 IEC 60079-35-2:2011	Explosive Atmospheres Part 35 Caplights for use in Mines Susceptible to Firedamp Section 2 Performance and other safety related matters

20	IS/IEC/TS 60079-40 : 2015 IEC 60079-40 : 2015 ISO 17480 : 2015	Explosive atmospheres Part 40 Requirements for process sealing between flammable process fluids and electrical systems
21	IS/IEC/TS 60079-46 : 2017 IEC TS 60079-46 : 2017 IEC TS 60079-46 : 2017	Explosive Atmospheres Part 46 Equipment Assemblies
22	IS/ISO/IEC 80079-36 : 2016 ISO/IEC 80079-36 : 2016 ISO/IEC 80079-36 : 2016	Explosive Atmospheres Part 36 Non-electrical Equipment for Explosive Atmospheres - Basic Method and Requirements
23	IS/ISO/IEC 80079-37 : 2016 ISO/IEC 80079-37 : 2016 ISO/IEC 80079-37 : 2016	Explosive Atmospheres Part 37 Non-electrical Equipment for Explosive Atmospheres - Non Electrical Type of Protection Constructional Safety 39 39 c 39 39 Control of Ignition Source 39 39 b 39 39 Liquid Immersion 39 39 k 39 39
24	IS/ISO/IEC 80079-38 : 2016 ISO/IEC 80079-38 : 2016 ISO/IEC 80079-38 : 2016	Explosive Atmospheres Part 38 Equipment and Components in Explosive Atmospheres in Underground Mines
25	IS 9836 : 1981 Reviewed In : 2021	Specification for exploders