

BUREAU OF INDIAN STANDARDS

Program of Work

ETD 37 : Conductors And Accessories For Overhead Lines

Scope: To prepare standards for conductors and accessories for overhead power lines and codes of practice for the design, installation and maintenance of overhead power lines

Liaison: **IEC TC-11 (P): Overhead lines IEC TC-7 (P): Overhead electrical conductors**

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10162:1982 <i>Reviewed In : 2018</i>	Specification for spacers and spacer dampers for twin horizontal bundle conductors	March, 2018	1	Indigenous
2	IS 12048:1987 <i>Reviewed In : 2023</i> Decision taken to Reaffirm and Archive	Specification for helically formed fittings for overhead lines up to 33 kV	March, 2023	1	Indigenous
3	IS 14214:1994 <i>Reviewed In : 2019</i> Reaffirmed but not taken up for revision	Annealed stranded copper conductors for jumper wires - Specification		-	Indigenous
4	IS 15976:2013 <i>Reviewed In : 2023</i>	Steel reels and drums for bare conductors - Specification	July, 2023	-	Indigenous
5	IS 1778:1980 <i>Reviewed In : 2024</i>	Specification for reels and drums for bare conductors (First Revision)	December, 2024	1	Indigenous
6	IS 2121 (Part 1):1981 <i>Reviewed In : 2018</i>	Specification for conductors and earth wire accessories for overhead power lines: Part 1 armour rods, binding wires and tapes for conductors (First Revision)	March, 2018	-	Indigenous
7	IS 2121 (Part 2):1981 <i>Reviewed In : 2018</i> BS 3288: Part I : 1973	Specification for conductors and earth wire accessories for overhead power lines: Part 2 mid - Spain joints and repair sleeves - For conductors (First Revision)	March, 2018	-	Modified/Technically Equivalent
8	IS 2121 (Part 3):1992 <i>Reviewed In : 2018</i> BS 3288: Part I : 1973, AS I 154.1 : Part 1 : 1985	Conductors and earthwire accessories for overhead lines: Part 3 accessories for earthwire - Specification (First Revision)	March, 2018	-	Modified/Technically Equivalent
9	IS 2121 (Part 4):1991 <i>Reviewed In : 2018</i> AS 1154. 1 : 1965	Conductors and earthwire accessories for overhead lines: Part 4 non - Tension joints - Specification	March, 2018	-	Modified/Technically Equivalent

	Insulator and conductor fittings for overhead power lines : Part 1 Performance and				
10	IS 3402:1965 Reviewed In : 2018 B.S. 2755: 1956 Specification for copper and cadmium copper stranded conductors for overhead electri	Specification for cadmium copper conductors for overhead railway traction	March, 2018	1	Modified/Technically Equivalent
11	IS 3476:1986 Reviewed In : 2019 Reaffirmed but not taken up for revision BS 23 : 1970, U. I. C. Code 870-O (first edition), ETI/OHE/ 42 (1 I/ 83)	Specification for trolley and contact wire for electric traction (First Revision)		-	Modified/Technically Equivalent
12	IS 398 (Part 1):1996 IEC 60889 Reviewed In : 2023	Aluminium conductors for overhead transmission purposes - Specification: Part 1 aluminium stranded conductors (Third Revision)	December, 2023	1	Indigenous
13	IS B398 (Part 1):1996	Aluminium Conductors for Overhead Transmission Purposes – Specification Part 1 Aluminium Stranded Conductors		-	
14	IS 398 (Part 2):1996 Reviewed In : 2018	Aluminium conductors for overhead transmission purposes - Specification: Part 2 aluminium conductors, galvanized steel - Reinforced (Third Revision)	March, 2018	3	Indigenous
15	IS 398 (Part 2):2025	Aluminium Conductor for Overhead Transmission Purposes - Specification Part 2 Aluminium Conductors Galvanized Steel Reinforced (Fourth Revision)		-	Indigenous
16	IS 398 (Part 3):1976 Reviewed In : 2019 AS 1220	Specification for aluminium conductors for overhead transmission purposes: Part 3 aluminium conductors, aluminized steel reinforced (Second Revision)		3	Modified/Technically Equivalent
17	IS 398 (Part 4):1994 Reviewed In : 2021 IEC Pub 208 (1966) Aluminium Alloy Stranded Conductors, International Electrotechnical Commission BS	Aluminium conductors for overhead transmission purposes: Part 4 aluminium alloy stranded conductors (Aluminium - Magnesium - Silicon Type) - Specification (Third Revision)	October, 2021	1	Modified/Technically Equivalent
18	IS 398 (Part 5):1992 Reviewed In : 2018	Aluminium conductor for overhead transmission purposes - Specification: Part 5 aluminium conductors - Galvanized steel - Reinforced for extra high voltage	March, 2018	2	Indigenous

		(400 KV And Above) (First Revision)			
19	IS 398 (Part 6):2021	Aluminium Conductors for Overhead Transmission Purposes Part 6 High Conductivity Aluminium Alloy Stranded Conductors — Specification		1	Indigenous
20	IS 5613 (Part 1/Sec 1):1985 Reviewed In : 2018 Reaffirmed but not taken up for revision Rural Line Standards, Construction Manual, prepared by Rural Electrification Corporation Ltd,	Code of practice for design, installation and maintenance of overhead power lines: Part 1 lines up to and including 11 kV Sec 1 design (First Revision)	March, 2018	1	Modified/Technically Equivalent
21	IS 5613 (Part 1/Sec 2):1985 Reviewed In : 2018 Reaffirmed but not taken up for revision Rural Line Standards, Construction Manual, prepared by Rural Electrification Corporation Ltd,	Code of practice for design, installation and maintenance of overhead power lines: Part 1 lines up to and including 11 kV Sec 2 installation and maintenance	March, 2018	-	Modified/Technically Equivalent
22	IS 5613 (Part 2/Sec 1):1985 Reviewed In : 2018 Reaffirmed but not taken up for revision Rural Line Standards, Construction Manual, prepared by Rural Electrification Corporation Ltd,	Code of practice or design, installation and maintenance of overhead power lines: Part 2 lines above 11 kv and up to and including 220 kv sec 1 design (First Revision)	March, 2018	1	Modified/Technically Equivalent
23	IS 5613 (Part 2/Sec 2):1985 Reviewed In : 2018 Reaffirmed but not taken up for revision Rural Line Standards, Construction Manual, prepared by Rural Electrification Corporation Ltd,	Code of practice for design, installation and maintenance of overhead power lines: Part 2 lines above 11 kV and up to and including 220 Kv: Sec 2 installation and maintenance (First Revision)	March, 2018	3	Modified/Technically Equivalent
24	IS 5613 (Part 3/Sec 1):2024	Design, Installation and Maintenance for Overhead Power Lines i _c ½ Code of Practice Part 3 400 kV and 765 kV Lines Section 1 Design (First Revision)		-	Indigenous
25	IS 5613 (Part 3/Sec 2):2023	Design, Installation and Maintenance for Overhead Power Lines i _c ½ Code of Practice Part 3:		-	Indigenous

		400 kV and 765 kV Lines Section 2 Installation and Maintenance (First Revision)			
26	IS 9511:1980 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Specification for earth knobs for neutral conductors	March, 2024	-	Indigenous
27	IS 9708:1993 Reviewed In : 2019 IEEE standard 563-1978	Stockbridge vibration dampers for overhead power lines - Specification (First Revision)	March, 2019	-	Modified/Technically Equivalent

Standards under Development

Projects Approved		
Sl. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards		
Sl. No.	Doc No.	Title
1	ETD 37 (28236)	Concentric lay stranded overhead electrical conductors containing one or more gaps
2	ETD 37 (28324) Revision of: IS 10162:1982	Overhead lines - Requirements and tests for spacers

Drafts Standards in WC Stage		
Sl. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage		
Sl. No.	Doc No.	Title
1	ETD 37 (25450)	Specification for conductors and earth wire accessories for overhead power lines Part 1 armour rods binding wires and tapes for conductors Second Revision
2	ETD 37 (25451)	Specification for conductors and earth wire accessories for overhead power lines Part 2 mid - Spain joints and repair sleeves - For conductors Second Revision
3	ETD 37 (25452)	Conductors and earthwire accessories for overhead lines Part 3 accessories for earthwire - Specification Second Revision
4	ETD 37 (25453)	Conductors and earthwire accessories for overhead lines Part 4 non - Tension joints - Specification Second Revision
5	ETD 37 (27203)	Overhead lines Requirements and tests for aeolian vibration dampers

Finalized Draft Indian Standard		
Sl. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print		
Sl. No.	Doc No.	Title
No Records Found		

Total Published Standards:26	Total Standards Under development:7
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Aspect Wise Report

Product : 19
Code of Practices : 6
Methods of Test : 0
Terminology : 0
Dimensions : 0
System Standard : 0
Safety Standard : 0
Others : 1
Service Specification : 0
Process Specification : 0
Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

Sl. No.	IS No. & Year	Title
1	IS 2532:1965 Reviewed In : 2018 B. S. 174 : 1951, B. S. 125 : 1954	Specification for hard - Drawn copper wire for telegraph and telephone purposes
2	IS 2665:1964 Reviewed In : 2018 bs 175-1951	Specification for cadmium copper wire for telegraph and telephone purposes
3	IS 282:1982 Reviewed In : 1990	Hard-drawn copper conductors for overhead power transmission
4	IS 2889:1964	Drums for trolley and contact wire

Annexure-II :List of Indian Product Standards

Sl. No.	IS No. & Year	Title
1	IS 10162:1982 Reviewed In : 2018	Specification for spacers and spacer dampers for twin horizontal bundle conductors
2	IS 12048:1987 Reviewed In : 2023 Decision taken to Reaffirm and Archive	Specification for helically formed fittings for overhead lines up to 33 kV
3	IS 14214:1994 Reviewed In : 2019 Reaffirmed but not taken up for revision	Annealed stranded copper conductors for jumper wires - Specification
4	IS 15976:2013 Reviewed In : 2023	Steel reels and drums for bare conductors - Specification
5	IS 1778:1980 Reviewed In : 2024	Specification for reels and drums for bare conductors First Revision
6	IS 2121 (Part 1):1981 Reviewed In : 2018	Specification for conductors and earth wire accessories for overhead power lines Part 1 armour rods binding wires and tapes for conductors First Revision
7	IS 2121 (Part 2):1981 Reviewed In : 2018 BS 3288: Part I : 1973	Specification for conductors and earth wire accessories for overhead power lines Part 2 mid - Spain joints and repair sleeves - For conductors First Revision
8	IS 2121 (Part 3):1992 Reviewed In : 2018 BS 3288: Part I : 1973, AS I 154.1 : Part 1 : 1985	Conductors and earthwire accessories for overhead lines Part 3 accessories for earthwire - Specification First Revision
9	IS 2121 (Part 4):1991 Reviewed In : 2018 AS 1154. 1 : 1965 Insulator and conductor fittings for	Conductors and earthwire accessories for overhead lines Part 4 non - Tension joints - Specification

	overhead power lines : Part 1 Performance and	
10	IS 3402:1965 Reviewed In : 2018 B.S. 2755: 1956 Specification for copper and cadmium copper stranded conductors for overhead electri	Specification for cadmium copper conductors for overhead railway traction
11	IS 3476:1986 Reviewed In : 2019 Reaffirmed but not taken up for revision BS 23 : 1970, U. I. C. Code 870-O (first edition), ETI/ OHE/ 42 (1 l/ 83)	Specification for trolley and contact wire for electric traction First Revision
12	IS 398 (Part 1):1996 IEC 60889 Reviewed In : 2023	Aluminium conductors for overhead transmission purposes - Specification Part 1 aluminium stranded conductors Third Revision
13	IS 398 (Part 2):2025	Aluminium Conductor for Overhead Transmission Purposes - Specification Part 2 Aluminium Conductors Galvanized Steel Reinforced Fourth Revision
14	IS 398 (Part 3):1976 Reviewed In : 2019 AS 1220	Specification for aluminium conductors for overhead transmission purposes Part 3 aluminium conductors aluminized steel reinforced Second Revision
15	IS 398 (Part 4):1994 Reviewed In : 2021 IEC Pub 208 (1966) Aluminium Alloy Stranded Conductors, International Electrotechnical Commission BS	Aluminium conductors for overhead transmission purposes Part 4 aluminium alloy stranded conductors Aluminium - Magnesium - Silicon Type - Specification Third Revision
16	IS 398 (Part 5):1992 Reviewed In : 2018	Aluminium conductor for overhead transmission purposes - Specification Part 5 aluminium conductors - Galvanized steel - Reinforced for extra high voltage 400 KV And Above First Revision
17	IS 398 (Part 6):2021 IEC 80601-2-49:2018	Aluminium Conductors for Overhead Transmission Purposes Part 6 High Conductivity Aluminium Alloy Stranded Conductors Specification
18	IS 9511:1980 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Specification for earth knobs for neutral conductors
19	IS 9708:1993 Reviewed In : 2019 IEEE standard 563-1978	Stockbridge vibration dampers for overhead power lines - Specification First Revision