

**APPROVAL OF ELECTRICAL APPARATUS & CABLES UNDER Regulation 181(3) of  
the COAL MINES REGULATIONS, 1957**

**The list of approved flameproof, intrinsically safe electrical cables is not exhaustive and  
subject to verification of the approval documents.**

<b>Sl. No.</b>	<b>Description of cables</b>	<b>Name of Manufacturer (M/S)</b>	<b>Approval no.</b>	<b>Valid upto</b>
R1	3X35 mm <sup>2</sup> , 3.3 KV grade PVC sheathed copper conductor double wire armoured cable conforming to IS:1554(Part-II)-1988	Rallison Electroproducts Pvt. Ltd., GI/118, Mayapuri, Phase-II, New Delhi-110 064.	533 of 2005	18.05.2010
N1	5 cores X 6 mm <sup>2</sup> , 1.1 KV grade, elastomer insulated & sheathed cable type FTD-3 conforming to IS:14494-1998	Nangalwala Impex (P) Ltd., F-152, MIA, Alwar-301 030 (Rajasthan)	103 of 2007	24.05.2009
N2	5 cores X 25 mm <sup>2</sup> , Elastomer insulated & sheathed flexible cable type FT-7, 1.1 KV grade conforming to IS:14494-1998 manufactured by M/S Nangalwala Impex (P) Ltd., Alwar for use in belowground Coal Mines.	Nangalwala Impex (P) Ltd., F-152, MIA, Alwar-301 030 (Rajasthan)	107 of 2008	31.12.2009
K1	3 core, 50 mm <sup>2</sup> size, 1.9/3.3 KV grade copper conductored double wire armoured PVC insulated, ST-1 mining cable conforming to IS:1554(Part-II)-1988	KEI Industries Ltd., D-90, Okhla Industrial Area, Phase-I, New Delhi-110 020	39 of 1996	31.08.2009
K2	Five cores Elastomer insulated (three power core, one pilot core and one Earth core) & black colour outer sheathed 1.1 KV grade cable, type-FTD-3 conforming to IS:14494-1998 manufactured by M/S KEI Industries Limited, New Delhi for use in belowground Coal Mines.	KEI Industries Ltd., D-90, Okhla Industrial Area, Phase-I, New Delhi-110 020	109 of 2009	17.04.2010
K3	Five cores, Elastomer insulated (three power core, one pilot core of same nominal cross section area and one Earth core type-A) & black colour outer sheathed 1.1 KV grade cable, type-FT7 conforming to IS:14494-1998 manufactured by M/S KEI	KEI Industries Ltd., D-90, Okhla Industrial Area, Phase-I, New Delhi-110 020	109 of 2009	17.04.2010

	Industries Limited, New Delhi for use in belowground Coal Mines.			
C1	3 core, 120 mm <sup>2</sup> , 1.9/3.3 KV PVC insulated, PVC sheathed copper conductor double wire armoured mining cable conforming to IS:1554(Part-II)-1988	Colt Cables Pvt. Ltd., 509 Kakad Market, 306, Kalbadevi Road, Mumbai-2	40 of 1997	<b>Revoked by Directorate's letter no. 1197-1222/EHQ dated 26.05.2009</b>
U1	1.1 KV, 3 core, 120 mm <sup>2</sup> PVC insulated (Heavy Duty) cable conforming to IS:1554(Part-I)-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	45 of 1984	30.07.2009
U2	4 core, 70 mm <sup>2</sup> size, 1.1 KV grade, cross linked polythene insulated PVC sheathed double wire armoured copper conductored cable conforming to IS:7098 (Part-I)-1988	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	31 of 1994	09.11.2009
U3	3 core, 50 mm <sup>2</sup> , copper conductor 6.6 KV grade (unearthed) cross-linked polythene insulated PVC sheathed, double wire armoured cable conforming to IS:7098(Part-II)-1985	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	XLPE/1 of 1988	07.05.2010
U4	5 core, 16 mm <sup>2</sup> flexible cable (three power core, one pilot core both individually screened and one bare earth conductor) 1100 V, type FT-7 conforming to IS:14494-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	81 of 2003	24.04.2010
U5	4 core, 1.1 KV grade, upto 95 mm <sup>2</sup> elastomer insulated pliable armoured flexible cable type-PA1 conforming to IS:14494-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	82 of 2003	24.04.2010
U6	1.1 KV grade, 4 core, 4 mm <sup>2</sup> (three power core and one earth core) elastomer insulated pliable armoured lighting cable type PLC4 conforming to IS: 14494-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	83 of 2003	10.06.2009
U7	1.1 KV grade, 5 core each 6 mm <sup>2</sup> (three power core, one pilot core and earth core) elastomer insulated flexible drill cable type FTD3 conforming to IS:14494-	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	87 of 2003	16.06.2009

	1998			
U8	PVC mining cable, 11 KV (E) YYWWY, size upto 3X95 mm <sup>2</sup> conforming to IS:1554 (Part-I)-1988	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	PVC/50 of 1985	10.09.2009
U9	Pliable flexible armoured cable 6 mm <sup>2</sup> , 3 core, 1.1 KV grade, type PA3 conforming to IS:14494-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	91 of 2004	04.02.2010
U10	Elastomer insulated flexible cable 5 core, 1.1 KV grade, 4 mm <sup>2</sup> size, type-PLC5 cable conforming to IS:14494-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	92 of 2004	18.02.2010
U11	Elastomer insulated flexible cable, 1.1 KV grade, 5X95 mm <sup>2</sup> , (3X95 mm <sup>2</sup> ATC individually screened power cores + 1x50 mm <sup>2</sup> unscreened pilot core + 1x50 mm <sup>2</sup> bare earth core) type FT-4(S) conforming to IS:14494-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	93 of 2004	28.06.2010
U12	Elastomer insulated flexible cable, 1.1 KV grade, 5x95 mm <sup>2</sup> , (3x95 mm <sup>2</sup> ATC individually screened power cores + 1x50 mm <sup>2</sup> unscreened pilot core + 1x95 mm <sup>2</sup> unscreened earth core) type FT-6(S) conforming to IS:14494-1998	Universal Cables Ltd., PO-Birlas Vikas, Satna-485 005(MP)	94 of 2004	28.06.2010
UC1	5 core each, 6 mm <sup>2</sup> size, 1100 V grade, elastomer insulated and heat resisting elastomer sheathed flexible trailing cable type FTD-3 conforming to IS:14494-1998	United Cable Industries A-14, Sector-4, NOIDA-201 301, Distt: Gautam Budh Nagar (UP).	84 of 2003	13.06.2009
UC2	3X16+1X16+1X16 mm <sup>2</sup> three power cores and one pilot core having same nominal cross-sectional area each having metallic screen laid around bare earth conductor and sheathed, 1.1 KV grade, flexible trailing cable type FT-7 conforming to IS:14494-1998 manufactured by M/S United Cable Industries, Noida for use in belowground Coal Mines.	United Cable Industries A-14, Sector-4, NOIDA-201 301, Distt: Gautam Budh Nagar (UP).	105 of 2008	16.09.2009

N1	5 core flexible trailing cable 1100 V grade, 3X25 mm <sup>2</sup> individually screened power cores, 1X25 mm <sup>2</sup> screened pilot core, 1X16 mm <sup>2</sup> bare earth core type FT7 conforming to IS:14494-1998	NICCO Corporation Ltd., NICCO House, 2 Hare Street, Kolkata-1	88 of 2003	22.09.2009
N2	5 core, 1.1 KV grade each 6 mm <sup>2</sup> size elastomer insulated flexible drill cable type FTD3 conforming to IS: 14494-1998	NICCO Corporation Ltd., NICCO House, 2 Hare Street, Kolkata-1	77 of 2002	09.07.2009
N3	Elastomer insulated pliable armoured flexible cable, 4 core, 1.1 KV grade, 4 mm <sup>2</sup> type PLC4 conforming to IS:14494-1998	NICCO Corporation Ltd., NICCO House, 2 Hare Street, Kolkata-1	90 of 2003	26.09.2010
N4	35 mm <sup>2</sup> , 4 core, 1.1 KV (earthed) pliable armoured trailing cable, type-PA1 conforming to IS:14494-1998	NICCO Corporation Ltd., NICCO House, 2 Hare Street, Kolkata-1	75 of 2002	19.06.2009
P1	1100 V grade flexible cable type FT-7 with three power cores and one pilot core having the same nominal cross sectional area of 25 mm <sup>2</sup> each having metallic screen laid around bare earth conductor of 16 mm <sup>2</sup> and complying the code of colours for three phases, (Red, Yellow, Blue) earth (Green) and pilot (Black) core manufactured by M/S Pirelli Kabel und Systeme GmbH, Germany conforming to IS:14494-1998 for use in belowground Coal Mines in India	Prysmian Kabel und Systeme GmbH Austrasse 99 96465 Neustadt bei Coburg Germany.	99 of 2006	14.07.2011
P2	3 power cores each 25 mm <sup>2</sup> and one 16 mm <sup>2</sup> for the pilot core and one 16 mm <sup>2</sup> for the earth core, 1100 V grade flexible cable type FT-10 all having semiconductive covering conforming to IS:14494-1998	Prysmian Kabel und Systeme GmbH Austrasse 99 96465 Neustadt bei Coburg Germany.	102 of 2007	28.02.2009
F1	1.1 KV grade, 2 core, PVC insulated lighting cables with galvanized steel wire armoured and 2.5 mm <sup>2</sup> copper conductor conforming to IS:1554(Part-I)-	Finecab Wires & Cables Pvt. Ltd., 2-3-465/7, Minister Road, Secunderabad-500 003(AP)	95 of 2004	11.08.2009

	1988			
F2	3X35 mm <sup>2</sup> , PVC insulated double layer, GI wire armoured 3.3 KV grade, mining cable conforming to IS:1554(Part-II)-1988 for use in belowground in coal mines.	Finecab Wires & Cables Pvt. Ltd., 2-3-465/7, Minister Road, Secunderabad-500 003(AP)	98 of 2005	10.06.2009
I1	Elastomer insulated flexible cable 5 core each, 6 mm <sup>2</sup> , 1.1 KV grade type FTD-3 cable conforming to IS:14494-1998	IMT Cables Pvt. Ltd., 1-96, Mayapuri, Phase-II, New Delhi-64	96 of 2004	19.10.2010
I2	3X16+1X16+1X16 mm <sup>2</sup> size, 1.1 KV grade, flexible trailing cable type FT-7 conforming to IS:14494-1998 for use in belowground coal mines.	IMT Cables Pvt. Ltd., 1-96, Mayapuri, Phase-II, New Delhi-64	101 of 2007	26.02.2012
I3	Flexible cap lamp cable size 1 mm <sup>2</sup> (32/0.2 mm) twin core twisted (with strain cord) elastomeric insulated and sheathed, conforming to IS:2593-1984 manufactured by M/S IMT Cables Pvt. Ltd., New Delhi for use in belowground Coal Mines.	IMT Cables Pvt. Ltd., 1-96, Mayapuri, Phase-II, New Delhi-64	108 of 2009	19.01.2010
S1	5 core, 6 mm <sup>2</sup> type-FTD-3 type flexible trailing cable 1100 V conforming to IS:14494-1998	Skytone Electricals (I) Ltd., 42 & 43, Industrial Estate, NIT Faridabad-121 001.	FTD-3 of 2002	30.11.2009
S2	3X25 mm <sup>2</sup> copper conductor, PVC insulated double wire armoured 3.3 KV Heavy Duty mining cable conforming to IS:1554(Part-II)-1988	Skytone Electricals (I) Ltd., 42 & 43, Industrial Estate, NIT Faridabad-121 001.	34 of 1994	07.09.2009
S3	1.1 KV grade, 4 core, 50 MM <sup>2</sup> (3X50 mm <sup>2</sup> power core and 1X50 mm <sup>2</sup> size earth core) size with elastomer insulated and collective ATC screened Power Core all laid up and elastomeric sheathed flexible trailing cable generally conforming to IS:9968(Part-I)-1988	Skytone Electricals (I) Ltd., 42 & 43, Industrial Estate, NIT Faridabad-121 001.	123 of 1997	28.09.2009
S4	5 core flexible trailing cable 1100 V, 4X25 mm <sup>2</sup> individually screened pilot core 1X16 mm <sup>2</sup> bare earth type FT-7 conforming to IS:14494-1998	Skytone Electricals (I) Ltd., 42 & 43, Industrial Estate, NIT Faridabad-121 001.	78 of 2002	30.11.2009

S5	Two core upto and including 10 mm <sup>2</sup> stranded annealed copper conductor, PVC insulated surrounded by an inner sheath of thermoplastic material armoured with galvanized steel wires PVC insulated 1100 V cable conforming to IS:1554(Part-I)-1988	Skytone Electricals (I) Ltd., 42 & 43, Industrial Estate, NIT Faridabad-121 001.	53 1985	of	22.10.2009
S6	Flexible trailing cable 1100 V grade, three metallic screened power cores each 25 mm <sup>2</sup> , one unscreened pilot core of 16 mm <sup>2</sup> and one bare earth core of 16 mm <sup>2</sup> with elastomeric compound insulation type FT-4(S) conforming to IS:14494-1998	Skytone Electricals (I) Ltd., 42 & 43, Industrial Estate, NIT Faridabad-121 001.	86 2003	of	13.06.2009
N1	1.1 KV grade, 50 mm <sup>2</sup> , 3 core PVC DWA copper conductor cable conforming to IS:1554(Part-I)-1988	Netco Cable Industries Pvt. Ltd., 11/1-B, Okhla Industrial Area, Phase-II, New Delhi-110 020	69 2000	of	02.05.2010
N2	3X95 mm <sup>2</sup> , 3300 V grade, PVC insulated, PVC sheathed double wire armoured copper conductor conforming to IS:1554(Part-II)-1988	Netco Cable Industries Pvt. Ltd., 11/1-B, Okhla Industrial Area, Phase-II, New Delhi-110 020	36 1995	of	10.07.2010
N3	2 core, 4 mm <sup>2</sup> , 1100 V grade, PVC insulated single wire armoured cable conforming to IS:1554(Part-I)-1988	Netco Cable Industries Pvt. Ltd., 11/1-B, Okhla Industrial Area, Phase-II, New Delhi-110 020	62 1988	of	18.07.2010
N4	0.6 mm <sup>2</sup> , 5 pair copper conductor, PVC insulated single armoured telephone cable conforming to ITD specification no. S/WS-113B and IS:1554(Part-I)-1988	Netco Cable Industries Pvt. Ltd., 11/1-B, Okhla Industrial Area, Phase-II, New Delhi-110 020	61 1988	of	30.04.2009
P1	3X25 mm <sup>2</sup> , 3.3 KV grade, copper conductor double steel wire armoured heavy duty cable conforming to IS:1554(Part-II)-1988	Pawan Power & Telecom Ltd., 204, Ashoka Plaza, 10-1-126, Masab Tank, Hyderabad-500 029	42 1998	of	20.05.2010
P2	PVC insulated, 2 core, 2.5 mm <sup>2</sup> , 1.1 KV grade standard copper conductor and armoured cable conforming to IS:1554(Part-I)-1988	Pawan Power & Telecom Ltd., 204, Ashoka Plaza, 10-1-126, Masab Tank, Hyderabad-500 029	51 1999	of	18.07.2010
C1	3X35 mm <sup>2</sup> , 3.8/6.6 KV PVC	Central Cables Ltd., 5,	PVC/60	of	26.06.2010

	insulated PVC sheathed double wire armoured taped inner sheath cable conforming to IS:1554(Part-II)-1988	Temple Road, Civil Lines, Nagpur-440 001	1987	
C2	PVC insulated and PVC sheathed mining cable three core with copper conductor 150 mm <sup>2</sup> , 3.3 KV grade galvanized double round steel wire armoured conforming to IS:1554(Part-II)-1988	Central Cables Ltd., 5, Temple Road, Civil Lines, Nagpur-440 001	TC/5 of 1982	28.08.2009
C3	3 core, 35 mm <sup>2</sup> , 6.35/11 KV grade PVC insulated double wired armoured copper conductor cable conforming to IS:1554(Part-II)-1988	Central Cables Ltd., 5, Temple Road, Civil Lines, Nagpur-440 001	68 of 1991	19.11.2009
R1	3 core, 185 mm <sup>2</sup> , 3.8/6.6 KV, copper conductor, double wire armoured PVC insulated (Heavy duty), PVC sheathed cable conforming to IS:1554(Part-II)-1988	Radiant Cable (P) Ltd., B-1, Industrial Estate, Sanathnagar, Hyderabad-500 018	PVC/6 of 1982	17.11.2009
K1	3.3 KV grade, PVC sheathed and PVC insulated double wire armoured mining cable having three core each 70 mm <sup>2</sup> copper conductor conforming to IS:1554(Part-II)-1988	Krishna Electrical Industries Ltd., MPI House, Gola-ka-Mandir, Airport Road, Gwalior-474 005	72 of 2002	07.02.2010
H1	Stranded annealed copper conductor, 3 core each, 120 mm <sup>2</sup> , 1.9/3.3 KV grade PVC insulated, surrounded by an inner sheathed of thermoplastic material double wire armoured with galvanized steel wire & copper wires (layers separated by a plastic type) & PVC sheathed cable conforming to IS:1554(Part-II)-1988	Hindustan Vidyut Products Ltd., 12/1, Delhi-Mathura Road, Faridabad-121 003 (Haryana)	PVC/31 of 1983	20.05.2010
M1	PVC armoured telephone cable (covering range of size from 2 pair to 50 pair) conforming to IS:1554(Part-I)-1988 and ITD/DOT specification no. S/WS113C and G/WIR-06/03 March 2002 with amendments	Maharaja Cables, B-34, Lajpat Nagar, Part-I, New Delhi-24	TC/82 of 1981	15.07.2009
M2	3 core, 2.5 mm <sup>2</sup> , 1.1 KV PVC	Maharaja Cables, B-34,	59/PVC of	17.07.2009

	insulated (heavy duty) single wire armoured cable conforming to IS:1554(Part-I)-1988	Lajpat Nagar, Part-I, New Delhi-24	1987	
P1	3.3 KV, 35 mm <sup>2</sup> , 3 cores, PVC double armoured cable conforming to IS:1554(Part-II)-1988	Polycab Wires Pvt. Ltd., R-898, Ground Floor, New Rajinder Nagar, New Delhi-110 060	68 of 2000	10.03.2009
I1	Flexible cap lamp cable conforming to IS:2593-1984, IS:10810(Part-31)-1984 and IS:6380-1984 manufactured by M/S Kewberg Cables and Braids (Pty.) Ltd., Alberton, South Africa for use in belowground Coal Mines in India.	Industrial Precision Products, 62/1A, Netaji Subhas Road (2 <sup>nd</sup> Floor, Room no. 17) Kolkata-700 001.	106 of 2008	16.09.2009
L1	Twin core 2.5 to 10 mm <sup>2</sup> lighting cable, PVC insulated & sheathed with copper conductor and GI wire armoured and overall sheathed with PVC conforming to IS:1554(Part-I)-1988	Load King Wire Industries, Plot no. 438, F.I.E. Patpar Ganj Industrial Estate, Delhi-110 092.	WA/3 of 1982	22.06.2009
L2	Twin core cable, 1 mm <sup>2</sup> cross-section meant for single shot firing cable conforming to IS:5950-1984 (1 <sup>st</sup> revision reaffirmed in 1996)	Load King Wire Industries, Plot no. 438, F.I.E. Patpar Ganj Industrial Estate, Delhi-110 092.	SA/24 of 1980	13.08.2011
E1	Parallel twin core, fig.'8' cross section PVC insulated copper conductor 1.0 mm <sup>2</sup> (nominal) single/multi shot firing cable conforming to IS:5950-1984 (1 <sup>st</sup> revision) and reaffirmed in 1996	Electromech Industries, Old Manbazar Road, Near Karni Dharmsala, Purulia-723 101 (W.B.)	49 of 1999	03.05.2010
P1	Twin core type-I shot firing cable, 2X1 mm <sup>2</sup> PVC insulated copper conductor for single and multi shot firing conforming to IS:5950-1984	Prakash Cable Products, Subhash Marg, Surajpur, Distt.-Surguja-497 229(Chhatisgarh)	76 of 2002	09.07.2010
R1	Shot firing cable, PVC insulated, 1 mm <sup>2</sup> , parallel twin core conforming to IS:5950-1984(1 <sup>st</sup> revision) for use in belowground Coal Mines.	Retco India, G-1/37, Karni Industrial Area, Pugal Road, Bikaner-334 001	100 of 2006	19.10.2011
G1	PVC shot firing cable type I, 1 mm <sup>2</sup> twin core with Fig '8' cross	Gupta Udyog, GT Road, West Barakar,	26 of 1992	24.08.2009

	section for single/multi shot firing cable conforming to IS:5950-1984	PO-Barakar, Distt.- Burdwan-713 324 (WB).		
GC1	Shot firing cable, PVC insulated, 1 mm <sup>2</sup> , parallel twin core conforming to IS:5950-1984(1 <sup>st</sup> revision)	Gananayak Cable Industries, "Panchanan Industrial Complex" Ghosh Para, Dharsa, GIP Colony, Howrah-711 321 (WB).	104 of 2008	02.07.2009