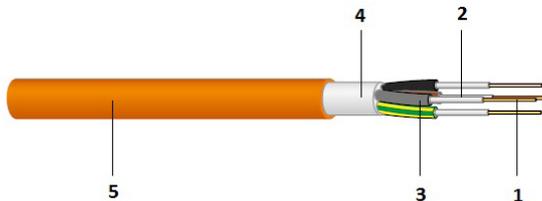


FE180 E30

Safety cable, 0.6/1kV, Keram

halogen-free, with improved fire characteristics,
in accordance with SEV TP 20B/3C and CENELEC HD 604 S1 part 5.H
30 minutes system circuit integrity* with reference to DIN 4102-12



- 1 Conductor: solid/stranded
- 2 Fire barrier: high-performance Keram compound
- 3 Insulation: cross-linked polymer, zero halogen
- 4 Filler: flame retardant, zero halogen
- 5 Sheath: FRNC/LSZH



Description

Safety cables are installed in all areas that require special protection of people and equipment against fire and fire damages and where strict security requirements must be fulfilled.

Suitable for indoor applications. For outdoor applications, protection must be provided against exposure to direct sunlight. The cable should only be laid directly in earth or water if a protective conduit is used.

Permitted operating temperature at conductor of +90°C.

Construction

Conductor	Bare copper, solid or stranded, IEC 60228 and EN 60228 ($\geq 16 \text{ mm}^2$; VDE 0295)
Insulation	Special compound, HD 604 S1 part 5 H
Core colours	CENELEC HD 308 S2
Filler	HD 604 S1 part 5 H
Outer sheath material	Compound, HD 604 S1 part 5 H

General properties

Circuit Integrity	E30
Insulation integrity	FE 180
Installation temperature	-5 °C - +50 °C
Operating temperature	-45 °C - +90 °C

Electrical properties

Nominal voltage	0.6/1kV
Test voltage at 50Hz	3,500 V

Mechanical properties

Minimum bending during installation (multi core)	12 x D
Minimum bending during installation (single core)	15 x D
Minimum bending radius permanent (multi core)	12 x D
Minimum bending radius permanent (single core)	15 x D
Remarks bending radius	50% reduction if installation at 30°C and with a template

Standards

Insulation Integrity (FE180)	IEC 60331-11/-21 (180 minutes), VDE 0472-814 (FE180), BS 6387 C/W/Z, IEC 60331-1 (120 minutes), IEC 60331-2 (120 minutes), EN 50200 (PH120 minutes), VDE 0482-200 (PH120), AREI-RGIE Art.104-FR1
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Art.104-SD, SEV TP 20B/3C 3.4.3
Zero halogen no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2, AREI-RGIE Art.104-SA, SEV TPV11
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2, AREI-RGIE Art.104-F1, SEV TP 20B/3C 3.4.1.1
Flame spread	IEC 60332-3-24, EN 60332-3-24, VDE 0482-332-3-24, AREI-RGIE Art.104-F2, SEV TP 20B/3C 3.4.1.3

Note

System Circuit Integrity is dependent on installation method.

Versions

Material number	Product	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Conductor	Construction	GTIN / EAN
191118	FE180 E30 2 x 1.5	7.8	29	102	0.22	solid	LN	40393910069662
188360	FE180 E30 2 x 1.5	7.8	29	102	0.22	solid	2L	40393910072242
191119	FE180 E30 2 x 2.5	9	48	142	0.28	solid	LN	40393910069655
190402	FE180 E30 2 x 2.5	9	48	142	0.28	solid	2L	40393910070996
187180	FE180 E30 3 x 1.5	8.3	43	121	0.25	solid	LNPE	40393910074499
187184	FE180 E30 3 x 2.5	9.5	72	169	0.31	solid	LNPE	40393910074451
187187	FE180 E30 3 x 4	11	115	243	0.41	solid	LNPE	40393910074420
187189	FE180 E30 3 x 6	12.5	173	329	0.51	solid	LNPE	40393910074406
187182	FE180 E30 4 x 1.5	9.1	58	147	0.29	solid	3LPE	40393910074475
190502	FE180 E30 4 x 2.5	10.5	96	209	0.38	solid	3LPE	40393910070828
192352	FE180 E30 4 x 4	12.2	154	304	0.49	solid	3LPE	40393910067705
192353	FE180 E30 4 x 6	13.8	230	409	0.61	solid	3LPE	40393910067699
187183	FE180 E30 5 x 1.5	9.9	72	177	0.35	solid	3LNPE	40393910074468
187186	FE180 E30 5 x 2.5	11.6	120	255	0.47	solid	3LNPE	40393910074437
187188	FE180 E30 5 x 4	13.4	192	371	0.61	solid	3LNPE	40393910074413
187190	FE180 E30 5 x 6	15.2	288	504	0.76	solid	3LNPE	40393910074390
186267	FE180 E30 7 x 1.5	10.8	100.8	220	0.41	solid	6LPE	40393910076172
186268	FE180 E30 7 x 2.5	12.5	168	319	0.53	solid	6LPE	40393910076165
187201	FE180 E30 7 x 6	16.7	403	644	0.89	solid	6LPE	40393910074338
187108	FE180 E30 8 x 1.5	11.9	115	258	0.48	solid	7LPE	40393910074680
188345	FE180 E30 10 x 1.5	13.8	144	319	0.69	solid	9LPE	40393910072372
186269	FE180 E30 12 x 1.5	14.2	172.8	364	0.66	solid	11LPE	40393910076158
192479	FE180 E30 12 x 2.5	16.7	288	536	0.88	solid	11LPE	40393910067354
187109	FE180 E30 21 x 1.5	17.7	303	578	0.99	solid	20LPE	40393910074673

Material number	Product	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Conductor	Construction	GTIN / EAN
190412	FE180 E30 27 x 1.5	20.4	389	752	1.30	solid	26LPE	40393910070972

Additional dimensions available on request.

Subject to technical modification

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