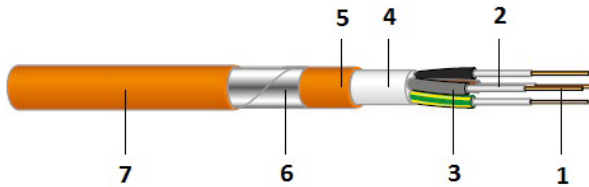


FE180 E30 CL

Safety cable, 0.6/1kV, armoured with rodent protection, Keram

halogen-free, with improved fire characteristics,
with reference to SEV TP 20B/3C and CENELEC HD 604 S1 part 5.H



- 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 Inner Sheath: Polyolefin flame retardant, low smoke, zero halogen
- 6 Armouring: galvanised steel tape
- 7 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

Armouring (rodent protection)	Single-core cable with copper tape (CLCU) and multicore cable with galvanised steel tape (CL)
Conductor	Bare copper, solid or stranded, IEC 60228 and EN 60228 ($\geq 16 \text{ mm}^2$: VDE 0295)
Core colours	CENELEC HD 308 S2
Filler	HD 604 S1 part 5 H ($\geq 16 \text{ mm}^2$: halogen-free polyolefin compound)
Inner sheath	Compound, HD 604 S1 part 5 H ($\geq 16 \text{ mm}^2$: Polyolefin compound, VDE 0276-604, CENELEC HD 604 S1 "HM 4", flame-retardant)
Insulation	Special compound, HD 604 S1 part 5 H ($\geq 16 \text{ mm}^2$: double-layer insulation, special compound, VDE 0266 "HX11")
Outer sheath material	Compound, HD 604 S1 part 5 H (16 mm ² : in accordance with CENELEC HD 308 S2 and VDE 0293)

General Properties

Installation temperature	-5 °C - +50 °C
Operating temperature	-45 °C - +90 °C

Electrical properties

Nominal voltage	0.6/1kV
Test voltage 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

Standards

Circuit integrity (FE180/PH120)	IEC 60331-11/-21 (180 minutes),VDE 0472-814 (FE180),BS 6387 C/W/Z,IEC 60331-1 (PH120),IEC 60331-2 (120 minutes),EN 50200 (PH120),VDE 0482-200 (PH120),VDE 0482-362,AREI-RGIE Art.104-FR1
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 Cat. C, EN 60332-3-24 Cat. C, VDE 0482-332-3-24 Cat. C, AREI-RGIE Art.104-F2, SEV TP 20B/3C 3.4.1.3
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
System circuit integrity	DIN 4102-12, AREI-RGIE Art.104-FR2

Note

* System Circuit Integrity is dependent on installation method

Versions

Material number	Product	Diameter mm ²	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Conductor
193886	FE180 E30 CL	1.5	11	43	211	0.46	solid
187199	FE180 E30 CL	2.5	12	72	256	0.50	solid
191097	FE180 E30 CL	4	14	115	373	0.69	solid
191121	FE180 E30 CL	6	15.8	173	487	0.90	solid
188354	FE180 E30 CL	10	18	288	655	1.20	solid
191595	FE180 E30 CL	2.5	14	96	298	0.56	solid
187167	FE180 E30 CL	4	16	154	408	0.79	solid
188352	FE180 E30 CL	6	17	230	539	1.06	solid
191038	FE180 E30 CL	2.5	14	120	397	0.76	solid
188350	FE180 E30 CL	4	16	192	488	1.05	solid
188353	FE180 E30 CL	6	17.5	288	643	1.28	solid
188397	FE180 E30 CL	10	21	480	971	1.76	solid
187197	FE180 E30 CL	2.5	16	168	481	0.91	solid
188355	FE180 E30 CL	6	19	403	801	1.53	solid
188356	FE180 E30 CL	10	23	672	1,212	2.13	solid
192461	FE180 E30 CL	1.5	15	115	404	0.85	solid
187128	FE180 E30 CL	2.5	16	192	504	1.04	solid
191104	FE180 E30 CL	4	18	308	684	1.36	solid

Additional dimensions available on request