



IFSI Cu

XLPE insulated and HFFR sheathed power cables with Cu conductors and copper concentric conductor, rated voltage 0,6/1 kV

APPLICATION

Power cable designed for fixed installation in dry and damp environment, suitable for mounting on or under plaster, on cable trays, and embedded in walls or concrete. Not intended for direct laying in ground or water. For outdoor use, the cable may be installed in conduits, provided that adequate measures are taken to prevent water ingress. Suitable for supply systems in an emergency. Appropriate for application in all situations where people and property need to be protected in case of fire. Recommended for public utility buildings with a high concentration of people such as: hotels, shopping malls, hospitals, schools, airports, underground railways, etc. and for industrial complex like power plants, transformers stations. Concentric conductor serves as electromagnetic screen, which could also be applied as neutral conductor.

Expected lifetime 50 years, provided proper installation, load and ambient temperature.

CONSTRUCTION

Conductors: Cu, class 1 or 2 according to EN 60228

Insulation: XLPE compound

Bedding: Extruded filling compound or plastic tape

Concentric conductor: Copper wires and copper tape helically (spirally) applied

Outer sheath: HFFR compound, UV resistant

CORE IDENTIFICATION

According to HD 308 S2

Insulation Color:

2-core: ● Brown ● Blue

3-core (a): ● Green/Yellow ● Brown ● Blue

3-core (b): ● Black ● Brown ● Grey

4-core (a): ● Green/Yellow ● Brown ● Black ● Grey

4-core (b): ● Blue ● Brown ● Black ● Grey

5-core: ● Green/Yellow ● Blue ● Brown ● Black ● Grey

Outer Sheath Colour:

● Black

Other colours available on request

TECHNICAL CHARACTERISTICS

CPR class: Dca – s1, d1, a1

Test voltage: 4 kV AC, 50 Hz, 5 min. per core

Rated voltage: 0,6/1 kV

Bending radius (min): up to 6 mm²- 6D single-core- 15D; multicore- 12D,

D – overall diameter

Min. laying temperature: -15°C

Max. cond. operating temp.: 90°C

Max. short-circuit temperature: 250°C

Low smoke emitting: EN 61034-2

Halogen free: EN 60754-1; EN 60754-2

Vertical flame spread: EN IEC 60332-3-24

Flame propagation: EN 60332-1-2

CPR class: EN 50575, EN 13501-6

STANDARD

SFS 5546, HD 604 S1, SS 424 14 18

HD 604-5D (Chosen parts)

IEC 60502-1

CERTIFICATION



TWO- CORE CABLES:

NOMINAL CROSS-SECTION	CONDUCTOR SHAPE	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)	PACKING
mm ²		Ω/km	A	A	mm	kg/km	kg/km	500m
2x1,5/1,5	RE	12,1	18,5	26	9,4	43,2	138,9	K6
2x2,5/2,5	RE	7,41	25	35	10,2	72	184,8	K6
2x4/4	RE	4,61	-	-	11,3	115,2	251	K7
2x6/6	RE	3,08	43	57	12,5	172,8	334,4	K7
2x10/10	RM/RE	1,83	60	77	14,4	288	495,3	K8
2X10/16	RM/RE	1,83	60	77	15,9	345,6	552,6	K8
2x16/16	RM/RE	1,15	80	100	16,7	460,8	726,3	K8
2x25/16	RM/RE	0,727	102	130	20	633,6	1013	K9
2x35/16	RM	0,524	126	160	22,5	825,6	1297,3	K10
2x6/2,5	RE	3,08	43	57	12,4	139,2	300	K7
2x10/2,5	RM/RE	1,83	60	77	14,1	216	420,6	K7
2x16/2,5	RM/RE	1,15	80	100	16	331,2	590,9	K8
2x25/2,5	RM/RE	0,727	102	130	19,2	504	875,9	K9

THREE- CORE CABLES:

NOMINAL CROSS-SECTION	CONDUCTOR SHAPE	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)	PACKING
mm ²		Ω/km	A	A	mm	kg/km	kg/km	500m
3x1,5/1,5	RE	12,1	18,5	26	9,9	57,6	157,8	K6
3x2,5/2,5	RE	7,41	25	35	10,8	96	213,5	K6
3x4/4	RE	4,61	-	-	11,9	153,6	294,3	K7
3x6/6	RE	3,08	43	57	13,2	230,4	396,9	K7
3x10/10	RM/RE	1,83	60	77	15,3	384	595,7	K8
3x16/16	RM/RE	1,15	80	100	17,7	614,4	883,2	K9
3x25/16	RM	0,727	102	130	21,1	873,6	1254,9	K10
3x35/16	RM	0,524	126	160	23,7	1161,6	1629,5	K11
3x50/25	SM	0,387	153	190	26,4	1680	1969,9	K11
3x70/35	SM	0,268	195	240	30,3	2352	2714,1	K12
3x95/50	SM	0,193	236	285	34,3	3216	3649,4	K14
3x120/70	SM	0,153	274	325	38,4	4128	4648,7	K16
3x150/70	SM	0,124	317	370	42,5	4992	5624,4	K18
3x185/95	SM	0,0991	361	420	47,3	6240	7008,2	K20
3x240/120	SM	0,0754	427	480	53,2	8064	8994,7	K22
3x300/150	SM	0,0601	492	550	58,6	10080	11174,6	K24

FOUR- CORE CABLES:

NOMINAL CROSS-SECTION	CONDUCTOR SHAPE	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)	PACKING
mm ²		Ω/km	A	A	mm	kg/km	kg/km	500m
4x1,5/1,5	RE	12,1	18,5	26	10,7	72	182,7	K6
4x2,5/2,5	RE	7,41	25	35	11,7	120	249,8	K7
4x4/4	RE	4,61	-	-	13	192	347,2	K7
4x6/6	RE	3,08	43	57	14,4	288	471,3	K8
4x10/10	RM/RE	1,83	60	77	16,7	480	712,3	K8
4x10/16	RM/RE	1,83	60	77	18	537,6	770	K9
4x16/16	RM/RE	1,15	80	100	19,3	768	1061,8	K9
4x25/16	RM	0,727	102	130	23,2	1113,6	1530,5	K10
4x35/16	SM	0,524	126	160	26	1497,6	2007,2	K11
4x50/25	SM	0,387	153	190	29,2	2160	2511,2	K12
4x70/35	SM	0,268	195	240	34,2	3024	3474	K14
4x95/50	SM	0,193	236	285	38	4128	4655,7	K16
4x120/70	SM	0,153/0,268	274	325	42,5	5280	5915,8	K18
4x150/70	SM	0,124/0,268	317	370	47,1	6432	7208,2	K20
4x185/95	SM	0,0991/0,193	361	420	52,5	8016	8962,2	K22
4x240/120	SM	0,0754/0,153	427	480	59	10368	11516,9	K24
4x300/150	SM	0,0601/0,124	492	550	65	12960	14313,2	K24

NOMINAL CROSS-SECTION	CONDUCTOR SHAPE	MAX. RESISTANCE AT 20°C	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)	PACKING
mm ²		Ω/km	A	A	mm	kg/km	kg/km	500m
6x10/16	RM/RE	1,830	60	77	20,9	729,6	946	K10