ttcables
ELECTRIC CABLE WORKS

RZ1-K

Power cable 0,6/1 kV with Cu conductors, XLPE insulated and HFFR sheathed

APPLICATION

Power cable suitable for fixed installation in dry and damp environment, on or under plaster, on cable trays, same as in walls and concrete. Not intended for direct laying in ground or water. For outdoor application can be laid in tubes, but in that case should be taken all precautionary measures necessary to prevent water penetration into the tubes. Suitable for supply systems in an emergency. Appropriate for application in all situations where people and material goods need to be protected in case of fire. Recommended for public buildings frequented by a lot of people, and for buildings of high material value, for industrial complexes, electric power plants, transformer stations, municipal facilities, hotels, shopping malls, hospitals, schools, airports, underground railways and similar. Concentric conductor serves as electromagnetic screen, which could also be applied as neutral conductor.

TECHNICAL CHARACTERISTICS

CPR class: Dca
Test voltage: 4 Kv
Rated voltage: 0,6/1 kV
Bending radius (min): 5xD
Min. laying temperature: -15°C
Max. working temperature: 90°C
Max. short-circuit temperature: 250°C
Flame retardant: IEC 60332-1-2
Fire retardant: IEC 60332-3-24
Halogen free: IEC 60754
Low smoke emission: IEC 61034

CONSTRUCTION

Conductors: Cu, class 5 according to EN 60228
Insulation: : XLPE compound, type DIX 3
Bedding: Extruded elastomere or plastomere LSZH compound
Sheat: LSZH compound, type DMZ-E

STANDARD

UNE 21123-4, IEC 60502-1

CORE IDENTIFICATION

According to HD 308 S2

Insulation Color:
Single-core: Green/Yellow OR Black
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:
Green
Other colours available on request

CERTIFICATION

CE
RoHS compliant
IEC International Electrotechnical Commission
REACH
CPR COMPLIANT Construction Products Regulation EN 50575

SINGLE - CORE CABLES:

NOMINAL CROSS-SECTION	MAX. RESISTANCE AT 20°c	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)
mm2	Ω/km	A	A	mm	kg/km	kg/km
1x10	1,910	77	89	8,6	96,0	163,2
1x16	1,210	102	115	9,5	153,6	230,4
1x25	0,780	138	148	11,0	240,0	336,1
1x35	0,554	170	177	12,1	336,0	444,5
1x50	0,386	207	209	13,6	480,0	607,7
1x70	0,272	263	256	15,2	672,0	820,9
1x95	0,206	325	307	16,8	9112,0	1079,7
1x120	0,161	380	349	18,4	1152,0	1342,3
1x150	0,129	437	393	20,2	1440,0	1660,2
1x185	0,106	507	445	22,1	1776,0	2029,4
1x240	0,0801	604	517	24,5	2304,0	2594,3
1x300	0,0641	679	583	26,7	2880,0	3205,9
1x400	0,0486	811	663	30,4	3840,0	4242,1
1x500	0,0384	940	749	33,7	4800,0	6626,4
1x630	0,0287	1083	843	37,4	6048,0	8374,2

TWO - CORE CABLES:

NOMINAL CROSS-SECTION	MAX. RESISTANCE AT 20°c	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)
mm2	Ω/km	A	A	mm	kg/km	kg/km
2x1,5	13,3	24	31	10,0	28,8	138,1
2x2,5	7,98	32	40	10,8	48,0	173,1
2x4	4,95	42	52	11,8	76,8	222,7
2x6	3,3	53	64	12,8	115,2	283,2
2x10	1,910	74	86	14,4	192,0	397,7
2x16	1,210	98	112	16,2	307,2	559,0
2x25	0,780	133	145	19,2	480,0	824,1
2x35	0,554	162	174	21,4	672,0	1087,0
2x50	0,386	197	206	24,4	960,0	1485,7
2x70	0,272	250	254	27,6	1344,0	2001,2
2x95	0,206	308	305	31,2	1824,0	2649,9
2x120	0,161	359	348	34,6	2304,0	3308,2
2x150	0,129	412	392	38,4	2880,0	4110,1
2x185	0,106	475	444	42,4	3552,0	5043,2
2x240	0,0801	564	517	48,0	1608,0	6511,6

THREE - CORE CABLES:

NOMINAL CROSS-SECTION	MAX. RESISTANCE AT 20°c	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)
mm2	Ω/km	A	A	mm	kg/km	kg/km
3x1,5	13,3	24	31	10,5	43,2	158,2
3x2,5	7,98	32	40	11,3	72,0	203,2
3x4	4,95	42	52	12,4	115,2	267,6
3x6	3,3	53	64	13,5	172,8	347,4
3x10	1,910	74	86	15,2	288,0	500,2
3x16	1,210	98	112	17,1	460,8	718,3
3x25	0,780	133	145	20,4	720,0	1070,3
3x35	0,554	162	174	22,8	1008,0	1426,5
3x50	0,386	197	206	25,2	1440,0	1959,3
3x70	0,272	250	254	28,9	2016,0	2676,0
3x95	0,206	308	305	32,5	2736,0	3543,1
3x120	0,161	359	348	36,2	3456,0	4434,8
3x150	0,129	412	392	40,5	4320,0	5538,7
3x185	0,106	475	444	44,8	5328,0	6802,9
3x240	0,0801	564	517	50,3	6912,0	8783,8
3x300	0,0641	649	585	55,5	8640,0	10878,4
3x400	0,0486	761	710	64,9	11520,0	14428,2

FOUR - CORE CABLES:

NOMINAL CROSS-SECTION	MAX. RESISTANCE AT 20°c	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)
mm2	Ω/km	A	A	mm	kg/km	kg/km
4x1,5	13,3	24	31	11,2	57,6	183,6
4x,25	7,98	32	40	12,1	96,0	239,8
4x4	4,95	42	52	13,4	153,6	320,6
4x6	3,3	53	64	14,6	230,4	421,5
4x10	1,910	74	86	16,5	384,0	615,7
4x16	1,210	98	112	18,7	614,4	894,5
4x25	0,780	133	145	22,3	960,0	1341,0
4x35	0,554	162	174	25,0	1344,0	1796,9
4x50	0,386	197	206	28,0	1920,0	2494,2
4x70	0,272	250	254	32,7	2688,0	3419,8
4x95	0,206	308	305	36,1	3648,0	4529,4
4x120	0,161	359	348	40,4	4608,0	5692,3
4x150	0,129	412	392	45,0	5760,0	7123,8
4x185	0,106	475	444	50,0	7104,0	8772,1
4x240	0,0801	564	517	56,2	9216,0	11267,0
4x300	0,0641	649	585	61,9	11520,0	13962,3
4x400	0,0486	761	710	65,3	15360,0	18388,6

FIVE - CORE CABLES:

NOMINAL CROSS-SECTION	MAX. RESISTANCE AT 20°c	CURRENT CAPACITY IN AIR	CURRENT CAPACITY IN EARTH	OUTER DIAM. (APPROX.)	METAL WEIGHT	CABLE WEIGHT (APPROX.)
mm2	**Ω/km**	**A**	**A**	**mm**	**kg/km**	**kg/km**
5x1,5	13,3	24	31	12,0	72	211,1
5x2,5	7,98	32	40	13,0	120	279,2
5x4	4,95	42	52	14,4	192	377,1
5x6	3,3	53	64	15,7	288	500,1
5x10	1,910	74	86	17,9	480	737,2
5x16	1,210	98	112	20,3	768	1078,8
5x25	0,780	133	145	24,4	1200	1624,2
5x35	0,554	162	174	27,4	1680	2183,7
5x50	0,386	197	206	31,8	2400	3061,6
5x70	0,272	250	254	36,3	3360	4192,4
5x95	0,206	308	305	41,0	4560	5585,4
5x120	0,161	359	348	45,6	5760	6993,3
5x150	0,129	412	392	51,2	7200	8733,3
5x185	0,106	475	444	56,8	8880	10753,8
5x240	0,0801	564	517	63,6	11520	13872,8