ttcables
ELECTRIC CABLE WORKS



RZ1-K

Power cable 0,6/1 kV AC (1,5 kV DC) 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. Suitable for laying in ground. For outdoor application can be laid in tubes, but in that case should be taken all precautionary measures neces-sary 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 ma-terial 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. Expected lifetime 50 years, provided proper installation, load and ambient temperature.

CONSTRUCTION

Conductors: Cu, class 5 according to EN 60228
Insulation: : XLPE compound
Bedding: Extruded elastomere or plastomere LSZH compound
Sheat: LSZH compound
UV resistant

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:
Black
Other colours available on request

TECHNICAL CHARACTERISTICS

CPR class: B2ca- s1a, d1, a1
Test voltage: 4 kV
Rated voltage: 0,6/1 kV AC (1,5 kV DC)
Bending radius (min): 5xD
Min. service temperature: -40°C
Min. installation and handling temp. :-15°C
Max. working temperature: 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

UNE 21123-4, IEC 60502-1,
HD 604-5D (Chosen parts)

CERTIFICATION

CE RoHS compliant
IEC International Electrotechnical Commission
REACH COMPLIANT
CPR

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	10,7	96,0	173
1x16	1,210	102	115	11,6	153,6	241
1x25	0,780	138	148	12,9	240,0	347
1x35	0,554	170	177	13,9	336,0	458
1x50	0,386	207	209	15,1	480,0	628
1x70	0,272	263	256	17,4	672,0	853
1x95	0,206	325	307	19,1	9112,0	1120
1x120	0,161	380	349	21,4	1152,0	1396
1x150	0,129	437	393	23,7	1440,0	1739
1x185	0,106	507	445	26,2	1776,0	2129
1x240	0,0801	604	517	29,2	2304,0	2724
1x300	0,0641	679	583	32,3	2880,0	3373
1x400	0,0486	811	663	36,7	3840,0	4449
1x500	0,0384	940	749	40,8	4800,0	5529
1x630	0,0287	1083	843	46,1	6048,0	6951

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	10,4	28,8	139
2x2,5	7,98	32	40	11,6	48,0	181
2x4	4,95	42	52	12,8	76,8	235
2x6	3,3	53	64	14,6	115,2	313
2x10	1,910	74	86	17,0	192,0	449
2x16	1,210	98	112	18,8	307,2	613
2x25	0,780	133	145	21,4	480,0	871
2x35	0,554	162	174	24,0	672,0	1149
2x50	0,386	197	206	27,8	960,0	1583
2x70	0,272	250	254	32,4	1344,0	2167
2x95	0,206	308	305	35,8	1824,0	2819
2x120	0,161	359	348	40,6	2304,0	3565
2x150	0,129	412	392	45,0	2880,0	4424
2x185	0,106	475	444	50,0	3552,0	5438
2x240	0,0801	564	517	56,0	1608,0	6953

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	10,7	43,2	154
3x2,5	7,98	32	40	12,0	72,0	205
3x4	4,95	42	52	13,3	115,2	273
3x6	3,3	53	64	15,2	172,8	369
3x10	1,910	74	86	17,8	288,0	541
3x16	1,210	98	112	19,7	460,8	759
3x25	0,780	133	145	22,5	720,0	1103
3x35	0,554	162	174	25,3	1008,0	1471
3x50	0,386	197	206	29,4	1440,0	2040
3x70	0,272	250	254	34,6	2016,0	2819
3x95	0,206	308	305	38,0	2736,0	3685
3x120	0,161	359	348	43,2	3456,0	4653
3x150	0,129	412	392	47,9	4320,0	5788
3x185	0,106	475	444	53,5	5328,0	7143
3x240	0,0801	564	517	59,7	6912,0	9132
3x300	0,0641	649	585	66,6	8640,0	11379
3x400	0,0486	761	710	76,0	11520,0	15041

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	11,5	57,6	179
4x2,5	7,98	32	40	13,0	96,0	243
4x4	4,95	42	52	14,4	153,6	326
4x6	3,3	53	64	16,6	230,4	445
4x10	1,910	74	86	19,5	384,0	658
4x16	1,210	98	112	21,7	614,4	937
4x25	0,780	133	145	24,8	960,0	1374
4x35	0,554	162	174	27,9	1344,0	1842
4x50	0,386	197	206	32,7	1920,0	2578
4x70	0,272	250	254	38,5	2688,0	3561
4x95	0,206	308	305	42,1	3648,0	4654
4x120	0,161	359	348	48,1	4608,0	5896
4x150	0,129	412	392	53,3	5760,0	7337
4x185	0,106	475	444	59,6	7104,0	9049
4x240	0,0801	564	517	66,9	9216,0	11645
4x300	0,0641	649	585	74,1	11520,0	14434
4x400	0,0486	761	710	84,9	15360,0	19130

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	12,4	72	208
5x2,5	7,98	32	40	14,1	120	284
5x4	4,95	42	52	15,7	192	385
5x6	3,3	53	64	18,1	288	527
5x10	1,910	74	86	21,4	480	786
5x16	1,210	98	112	23,8	768	1127
5x25	0,780	133	145	27,3	1200	1662
5x35	0,554	162	174	30,8	1680	2234
5x50	0,386	197	206	36,3	2400	3148
5x70	0,272	250	254	43,0	3360	4368
5x95	0,206	308	305	47,2	4560	5739
5x120	0,161	359	348	53,4	5760	7210
5x150	0,129	412	392	59,3	7200	8974
5x185	0,106	475	444	66,6	8880	11127
5x240	0,0801	564	517	74,6	11520	14277