

BiT 1000[®] Power

Flexible power cables, 0,6/1kV



RoHS 2015/863/EU



LVD 2014/35/EU



CPR 305/2011



24 months warranty



industrial application



internal application



external application



underground installation



EN 60332-1-2



high flexibility



UV resistance

Technical data:

Thermal parameters:

Operating temperature:

fixed installation: -40 °C to 80 °C

flexible connections: -5 °C to 80 °C

Max. conductor operating temp.: 90 °C**Max. conductor temperature in short-circuit:** 250 °C

Electrical parameters:

Operating voltage: U_n/U=0,6/1kV**Test voltage (50Hz):** 4000V

Mechanical parameters:

Min. bending radius:

flexible connections: 10xØ

fixed installation: 6xØ

Design:

Conductors:

bare copper conductors, multi-stranded class 5 acc. to EN 60228

Insulation:

XLPE

Core identification:

coloured conductors (see the table with conductor insulation colours), cables with protective earth conductor marked G (e.g. 7G1,5)

Core arrangement:

Inner sheath:

cores twisted together special PVC (cables up to 10mm² and single core cables are manufactured without inner sheath)

Outer sheath:

special PVC, oil resistant (see table of chemical resistance), self-extinguishing and flame retardant (acc. to EN 60332-1-2), UV resistant; colour: black

Application:

BiT 1000[®]Power cables are designed for supplying power to electric devices and working in low voltage energy networks. Flexible construction enables easy and fast connections as well as application as power supply cables for portable devices. Cables are suitable for operation in dry and damp rooms as well as for outdoor installations. Outer sheath is UV resistant. **Cables designed also for direct burial in ground.** Cables classified according to **EN 50575 (CPR)**.

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
EM9050	2x1,5	9,1	112
EM9051	3G1,5	9,5	130
EM9052	3x1,5	9,5	130
EM9053	4G1,5	10,4	155
EM9054	4x1,5	10,4	155
EM9055	5G1,5	11,1	179
EM9056	2x2,5	10,2	147
EM9057	3G2,5	10,7	174
EM9058	3x2,5	10,7	174
EM9059	4G2,5	11,8	211
EM9060	4x2,5	11,8	211
EM9061	5G2,5	12,6	246
EM9062	2x4,0	11,1	192
EM9063	3G4,0	11,7	233
EM9064	3x4,0	11,7	233
EM9065	4G4,0	12,9	285
EM9066	4x4,0	12,9	285
EM9067	5G4,0	13,8	335
EM9068	2x6,0	12,3	249
EM9069	3G6,0	13,0	305
EM9070	3x6,0	13,0	305
EM9071	4G6,0	14,3	380
EM9072	4x6,0	14,3	380
EM9073	5G6,0	15,5	450
EM9074	2x10	14,1	360
EM9075	3G10	14,9	455
EM9076	3x10	14,9	455
EM9077	4G10	16,5	570
EM9078	4x10	16,5	570

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
EM9079	5G10	17,9	685
EM9080	2x16	17,4	555
EM9081	3G16	18,4	705
EM9082	3x16	18,4	705
EM9083	4G16	20,7	900
EM9084	4x16	20,7	900
EM9085	5G16	22,5	1085
EM9086	2x25	21,8	870
EM9087	3G25	23,2	1115
EM9088	3x25	23,2	1115
EM9089	4G25	25,9	1410
EM9090	4x25	25,9	1410
EM9091	5G25	27,9	1085
EM9092	2x35	24,0	1105
EM9093	3G35	25,6	1430
EM9094	3x35	25,6	1430
EM9095	4G35	28,5	1810
EM9096	4x35	28,5	1810
EM9097	5G35	30,8	2175
EM9098	2x50	28,0	1525
EM9099	3G50	29,9	1975
EM9100	3x50	29,9	1975
EM9101	4G50	34,4	2590
EM9102	4x50	34,4	2590
EM9103	5G50	37,2	3110
EM9104	3G70	35,4	2795
EM9105	3x70	35,4	2795
EM9106	4G70	39,5	3545
EM9107	4x70	39,5	3545

BiT 1000[®] Power

Flexible power cables, 0,6/1kV

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
EM9108	5G70	43,0	4290
EM9109	3G95	39,2	3615
EM9110	3x95	39,2	3615
EM9111	4G95	43,9	4605
EM9112	4x95	43,9	4605
EM9113	5G95	48,0	5605
EM9114	3G120	43,0	4525
EM9115	3x120	43,0	4525
EM9116	4G120	48,3	5790
EM9117	4x120	48,3	5790
EM9118	5G120	52,6	7040
EM9119	3G150	48,4	5595
EM9120	3x150	48,4	5595

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
EM9121	4G150	54,4	7165
EM9122	4x150	54,4	7165
EM9123	5G150	59,4	8795
EM9124	3G185	54,8	6830
EM9125	3x185	54,8	6830
EM9126	4G185	61,5	8720
EM9127	4x185	61,5	8720
EM9128	5G185	67,3	10600
EM9129	3G240	60,3	8785
EM9130	3x240	60,3	8785
EM9131	4G240	67,9	11280
EM9132	4x240	67,9	11280
EM9133	5G240	74,0	13800

Single core cables with protective core

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
EM9145	1G1,5	5,6	44
EM9146	1G2,5	6,1	56
EM9147	1G4,0	6,6	75
EM9148	1G6,0	7,2	97
EM9149	1G10	8,1	136
EM9150	1G16	9,1	194
EM9151	1G25	10,8	280
EM9152	1G35	11,9	375
EM9153	1G50	13,9	525
EM9154	1G70	15,8	720
EM9155	1G95	17,7	945
EM9156	1G120	19,7	1175
EM9157	1G150	21,5	1445
EM9158	1G185	24,1	1765
EM9159	1G240	26,9	2290
EM9160	1G300	30,4	2995
EM9161	1G400	34,1	4110

Single core cables without protective core

Cat. no.	n x mm ²	Outer diameter* [mm]	Approximate cable weight [kg/km]
EM9162	1x1,5	5,6	44
EM9163	1x2,5	6,1	56
EM9164	1x4,0	6,6	75
EM9165	1x6,0	7,2	97
EM9166	1x10	8,1	136
EM9167	1x16	9,1	194
EM9168	1x25	10,8	280
EM9169	1x35	11,9	375
EM9170	1x50	13,9	525
EM9171	1x70	15,8	720
EM9172	1x95	17,7	945
EM9173	1x120	19,7	1175
EM9174	1x150	21,5	1445
EM9175	1x185	24,1	1765
EM9176	1x240	26,9	2290
EM9177	1x300	30,4	2995
EM9178	1x400	34,1	4110

Cables without protective conductor are marked with x (e.g. 3x50)
Cables with protective conductor are marked with G (e.g. 3G50)

*Outer diameter tolerance: +/-5%
Cable Factory BITNER reserves the right to modify the specifications without prior notice
Note: On customer's request other cross sections or number of cores can be produced

Number of conductors	Conductor insulation colours
Cables without protective conductor	
1	black
2	blue, brown
3	brown, black, grey
4	blue, brown, black, grey
5	blue, brown, black, grey, black
Cables with protective conductor	
3	green-yellow, blue, brown
4	green-yellow, brown, black, grey
5	green-yellow, blue, brown, black, grey

BiT 1000[®] Power

Flexible power cables, 0,6/1kV

Long term current rating for 3-, 4- and 5-core cables laid as single in air or in ground, operating in 3-phase symmetrical systems

Section mm ²	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240
air 30°C	23	32	42	53	75	100	133	162	197	250	308	359	412	475	564
ground 20°C	31	40	52	64	86	112	145	174	206	254	305	348	392	444	517

Long term current rating of single core cables laid in air or ground as single cable operating in DC systems with distant protective conductor

Section mm ²	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
air 30°C	33	43	57	72	99	131	177	217	265	336	415	485	557	646	774	900	1060
ground 20°C	41	63	82	102	136	176	229	275	326	400	480	548	616	698	815	927	1064

Long term current rating of single core cables laid in air or ground in triangle, operating in 3-phase symmetrical systems

Section mm ²	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
air 30°C	26	34	44	56	77	102	138	170	207	263	325	380	437	507	604	697	811
ground 20°C	33	42	54	67	89	115	148	177	209	256	307	349	393	445	517	583	663

Correction factors for ambient temperature other than 30°C

ambient temperature °C	10	15	20	25	30	35	40	45	50	55	60	65	70	75
correction factor	1,18	1,14	1,10	1,05	1,00	0,95	0,89	0,84	0,77	0,71	0,63	0,55	0,45	0,32