BETAflam® 145 C-flex 600 / 1000 V

CPR: Dca - CCHDA0000023

Shielded connection and power cable – temperature resistant.

Application

Fixed and flexible application in dry, humid and wet rooms. Good weather and UV resistance. Extensively oil resistant. Intended for installation outdoors. Typical areas of applikation are connections of:

Lamps / Heating units / Electrical machinery (thermal class B)/ Switchboards / switch cabinets and distributors in apparatus, mechanical or plant engineering.

Standards / material properties

Halogenfree	IEC 60754-1, EN 50267-2-1
No corrosive gases	IEC 60754-2, EN 50267-2-2
No toxic gases	NF X 70-100
Low smoke density	IEC 61034, DIN EN 61034-2, EN 50268-2
Flame retardant	EN IEC 60332-1-2
Non-flame propagating	IEC 60332-3, DIN EN 60332-3, EN 50266-2
Low fire load	DIN 51900
Cross-linked insulating compound HF90	IEC 60092-360
Cross-linked sheating compound SHF2	IEC 60092-360
Oil resistant	EN 50264-1, 72h/100°C, IRM 902
Fuel resistant	EN 50264-1, 168h/70°C, IRM 903

Fire properties acc. Construction Products Regulation (CPR)

Dca- s2, d2, a1	EN 50575, EN 13501-6
Fire performance Dca	EN 50399
Medium smoke emission s2	EN 50399
Drip off behavior d2	EN 50399
Low corrosive gases a1	EN 60754-2
CPR-Identification code	CCHDA0000022

Construction

Conductor	Tinned fine copper strands acc. VDE 0295 / IEC 60228 class 5
Insulation	Polyolefin Copolymer, electronbeam cross-linked
Core identification	≤ 5 Cores according HD 308 S2, ≥ 6 Cores NR, NRPE
Shield	Tinned fine copper braid, min. 85% coverage
Outer sheath	Polyolefin Copolymer, electronbeam cross-linked SHF2, colour black

Technical properties

Nominal voltage	Uo/U < 1 mm²	300/500 V
	Uo/U > 1,5 mm²	470/750 V
	Uo/U ≥ 1,5 mm²	600/1000 V AC (fixed and protected installation)
	Vo/V > 1,5 mm²	750/1500 V DC (fixed and protected installation)
Testing voltage	core/core ≤ 1 mm²	2000 V, ≥ 1,5 mm² 3500 V
	core/shield ≤ 1 mm²	1500 V, ≥ 1,5 mm² 2500 V
Temperature range	fixed installation	- 55 upto + 145°C
	occaisionally moved	- 35 upto + 120°C
	short circuit	+ 280°C
Bending radius	fixed installation	> 4 x outer-Ø
	occaisionally moved	> 8 x outer-Ø

Approvals

DNV / GL	Certificate - no. TAE00001RK
Lloyd's Register	Certifikate - no. LR2016000TA
BUREAU VERITAS	Certifikate - no. 13348 / D0 BV

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Construction n x mm²	Core-function	Core-Ø mm	Outer-Ø mm	Weight kg/km	Fire load kWh/m	Article no.
2 x 0,50	NR	1.90	5.6	45	0.09	217371
3 x 0,50	NR	1.90	5.9	55	0.11	◑
4 x 0,50	NR	1.90	6.5	65	0.13	221012
5 x 0,50	NR	1.90	7.1	82	0.17	◑
7 x 0,50	NR	1.90	8.2	112	0.23	◑
1 x 0,75	L	2.20	3.8	28	0.06	◑
2 x 0,75	LN	2.20	6.4	59	0.15	217638
2 x 0,75	NR	2.20	6.4	59	0.15	◑
3 G 0,75	LNPE	2.20	6.7	70	0.14	304100
3 x 0,75	NR	2.20	6.7	70	0.14	211368
4 x 0,75	NR	2.20	7.4	86	0.18	211369
4 G 0,75	NRPE	2.20	7.4	86	0.18	304645
5 x 0,75	NR	2.20	8.1	104	0.21	211370
5 G 0,75	NPPE	2.20	8.1	104	0.21	304101
6 x 0,75	NR	2.20	8.7	122	0.25	211371
7 x 0,75	NR	2.20	9.7	148	0.32	211372
7 G 0,75	NRPE	2.20	9.7	148	0.32	304102
8 G 0,75	NRPE	2.20	10.4	172	0.37	◑
10 G 0,75	NRPE	2.20	11.3	197	0.41	218891
12 x 0,75	NR	2.20	11.3	208	0.40	214971
14 G 0,75	NRPE	2.20	12.0	240	0.46	◑
16 x 0,75	NR	2.20	12.7	267	0.52	218512
19 x 0,75	NR	2.20	14.3	331	0.69	304932
21 x 0,75	NR	2.20	15.1	366	0.74	◑
1 x 1	L	2.40	4.0	33	0.07	◑
2 x 1	NR	2.40	6.8	71	0.15	212661
3 x 1	NR	2.40	7.2	81	0.16	218841
3 G 1	NRPE	2.40	7.2	81	0.16	300812
4 x 1	NR	2.40	7.9	103	0.20	221126
4 G 1	NRPE	2.40	7.9	103	0.20	218185
5 x 1	NR	2.40	8.7	124	0.25	218790
5 G 1	NRPE	2.40	8.7	124	0.25	218852
6 x 1	NR	2.40	9.3	145	0.28	225248
7 x 1	NR	2.40	10.3	175	0.36	218786
7 G 1	NRPE	2.40	10.3	175	0.36	218868
8 x 1	NR	2.40	11.2	207	0.43	◑
10 G 1	NRPE	2.40	12.3	240	0.48	◑
12 x 1	NR	2.40	12.3	253	0.47	224022
1 x 1,5	L	3.00	4.6	43	0.09	◑
2 x 1,5	NR	3.00	8.0	94	0.21	211373
3 x 1,5	NR	3.00	8.5	94	0.21	211374
3 G 1,5	LNPE	3.00	8.5	94	0.21	221809
4 x 1,5	NR	3.00	9.2	136	0.27	211375
4 G 1,5	2LNPE	3.00	9.2	136	0.27	213934
4 G 1,5	NRPE	3.00	9.2	136	0.27	219673
5 x 1	NR	3.00	10.3	171	0.34	211376
5 G 1	NRPE	3.00	10.3	171	0.34	221047

Construction n x mm²	Core-function	Core-Ø mm	Outer-Ø mm	Weight kg/km	Fire load kWh/m	Article no.
6 x 1,5	NR	3.00	11.3	209	0.42	◑
7 x 1,5	NR	3.00	12.4	245	0.51	211378
7 G 1,5	NRPE	3.00	12.4	245	0.51	214030
8 x 1,5	NR	3.00	13.5	288	0.62	304226
10 G 1,5	NRPE	3.00	14.8	294	0.60	310278
12 x 1,5	NR	3.00	14.8	352	0.64	222149
14 x 1,5	NR	3.00	15.8	415	0.77	216957
16 x 1,5	NR	3.00	16.8	477	0.85	◑
19 x 1,5	NR	3.00	19.0	592	1.17	226401
21 x 1,5	NR	3.00	20.0	655	1.30	215657
25 G 1,5	NRPE	3.00	21.5	748	1.42	214031
1 x 2,5	L	3.70	5.6	61	0.11	◑
2 x 2,5	NR	3.70	9.4	132	0.28	211379
3 x 2,5	NR	3.70	10.2	160	0.29	211380
3 G 2,5	LNPE	3.70	10.2	160	0.29	217068
3 G 2,5	NRPE	3.70	10.2	160	0.29	218770
4 x 2,5	NR	3.70	11.3	205	0.38	211381
4 G 2,5	2LNPE	3.70	11.3	205	0.38	214028
4 G 2,5	NRPE	3.70	11.3	205	0.38	225386
5 x 2,5	NR	3.70	12.4	252	0.47	211382
5 G 2,5	NRPE	3.70	12.4	252	0.47	221810
6 x 2,5	NR	3.70	13.6	309	0.57	◑
7 G 2,5	NRPE	3.70	15.0	364	0.71	217278
8 x 2,5	NR	3.70	16.2	438	0.84	◑
10 x 2,5	NR	3.70	18.0	507	0.93	◑
12 x 2, 5	NR	3.70	18.0	540	0.92	304333
14 x 2,5	NR	3.70	19.3	630	1.10	◑
16 x 2,5	NR	3.70	20.4	716	1.23	◑
19 x 2,5	NR	3.70	23.3	906	1.67	226045
21 x 2,5	NR	3.70	24.2	990	1.82	304334
1 x 4	L	4.20	6.1	84	0.12	◑
2 x 4	NR	4.20	10.6	176	0.34	217057
3 x 4	NR	4.20	11.2	214	0.34	◑
3 G 4	NRPE	4.20	11.2	214	0.34	226128
4 x 4	NR	4.20	12.6	276	0.45	214029
5 G 4	NRPE	4.20	13.9	342	0.56	221811
6 x 4	NR	4.20	15.4	415	0.70	◑
7 x 4	NR	4.20	16.7	503	0.85	304726
8 x 4	NR	4.20	18.0	580	1.00	304335
10 x 4	NR	4.20	20.5	701	1.17	◑
12 x 4	NR	4.20	20.4	754	1.13	304228
14 x 4	NR	4.20	21.9	884	1.33	304727

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1 x 6	L	4.70	6.7	109	0.14	◑
2 x 6	NR	4.70	11.8	228	0.41	217828
3 x 6	NR	4.70	12.6	300	0.49	215519
4 x 6	NR	4.70	14.0	382	0.60	213135
4 G 6	2LNPE	4.70	14.0	382	0.60	214972
5 x 6	NR	4.70	15.7	493	0.67	◑
7 x 6	NR	4.70	19.0	680	1.06	◑
1 x 10	L	6.10	8.2	165	0.21	◑
2 x 10	NR	6.10	14.9	366	0.64	305813
3 x 10	NR	6.10	16.0	486	0.75	221677
4 x 10	NR	6.10	17.8	623	0.93	222976
5 x 10	NR	6.10	19.9	782	1.20	301723
6 x 10	NR	6.10	22.0	905	1.36	◑
7 x 10	NR	6.10	24.0	1054	1.59	◑
1 x 16	L	7.20	9.2	229	0.26	◑
2 x 16	NR	7.20	17.4	531	0.84	224005
3 x 16	NR	7.20	18.9	715	1.03	221678
4 x 16	NR	7.20	21.1	928	1.28	226254
5 G 16	NRPE	7.20	23.4	1151	1.60	304166
1 x 25	L	8.60	11.2	331	0.35	◑
2 x 25	NR	8.60	21.2	824	1.21	◑
3 x 25	NR	8.60	22.4	1064	1.33	◑
4 x 25	NR	8.60	25.0	1369	1.68	◑
5 G 25	NRPE	8.60	27.8	1713	2.16	◑
1 x 35	L	10.10	12.8	448	0.45	◑
2 x 35	NR	10.10	24.3	1101	1.55	◑
3 x 35	NR	10.10	26.1	1459	1.76	◑
4 x 35	NR	10.10	28.8	1852	2.22	◑
5 G 35	NRPE	10.10	32.4	2377	2.77	◑

Item marked gray = not CPR tested

Dimensional and weight deviations due to technical progress or changed manufacturing processes are reserved.