MMJ-HF C

Copper power cable HF

0,6/1 (1,2) kV

Application

Installation cable for fixed installations indoors and outdoors. Not to be laid in soil nor directly in cast concrete. Can be embedded to the groove filled with plaster. Can also be used in medical facilities where higher fire class is required. The conductor insulation must be protected against UV-radiation. Installations must be in accordance with national regulations and rules of installations. The cable is halogen-free and flame-retardant according to CPR-class Cca-s1,d1,a1.

Design

Standards	SFS 5544, NEK 591, IEC 60502-1
Reaction to fire	Cca-s1,d1,a1; EN 13501-6, EN 50575:2014+A1:2016
Product Environmental Profile (PEP/EPD)	PEP NXNS-00714-V01.01-EN
Conductor	Circular stranded copper, EN/IEC 60228 class 2
Insulation	Cross-linked polyethylene XLPE
Core Identification	2N: Blue, brown 3S: Yellow-green, blue, brown 4S: Yellow-green, blue, brown, black 5S: Yellow-green, blue, brown, black, grey
Inner covering	Extruded filling compound
Oversheath	UV-protected polyolefin compound , White

Temperature limits

Max. conductor temperature °C	90
Max. cond. temp. short circuit max. 5 s °C	250
Min. cable temperature during operation °C	-50
Min. cable temperature during handling °C	-15
Min. cable temperature during transport °C	-25

Additional information

HD 604 5 D cold impact test -25 °C

Technical information	2x6 N	3x6 S	4x6 S	5x6 S	3x10 S	4x10 S	5x10 S	3x16 S	4x16 S	5x16 S
Product code	**1146979**	**1146980**	**1146981**	**1146982**	**1146985**	**1146986**	**1146987**	**1146990**	**1146991**	**1146992**
Nominal cable diameter mm	14	15	16	17	17	18	20	19	21	23
Nominal cable weight kg/km	325	376	454	561	534	649	793	764	936	1138
Nominal weight of copper kg/km	106	160	213	266	260	346	436	414	549	692
Nominal diameter of conductor mm	3,1	3,1	3,1	3,1	4,0	4,0	4,0	5,0	5,0	5,0
Nominal Insulation thicness mm	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7
Nominal thickness of oversheath mm	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,6
Fire load										
Fire load MJ/m	2,797	3,144	3,694	4,617	4,871	4,591	5,625	4,886	5,729	7,002
Fire load kWh/m	0,777	0,873	1,026	1,283	1,353	1,275	1,562	1,357	1,591	1,945
Maximum forces during installation when pulling by										
Max. pulling force by pulling-eye kN	0,6	0,9	1,2	1,5	1,5	2,0	2,5	2,4	3,2	4,0
Max. pulling force by pulling-stocking kN	0,2	0,3	0,4	0,5	0,5	0,6	0,8	0,7	1,0	1,2
Minimum bending radii										
Minimum bending radius, handling mm	138	145	157	172	166	180	196	189	205	226
Minimum bending radius, final bending mm	41	44	47	52	50	54	59	57	62	68
Minimum bending radii										
During handling and installation, cable cm	14	15	16	17	17	18	20	19	21	23
In final installation, cable cm	4	4	5	5	5	5	6	6	6	7
DC resistance										
Max. DC resistance of conductor at 20 °C Ω/km	3,08	3,08	3,08	3,08	1,83	1,83	1,83	1,15	1,15	1,15
Current ratings										
Cables in air (25 °C)										
two loaded conductor, conductor 70 °C A	53	53	53	53	73	73	73	98	98	98
three loaded conductor, conductor 70 °C A			45	45		62	62		83	83
Cables in air (30 °C)										
two loaded conductor, conductor 70 °C A	51	51	51	51	70	70	70	94	94	94
three loaded conductor, conductor 70 °C A			43	43		60	60		80	80
Maximum thermal short circuit current during 1 s										
Phase (initial 90 °C, final 250 °C) kA	0,8	0,8	0,8	0,8	1,4	1,4	1,4	2,3	2,3	2,3
Environmental information										
(A1-A3) GWP emission kgCO2e/km	1070	1280	1594	2028	1919	2386	2939	2857	3552	4374
GWP emissions calculation standard	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019

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STANDARD PACKAGES	2x6 N	3x6 S	4x6 S	5x6 S	3x10 S	4x10 S	5x10 S	3x16 S	4x16 S	5x16 S
Product code	1146979	1146980	1146981	1146982	1146985	1146986	1146987	1146990	1146991	1146992
GTIN code	6438176304587	6438176304594	6438176304600	6438176304617	6438176304655	6438176304662	6438176304679	6438176304709	6438176304716	6438176304723
Package	500 K7	500 K8	500 K9	250 K9	500 K9	500 K9	250 K10	500 K10	500 K10	250 K10
Product code				1146982			1146987			1146992
GTIN code				6438176304631			6438176304693			6438176304747
Package				500 K9			500 K10			500 K11

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Technical information	3x25 S	4x25 S	5x25 S
Product code	**1146995**	**1146996**	**1146997**
Nominal cable diameter mm	23	25	28
Nominal cable weight kg/km	1143	1431	1747
Nominal weight of copper kg/km	668	891	1114
Nominal diameter of conductor mm	6,4	6,4	6,4
Nominal Insulation thicness mm	0,9	0,9	0,9
Nominal thickness of oversheath mm	1,6	1,7	1,7
Fire load			
Fire load MJ/m	6,989	8,490	10,539
Fire load kWh/m	1,941	2,358	2,927
Maximum forces during installation when pulling by			
Max. pulling force by pulling-eye kN	3,8	5,0	6,3
Max. pulling force by pulling-stocking kN	1,1	1,5	1,9
Minimum bending radii			
Minimum bending radius, handling mm	228	251	275
Minimum bending radius, final bending mm	68	75	83
Minimum bending radii			
During handling and installation, cable cm	23	25	28
In final installation, cable cm	7	8	8
DC resistance			
Max. DC resistance of conductor at 20 °C Ω/km	0,727	0,727	0,727
Current ratings			
Cables in air (25 °C)			
two loaded conductor, conductor 70 °C A	124	124	124
three loaded conductor, conductor 70 °C A		105	105
Cables in air (30 °C)			
two loaded conductor, conductor 70 °C A	119	119	119
three loaded conductor, conductor 70 °C A		101	101
Maximum thermal short circuit current during 1 s			
Phase (initial 90 °C, final 250 °C) kA	3,6	3,6	3,6
Environmental information			
(A1-A3) GWP emission kgCO2e/km	4393	5564	6848
GWP emissions calculation standard	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019	EN15804:2012 + A2:2019

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STANDARD PACKAGES	3x25 S	4x25 S	5x25 S
Product code	1146995	1146996	1146997
GTIN code	6438176304754	6438176304761	6438176304792
Package	500 K11	500 K12	500 K12
Product code			1146997
GTIN code			6438176304778
Package			250 K12