

NHXMH UHP 300/500V

[D]ULTRA HIGH PERFORMANCE CPR B2ca-s1a,d1,a1

Model Product: B77-B78 - 20250311



Rigid class 1 and class 2 red copper conductor.
 XLPE Crosslinked polyethylene insulation, 2X11
 Not fibrous and not hygroscopic filler
 LSZH thermoplastic sheath, HM2.

STANDARDS

DIN VDE 0250-214 DIN VDE 0207 DIN VDE 0472
 EN 50575:2014 + EN 50575/A1:2016

Accordingly to the standards BT 2014/35/UE- 2011/65/EU (RoHS 3)

COMMON FEATURES

Halogen-free sheathed cable with enhanced characteristics in case of fire, used for applications where harm to human life and damage to property must be prevented in the event of fire, e.g. industrial installations, communal establishment, hotels, airports, underground stations, railway stations, hospitals, departmental stores, banks, schools, theaters, multi storey buildings, process control centres. Suitable for installation in dry, damp or wet environments, for installation above and below plaster as well as masonry walls and in concrete, nevertheless not suitable for direct use in compacted or tamped concrete. Also suitable for outdoor applications. Supply of electricity and communications in buildings and other civil engineering works with the objective of limiting the generation and spread of fire and smoke.- Insulation tested up to +90°C

EMPLOYMENT

Minimum bending radius per D cable diameter (in mm):
 Normal use = 4D <8 - 5D <12 - 6D >12
 Accurate bending close to the terminal = 2D <8 - 3D <12 - 4D >12
 Maximum pulling stress: 50 N/mm²

PACKING

100mt. rings in thermoplastic film or drums to agree.

XLPE INSULATED CABLES OF RATED VOLTAGES UP TO 300/500V WITH CROSSLINKED POLYMER AND L.S.O.H.

Nominal voltage U0: 300 V

Nominal voltage U: 500 V

Maximum operating temperature: +70°C(+90°C)

Maximum short circuit temperature: +160°C(+250°C)

Minimum installation and laying temperature: +5°C

Min. operating temperature (without mechanical shocks): -40°C

CORE COLOURS

Two cores: blue-brown

Three cores: Y/G-blue-brown

Four cores: Y/G-brown-black-grey

Five cores: Y/G-blue-brown-black-grey

SHEATH COLOUR

grey

INK MARKING

GENERAL CAVI B2ca-s1a,d1,a1 <VDE> NHXMH UHP 300/500V n° x sect year



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Cores number	Cross section	Insulation medium thickness	Sheath medium thickness	MAXIMUM external diameter	Approx cable weight	Electric resistance at 20°C	Heat index	Max short circuit current
				mm				
(N°)	(mm ²)	(mm)	(mm)	(mm)	(kg/km)	(Ohm/km)	(kWh/m)	(kA)
Two cores								
2x	1.5RE	0.5	1.4	9.02	116	12.1	0.36	0.17
2x	2.5RE	0.5	1.4	9.78	149	7.41	0.42	0.29
2x	4RE	0.6	1.4	11.16	200	4.61	0.56	0.46
2x	6RE	0.6	1.4	12.17	257	3.08	1.5	0.69
2x	10RE	0.7	1.6	15.30	385	1.83	1.5	1.15
2x	16RM	0.7	1.6	17.90	524	1.15	1.8	1.84
2X	25RM	0.9	1.6	21.05	749	0.727	2.6	2.88
2X	35RM	0.9	1.8	23.68	997	0.524	3.1	4.02
Three cores								
3x	1.5RE	0.5	1.4	9.60	138	12.1	0.42	0.17
3x	2.5RE	0.5	1.4	10.42	176	7.41	0.47	0.26
3x	4RE	0.6	1.4	11.70	235	4.61	0.61	0.46
3x	6RE	0.6	1.6	13.20	320	3.08	0.78	0.69
3x	10RE	0.7	1.6	16.12	493	1.83	1.1	1.15
3x	16RM	0.7	1.6	18.92	697	1.15	1.8	1.84
3x	25RM	0.9	1.8	22.84	1046	0.727	2.6	2.88
3x	35RM	0.9	1.8	25.25	1416	0.524	3.1	4.02
Four cores								
4x	1.5RE	0.5	1.4	10.22	142	12.1	0.47	0.17
4x	2.5RE	0.5	1.4	11.14	188	7.41	0.56	0.29
4x	4RE	0.6	1.6	12.99	279	4.61	0.78	0.46
4x	6RE	0.6	1.6	14.22	371	1.83	1.3	1.15
4x	10RE	0.7	1.6	17.44	569	1.83	1.3	1.15
4x	16RM	0.7	1.6	20.58	849	1.15	1.8	1.84
4x	25RM	0.9	1.8	24.93	1298	0.73	2.6	2.88
4x	35RM	0.9	1.8	27.63	1731	0.52	3.1	4.02
Five cores								
5x	1.5RE	0.5	1.4	10.88	183	12.1	0.56	0.17
5x	2.5RE	0.5	1.4	11.91	249	7.41	0.64	0.29
5x	4RE	0.6	1.6	13.95	370	4.61	0.98	0.46
5x	6RE	0.6	1.6	16.33	488	3.08	1.1	0.69
5x	10RE	0.7	1.6	18.87	739	1.83	1.5	1.15



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				mm				
(N°)	(mm²)	(mm)	(mm)	(mm)	(kg/km)	(Ohm/km)	(kWh/m)	(kA)
5x	16RM	0.7	1.8	22.86	-	1.15	2.2	1.84
5x	25RM	0.9	1.8	27.19	-	0.73	2.6	2.88
5x	35RM	0.9	1.8	30.19	2210	0.52	3.1	4.02
Multicores								
7x	1.5RE	0.5	1.4	11.67	250	12.1	0.64	0.17
7x	2.5RE	0.5	1.6	13.60	350	7.41	0.81	0.29

RE=rigid single wire conductor class 1

RM=rigid stranded multiwires conductor class 2