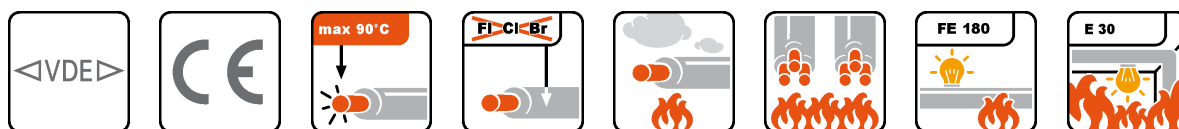


# FRNC power cable NHXH FE180/E30 acc. to VDE 0266



<b>conductor material:</b>	bare copper
<b>conductor construction:</b>	class 1, from 25 sqmm class 2
<b>insulation:</b>	FRNC compound HI1
<b>sheathing material:</b>	FRNC-compound HM1
<b>flame retardant:</b>	VDE 0482-266-2-4/IEC 60332-3-24
<b>smoke density:</b>	DIN EN 61034/IEC 61034
<b>halogen free:</b>	DIN EN 50267/IEC 60754
<b>fire resistance:</b>	FE 180
<b>circuit integrity:</b>	E 30
<b>maximum temperature at conductor:</b>	90 °C
<b>max. operating temperature, fixed:</b>	-5 - +70 °C
<b>bending radius, fixed installation:</b>	12 x DA
<b>core identification:</b>	colours acc. VDE 0293 (HD308)
<b>nominal voltage U<sub>0</sub>:</b>	0,6 kV
<b>nominal voltage U:</b>	1 kV
<b>maximum permitted operating voltage in 3-phase systems:</b>	1,2 kV
<b>test voltage:</b>	4 kV

**Application:** For installation in dry and wet rooms, also for direct bedding in concrete, but not for direct burial in ground and not for use in water. The cable has improved flame retardant and may be used in public buildings with high safety requirements. Cables are halogen free, low smoke density and are fire resistant according to VDE 0472 part 814 (180 min., = IEC 60331). Furthermore the cable passed the test of 30 min. circuit integrity according to DIN 4102 part 12 (E 30) for all so called standard-installation systems (ladder, tray and ceiling) and is suitable for installation in fire alarm systems, safety lightning and other emergency electrical supply systems according to VDE 0108. A special test certificate about the circuit integrity is issued by the "Amtlichen Materialprüfanstalt für das Bauwesen". For calculation of electrical systems with circuit integrity has to be considered that electrical resistance of copper conductors at 800 °C is approximately four times higher than at 20 °C and the current carrying capacity is reduced respectively.



The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

table: technical data NHXH-J/-O E30

Art.-Nr.	part-name		RI [Ω/km]	I <sub>bl</sub> [A]	R <sub>bf</sub> [mm]	DA [mm]	CU	G [kg/km]
011238	NHXH-O E30 01X4 RE OR	RE	4,61	42	120	6,9	38	100
011240	NHXH-O E30 01X6 RE OR	RE	3,08	53	135	7,9	58	120
011229	NHXH-O E30 01X10 RE OR	RE	1,83	73	150	8,1	96	160
011232	NHXH-O E30 01X16 OR		1,15	97	180	8,9	154	200
011235	NHXH-O E30 01X25 RM OR	RM	0,727	135	195	10,9	240	310
011237	NHXH-O E30 01X35 RM OR	RM	0,524	165	225	11,9	336	410
011239	NHXH-O E30 01X50 RM OR	RM	0,387	201	240	12,9	480	540
011241	NHXH-O E30 01X70 RM OR	RM	0,268	255	270	15,9	672	740
011242	NHXH-O E30 01X95 RM OR	RM	0,193	314	300	17,9	912	1020
011230	NHXH-O E30 01X120 RM OR	RM	0,153	364	330	18,9	1152	1380

table: technical data NHXH-J/-O E30

Art.-Nr.	part-name		RI [Ω/km]	Ibl [A]	Rbf [mm]	DA [mm]	CU	G [kg/km]
011231	NHXXH-O E30 01X150 RM OR	RM	0,124	416	360	20,9	1440	1560
011233	NHXXH-O E30 01X185 RM OR	RM	0,0991	480	405	23,9	1776	1930
011234	NHXXH-O E30 01X240 RM OR	RM	0,0754	565	450	26,9	2304	2540
011236	NHXXH-O E30 01X300 RM OR	RM	0,0601		495	32,9	2880	3180
011243	NHXXH-O E30 02X1,5 RE OR	RE	12,1	24	145.2	10,2	29	190
011246	NHXXH-O E30 02X2,5 RE OR	RE	7,41	32	146,4	10,9	48	220
011248	NHXXH-O E30 02X4 RE OR	RE	4,61	42	158.4	11,9	77	270
011249	NHXXH-O E30 02X6 RE OR	RE	3,08	53	170.4	12,8	115	320
011244	NHXXH-O E30 02X10 RE OR	RE	1,83	73	196.8	14,4	192	430
011245	NHXXH-O E30 02X16 OR		1,15	97	234	17,3	307	620
011247	NHXXH-O E30 02X25 RM OR	RM	0,727	135	267.6	21,1	480	900
011044	NHXXH-J E30 03X1,5 RE OR	RE	12,1	24	156	10,9	43	210
011171	NHXXH-J E30 03X2,5 RE OR	RE	7,41	32	168	11,9	72	260
011172	NHXXH-J E30 03X4 RE OR	RE	4,61	42	180	12,9	115	320
011194	NHXXH-J E30 03X6 RE OR	RE	3,08	53	192	13,9	173	400
011182	NHXXH-J E30 03X10 RE OR	RE	1,83	73	216	15,9	288	550
011185	NHXXH-J E30 03X16 OR		1,15	97	264	17,9	461	790
011251	NHXXH-J E30 03X25 RM OR	RM	0,727	135	300	23,9	720	1150
011253	NHXXH-J E30 03X35 RM OR	RM	0,524	165	324	25,9	1008	1490
011255	NHXXH-J E30 03X50 RM OR	RM	0,387	201	348	28,9	1440	1980
011257	NHXXH-J E30 03X70 RM OR	RM	0,268	255	396	31,9	2016	2830
011252	NHXXH-J E30 03X25/16 RM OR	RM	0,727	135	324	23,4	874	1500
011254	NHXXH-J E30 03X35/16 RM OR	RM	0,524	165	348	26,9	1162	1800
011256	NHXXH-J E30 03X50/25 RM OR	RM	0,387	201	432	29,9	1680	2600
011258	NHXXH-J E30 03X70/35 RM OR	RM	0,268	255	480	34,9	2352	3400
011186	NHXXH-J E30 03X95/50 RM OR	RM	0,193	314	552	38,9	3216	4600
011269	NHXXH-J E30 03X120/70 RM OR	RM	0,153	364	600	42,9	4128	5700
011270	NHXXH-J E30 03X150/70 RM OR	RM	0,124	416	648	46,9	4992	6800
011271	NHXXH-J E30 03X185/95 RM OR	RM	0,0991	480	720	52,9	6240	8500
011272	NHXXH-J E30 03X240/120 RM OR	RM	0,0754	565	756	58,8	8064	11000
011188	NHXXH-J E30 04X1,5 RE OR	RE	12,1	24	180	11,9	58	240
011045	NHXXH-J E30 04X2,5 RE OR	RE	7,41	32	192	12,9	96	300
011217	NHXXH-J E30 04X4 RE OR	RE	4,61	42	204	13,9	154	390
011218	NHXXH-J E30 04X6 RE OR	RE	3,08	53	228	14,9	230	490
011219	NHXXH-J E30 04X10 RE OR	RE	1,83	73	252	16,9	384	670
011220	NHXXH-J E30 04X16 OR		1,15	97	300	19,9	614	950
011221	NHXXH-J E30 04X25 RM OR	RM	0,727	135	312	24,9	960	1430
011189	NHXXH-J E30 04X35 RM OR	RM	0,524	165	348	27,9	1344	1890
011222	NHXXH-J E30 04X50 RM OR	RM	0,387	201	408	31,9	1920	2510
011196	NHXXH-J E30 04X70 RM OR	RM	0,268	255	456	36,9	2688	3650
011261	NHXXH-J E30 04X95 RM OR	RM	0,193	314	528	40,9	3648	4750
011259	NHXXH-J E30 04X120 RM OR	RM	0,153	364	576	44,9	4608	5910
011260	NHXXH-J E30 04X150 RM OR	RM	0,124	416	624	49,9	5760	7240
011190	NHXXH-J E30 05X1,5 RE OR	RE	12,1	24	216	12,9	72	280
011046	NHXXH-J E30 05X2,5 RE OR	RE	7,41	32	228	13,9	120	354
011192	NHXXH-J E30 05X4 RE OR	RE	4,61	42	192	14,9	192	450
011193	NHXXH-J E30 05X6 RE OR	RE	3,08	53	264	16,9	288	570
011173	NHXXH-J E30 05X10 RE OR	RE	1,83	73	300	18,9	480	820
011195	NHXXH-J E30 05X16 OR		1,15	97	324	22,9	768	1140
011262	NHXXH-J E30 05X25 RM OR	RM	0,727	135	372	26,6	1200	1710
012469	NHXXH-J E30 05X35 OR	RM	0,524	165		30,5	1680	2384
011047	NHXXH-J E30 07X1,5 RE OR	RE	12,1	24	192	13,9	101	330
011223	NHXXH-J E30 07X2,5 RE OR	RE	7,41	32	216	14,9	168	430
013127	NHXXH-J E30 10X1,5 RE OR					18	144	580
012838	NHXXH-J E30 10X2,5 RE OR	RE	7,41	32		18	240	522
011214	NHXXH-J E30 12X1,5 RE OR	RE	12,1	24	246	18,9	173	500
011180	NHXXH-J E30 12X2,5 RE OR	RE	7,41	32	276	21,9	288	650
011263	NHXXH-J E30 19X1,5 RE OR	RE	12,1	24	288	21,9	274	720

table: technical data NHXH-J/-O E30

Art.-Nr.	part-name		RI [ $\Omega$ /km]	Ibl [A]	Rbf [mm]	DA [mm]	CU	G [kg/km]
011264	NHXH-J E30 19X2,5 RE OR	RE	7,41	32	312	23,9	456	950
011265	NHXH-J E30 24X1,5 RE OR	RE	12,1	24	336	24,9	346	890
011266	NHXH-J E30 24X2,5 RE OR	RE	7,41	32	366	26,9	576	1210
011267	NHXH-J E30 30X1,5 RE OR	RE	12,1	24	372	25,9	432	1090
011268	NHXH-J E30 30X2,5 RE OR	RE	7,41	32	390	28,9	720	1470

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