

# (N)HXH FE180/E30

Halogen-free energy cable with insulation integrity FE180 and circuit integrity E30

## DESIGN



- 1 | Copper conductor, round solid (RE), resp. round stranded (RM)
- 2 | Core insulation (silicone rubber)
- 3 | Inner covering (halogen-free fixation tape)
- 4 | Sheath (halogen-free polymer compound, orange)

## APPLICATION

These cables are intended for the stationary distribution of electrical energy in dry or damp premises and for fixed installations in air or concrete. Suitable for hotels, hospitals, underground railways, airports etc. to protect people and technical building equipment in the event of fire if circuit integrity is required (circuit integrity is only maintained if these cables are installed with specified supporting elements). Not allowed for installations underground or in water. These cables are not UV-protected.

## TECHNICAL DATA



**Standard:**  
adapted to DIN VDE 0266



**Rated voltage:**  
0.6/1 kV



**Test voltage:**  
4 kV/50 Hz



**Temperature range:**  
 laying temperature: min. -5 °C  
 operating temperature: -50 °C up to +90 °C  
 conductor temperature: max. +90 °C  
 short-circuit temperature: max. +250 °C/5 s



**Bending radius (min.):**  
 15 x Ø of cable (single core)  
 12 x Ø of cable (multi-core)



**Core identification:**  
HD 308 S2



**Fire properties:**  
 flame retardant:  
 EN 60332-1-2  
 halogen-free, non-corrosive combustion gases :  
 EN 50267-2-2  
 reduced flame propagation:  
 EN 60332-3-24  
 low smoke emission:  
 EN 61034-2  
 insulation integrity FE 180:  
 IEC 60331-21, DIN VDE 0472-814  
 circuit integrity E30:  
 DIN 4102-12



**Certificate:**  
EZÚ Czech Republic, VDE Germany

Number of cores x nominal cross section (mm <sup>2</sup> )	Max. conductor resistance (Ω/km)	Current rating in the air <sup>1)</sup> (A)	Outer diameter (mm) ca.	Total weight (kg/km) ca.	Standard lengths/packing (m)
(N)HXH FE180/E30					
2 x 1.5 RE	12.100	29	8.1	110	1,000 D
3 x 1.5 RE	12.100	24	8.6	125	1,000 D
4 x 1.5 RE	12.100	24	9.3	140	1,000 D
5 x 1.5 RE	12.100	24	10.1	175	1,000 D
7 x 1.5 RE	12.100	14	11.0	220	1,000 D
10 x 1.5 RE	12.100	13	13.9	295	500 D
12 x 1.5 RE	12.100	12	14.5	345	500 D
14 x 1.5 RE	12.100	11	15.2	385	500 D
19 x 1.5 RE	12.100	11	16.9	500	500 D
24 x 1.5 RE	12.100	10	20.0	635	500 D

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(N)HXH FE180/E30					
30 x 1.5 RE	12.100	9	21.2	750	500 D
40 x 1.5 RE	12.100	8	23.5	980	500 D
2 x 2.5 RE	7.410	38	8.9	140	1,000 D
3 x 2.5 RE	7.410	32	9.4	165	1,000 D
4 x 2.5 RE	7.410	32	10.3	200	1,000 D
5 x 2.5 RE	7.410	32	11.2	235	1,000 D
7 x 2.5 RE	7.410	20	12.4	310	1,000 D
10 x 2.5 RE	7.410	18	15.6	415	500 D
12 x 2.5 RE	7.410	17	15.9	475	500 D
14 x 2.5 RE	7.410	16	17.0	545	500 D
19 x 2.5 RE	7.410	16	19.1	725	500 D
24 x 2.5 RE	7.410	13	22.6	910	500 D
30 x 2.5 RE	7.410	12	23.9	1,090	500 D
40 x 2.5 RE	7.410	11	26.3	1,410	500 D
2 x 4 RE	4.610	51	10.5	195	1,000 D
3 x 4 RE	4.610	42	11.1	240	1,000 D
4 x 4 RE	4.610	42	12.3	295	1,000 D
5 x 4 RE	4.610	42	13.5	355	1,000 D
7 x 4 RE	4.610	28	14.7	450	500 D
10 x 4 RE	4.610	25	18.9	630	500 D
12 x 4 RE	4.610	23	19.5	730	500 D
14 x 4 RE	4.610	22	20.6	830	500 D
19 x 4 RE	4.610	22	23.2	1,100	500 D
2 x 6 RE	3.080	64	11.5	250	500 D
3 x 6 RE	3.080	53	12.4	315	500 D
4 x 6 RE	3.080	53	13.5	390	500 D
5 x 6 RE	3.080	53	14.8	470	500 D
1 x 10 RE	1.830	86	7.8	150	500 D
2 x 10 RE	1.830	86	13.2	360	500 D
3 x 10 RE	1.830	74	14.0	455	500 D
4 x 10 RE	1.830	74	15.4	570	500 D
5 x 10 RE	1.830	74	16.9	690	500 D
1 x 16 RM	1.150	131	8.9	210	500 D, 1,000 D
2 x 16 RM	1.150	110	15.4	520	500 D
3 x 16 RM	1.150	98	16.4	670	500 D
4 x 16 RM	1.150	98	18.3	845	500 D
5 x 16 RM	1.150	98	20.1	1,040	500 D
1 x 25 RM	0.727	177	11.2	340	500 D, 1,000 D
3 x 25 RM	0.727	133	22.2	1,090	500 D
3 x 25 + 16 RM/RM	0.727/1.150	133	24.5	1,280	500 D
4 x 25 RM	0.727	133	24.5	1,400	500 D
5 x 25 RM	0.727	133	27.2	1,740	500 D

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<b>(N)HXH FE180/E30</b>					
1 x 35 RM	0.524	217	12.0	415	500 D, 1,000 D
3 x 35 RM	0.524	162	23.9	1,310	500 D
3 x 35 + 16 RM/RM	0.524/1.150	162	26.6	1,520	500 D
4 x 35 RM	0.524	162	26.6	1,720	500 D
5 x 35 RM	0.524	162	29.5	2,000	500 D
1 x 50 RM	0.387	265	13.9	570	500 D, 1,000 D
3 x 50 RM	0.387	197	27.8	1,780	500 D
3 x 50 + 25 RM/RM	0.387/0.727	197	31.0	2,120	500 D
4 x 50 RM	0.387	197	31.0	2,340	500 D
5 x 50 RM	0.387	197	34.4	2,910	500 D
1 x 70 RM	0.268	336	15.6	765	500 D, 1,000 D
3 x 70 RM	0.268	250	31.6	2,430	500 D
3 x 70 + 35 RM/RM	0.268/0.524	250	35.1	2,840	500 D
4 x 70 RM	0.268	250	35.1	3,200	500 D
5 x 70 RM	0.268	250	38.8	3,950	500 D
1 x 95 RM	0.193	415	17.7	1,020	500 D, 1,000 D
3 x 95 RM	0.193	308	36.4	3,230	500 D
3 x 95 + 50 RM/RM	0.193/0.387	308	40.5	3,830	500 D
4 x 95 RM	0.193	308	40.5	4,250	500 D
5 x 95 RM	0.193	308	45.0	5,280	500 D
1 x 120 RM	0.153	485	19.4	1,270	500 D, 1,000 D
3 x 120 RM	0.153	359	39.7	4,000	500 D
3 x 120 + 70 RM/RM	0.153/0.268	359	44.0	4,780	500 D
4 x 120 RM	0.153	359	44.0	5,230	500 D
5 x 120 RM	0.153	359	48.9	6,520	500 D
1 x 150 RM	0.124	557	21.2	1,540	500 D, 1,000 D
3 x 150 RM	0.124	412	43.6	4,860	500 D
3 x 150 + 70 RM/RM	0.124/0.268	412	48.6	5,670	500 D
4 x 150 RM	0.124	412	48.6	6,390	500 D
5 x 150 RM	0.124	412	54.0	7,980	500 D

1) basic rated current acc. to DIN VDE 0266  
Subject to technical changes.