

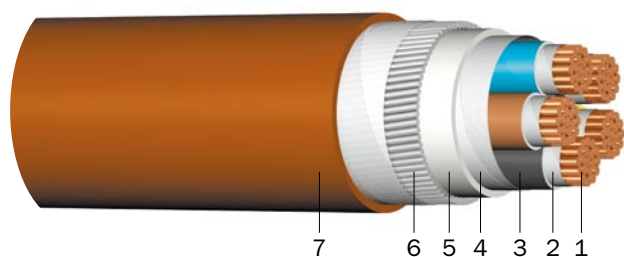
# 1-CHKHDH-V180, 1-CXKHDH-V180

**Power cables, with insulation integrity FE180, steel wire armoured**

**Standard: TP PRAKAB 02/99 – 5. edition**

## Usage:

These cables with enhanced mechanical protection are intended for stationary distribution of electrical energy in dry and damp premises. Suitable for hotels, hospitals, underground railways, airports etc. to protect people and technical building equipment in the event of fire where there is a requirement for maintaining the function of the cable in the event of fire.



## Construction:

- 1 Copper conductor, round solid (RE), round stranded (RM) resp. sector-shaped stranded (SM)
- 2 Flame protection (mica tape)
- 3 Core insulation (halogen-free polymer /1-CHKHDH-V180, XLPE/1-CXKHDH-V180)
- 4 Inner covering (halogen-free tape)
- 5 Sheath (halogen-free polymer compound)
- 6 Armouring (galvanized steel wires)
- 7 Sheath (halogen-free polymer compound, brown)



**Rated voltage:** 0.6/1 kV



**Test voltage:** 4000 Veff



**Temperature range:**

laying temperature: min. -5 °C  
 operating temperature: -30 °C to +90 °C  
 conductor temperature: max. +90 °C  
 short-circuit temperature: max. +250 °C/5 s



**Bending radius (min.):** 6 x Ø for Ø < 20 mm  
 12 x Ø for Ø 20 to 40 mm  
 15 x Ø for Ø > 40 mm



**Core identification:** coloured (HD 308 S2)



**Fire properties:**

flame retardant (EN 50265-2-1, IEC 60332-1)  
 halogen-free, no corrosive combustion gases (EN 50267-2-2, IEC 60754-2)  
 reduced fire propagation (IEC 60332-3 Cat. A, EN 50266-2-2, DIN VDE 0472-804)  
 minimum smoke emission (EN 50268-2, IEC 61034)  
 insulation integrity FE180 (IEC 60331, DIN VDE 0472-814)



**Test certificate:**

EZÚ Czech Republic,  
 GOST Russia  
 (only 1-CHKHDH-V180)

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.	Metal weight (kg/km)	Total weight (kg/km) ca.	Standard lengths/packing (m)
<b>1-CHKHDH-V180, 1-CXKHDH-V180</b>						
2 x 1.5 RE	12.5310	29	16.8	29	588	1000 T
3 x 1.5 RE	12.5310	24	17.2	44	623	1000 T
4 x 1.5 RE	12.5310	24	18.0	59	670	1000 T
5 x 1.5 RE	12.5310	24	18.8	74	731	1000 T
7 x 1.5 RE	12.5310	14	19.7	103	811	1000 T
12 x 1.5 RE	12.5310	12	23.2	176	1,077	500 T
19 x 1.5 RE	12.5310	11	26.4	279	1,391	500 T
24 x 1.5 RE	12.5310	10	29.4	353	1,632	500 T
37 x 1.5 RE	12.5310	9	32.6	544	2,059	500 T
48 x 1.5 RE	12.5310	8	36.0	706	2,454	500 T
2 x 2.5 RE	7.5200	38	17.6	49	654	1000 T
3 x 2.5 RE	7.5200	32	18.1	74	698	1000 T
4 x 2.5 RE	7.5200	32	18.9	98	769	1000 T

# 1-CHKHDH-V180, 1-CXKHDH-V180

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.	Metal weight (kg/km)	Total weight (kg/km) ca.	Standard lengths/packing (m)
<b>1-CHKHDH-V180, 1-CXKHDH-V180</b>						
5 x 2.5 RE	7.5200	32	19.9	123	844	1000 T
7 x 2.5 RE	7.5200	20	20.9	172	945	1000 T
12 x 2.5 RE	7.5200	17	25.6	294	1,332	500 T
19 x 2.5 RE	7.5200	16	28.4	466	1,675	500 T
24 x 2.5 RE	7.5200	13	32.0	588	2,024	500 T
37 x 2.5 RE	7.5200	12	35.4	907	2,575	500 T
48 x 2.5 RE	7.5200	11	42.6	1,176	4,052	500 T
2 x 4 RE	4.7000	51	18.6	78	736	1000 T
3 x 4 RE	4.7000	42	19.2	118	800	1000 T
4 x 4 RE	4.7000	42	20.2	157	887	1000 T
5 x 4 RE	4.7000	42	21.3	196	995	1000 T
7 x 4 RE	4.7000	28	22.5	274	1,143	500 T
12 x 4 RE	4.7000	23	27.7	470	1,639	500 T
2 x 6 RE	3.1330	64	19.6	118	828	1000 T
3 x 6 RE	3.1330	53	22.4	176	967	1000 T
4 x 6 RE	3.1330	53	21.4	235	1,031	1000 T
5 x 6 RE	3.1330	53	22.6	294	1,162	1000 T
1 x 10 RE	1.8800	99	14.5	98	573	1000 T
2 x 10 RE	1.8800	86	21.1	196	979	1000 T
3 x 10 RE	1.8800	74	21.9	294	1,105	1000 T
4 x 10 RE	1.8800	74	23.2	392	1,266	500 T
5 x 10 RE	1.8800	74	25.5	490	1,488	500 T
1 x 16 RE	1.1750	131	15.4	157	646	1000 T
2 x 16 RE	1.1750	110	22.9	314	1,224	1000 T
3 x 16 RE	1.1750	98	24.6	470	1,426	500 T
4 x 16 RE	1.1750	98	26.2	627	1,644	500 T
5 x 16 RE	1.1750	98	27.9	882	1,894	500 T
1 x 25 RM	0.7520	177	17.2	245	772	500 T
3 x 25 RE	0.7520	133	26.5	735	1,710	500 T
3 x 25 RM	0.7520	133	28.2	735	1,899	500 T
3 x 25 + 16 RE/RE	0.7520/1.1750	133	28.3	892	1,910	500 T
3 x 25 + 16 RM/RE	0.7520/1.1750	133	30.2	892	2,125	500 T
4 x 25 RE	0.7520	133	28.3	980	2,095	500 T
4 x 25 RM	0.7520	133	30.2	980	2,224	500 T
5 x 25 RM	0.7520	133	32.6	1,225	2,606	500 T
1 x 35 RM	0.5370	217	18.2	343	883	500 T
3 x 35 RM	0.5370	162	30.4	1,029	2,292	500 T
3 x 35 + 16 SM/RE	0.5370/1.1750	162	30.5	1,186	2,350	500 T
3 x 35 + 25 RM/RM	0.5370/0.7520	162	32.8	1,274	2,524	500 T
3 x 35 + 25 SM/RM	0.5370/0.7520	162	30.5	1,274	2,496	500 T
4 x 35 RM	0.5370	162	32.8	1,372	2,736	500 T
4 x 35 SM	0.5370	162	30.5	1,372	2,705	500 T

# 1-CHKHDH-V180, 1-CXKHDH-V180

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.	Metal weight (kg/km)	Total weight (kg/km) ca.	Standard lengths/ packing (m)
<b>1-CHKHDH-V180, 1-CXKHDH-V180</b>						
5 x 35 RM	0.5370	162	35.3	1,715	3,210	500 T
1 x 50 RM	0.3870	265	20.0	490	1,113	500 T
3 x 50 RM	0.3870	197	34.7	1,470	2,850	500 T
3 x 50 + 25 SM/RM	0.3870/0.7520	197	34.7	1,715	2,932	500 T
3 x 50 + 35 SM/RM	0.3870/0.5370	197	34.7	1,813	2,960	500 T
4 x 50 SM	0.3870	197	34.7	1,960	3,064	500 T
5 x 50 RM	0.3870	197	43.7	2,450	5,074	500 T
1 x 70 RM	0.2680	336	21.7	686	1,380	500 T
3 x 70 RM	0.2680	250	41.8	2,058	4,496	500 T
3 x 70 + 35 SM/RM	0.2680/0.5370	250	41.5	2,401	4,786	500 T
3 x 70 + 50 SM/RM	0.2680/0.3870	250	41.5	2,548	4,905	500 T
4 x 70 RM	0.2680	250	43.6	2,744	5,130	500 T
4 x 70 SM	0.2680	250	41.5	2,744	5,082	500 T
5 x 70 RM	0.2680	250	48.5	3,430	6,334	500 T
1 x 95 RM	0.1980	415	24.5	931	1,751	500 T
3 x 95 + 50 SM/RM	0.1980/0.3870	308	46.1	3,283	5,977	500 T
4 x 95 RM	0.1980	308	49.6	3,724	6,650	500 T
4 x 95 SM	0.1980	308	46.1	3,724	6,385	500 T
5 x 95 RM	0.1980	308	54.0	4,655	7,977	500 T
1 x 120 RM	0.1570	485	26.2	1,176	2,062	500 T
3 x 120 + 50 SM/RM	0.1570/0.3870	359	48.2	4,018	6,915	500 T
3 x 120 + 70 SM/RM	0.1570/0.2680	359	48.2	4,214	7,089	500 T
4 x 120 SM	0.1570	359	48.2	4,704	7,135	500 T
1 x 150 RM	0.1240	557	27.6	1,470	2,413	500 T
1 x 185 RM	0.1020	646	29.8	1,813	2,834	300 T
1 x 240 RM	0.0783	774	32.3	2,352	3,501	300 T
1 x 300 RM	0.0601	901	36.7	2,940	3,985	300 T
1 x 500 RM	0.0366	1252	45.1	4,900	7,605	300 T
1 x 630 RM	0.0283	1486	48.9	6,174	8,982	300 T

1) basic rated current acc. to TP PRAKAB 02/99 – 5. edition  
Subject to technical changes.