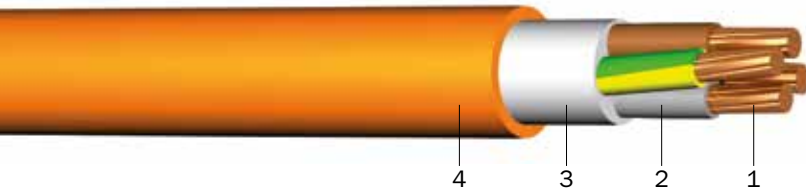


PRAFlaSafe® + X

1-CXKH-R B2_{ca} s1d1a1

Halogen-free energy cable with low heat release rate in case of fire

DESIGN



- 1 | Copper conductor, round solid (RE), round stranded (RM), or sector-shaped stranded (SM)
- 2 | Core insulation (XLPE)
- 3 | Inner covering (halogen-free polymer compound)
- 4 | Sheath (halogen-free polymer compound, orange, UV resistant)

APPLICATION

This cable is intended for the stationary distribution of electrical energy and can be used in environments according to the External influences table below as long as the ends of the cable are thoroughly secured against the ingress of water and moisture and its sheath remains undamaged during installation and operation. The terminal equipment into which the cable is connected (e.g. distribution boxes, switchboards, couplers etc.) must comply with at least the same operating environment requirements as the cable itself. The cable is intended for fixed, universal installation – outside in air (the cable is not self-supporting) or underground, but also inside buildings such as hotels, hospitals, underground railways, airports and in other places where there is an increased concentration of people, etc. to protect people and technical building equipment in the event of fire if circuit integrity is required. The cable releases little heat and smoke under fire. The cable is UV-resistant.

TECHNICAL DATA



Standard:

TP PRAKAB 02/99 and ZP PRAKAB 01/17



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 sec



Bending radius (min.):

6 x Ø of cable for Ø < 20 mm
 12 x Ø of cable for Ø 20 mm to 40 mm
 15 x Ø of cable for Ø > 40 mm



Cable operating environment:

See external influence table
 ČSN 33 2000-5-51 ed. 3

Cable Installation:

Outside or inside
 ČSN 33 2000-5-52 ed. 2, Annex NA



Core identification:

HD 308 S2, EN 50334



Fire properties:

flame retardant:
 EN 60332-1-2
 halogen-free, non-corrosive combustion gases:
 EN 60754-2
 low smoke emission:
 EN 61034-2
 reduced flame propagation:
 EN 60332-3-22
 classification of the reaction to fire:
 EN 13501-6



Certificate:

EZÚ Czech Republic

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External influence	Code	External influence	Code
AA – Ambient temperature (°C)	AA2 to AA8	AP – Seismic effects	AP1
AB – Atmospheric humidity	AB2 to AB8	AQ – Lighting	AQ1
AC – Altitude	AC1, AC2	AR – Movement of air	AR1 to AR3
AD – Presence of water	AD1 to AD7	AS – Wind	AS1, AS2
AE – Presence of foreign solid bodies or dust	AE1 to AE6	BA – Capability of persons	BA4, BA5
AF – Presence of corrosive or polluting substances	AF1 to AF3	BC – Contact of persons with earth potential	BC1 to BC3
AG – Mechanical shock	AG1, AG2	BD – Conditions of evacuation in case of emergency	BD1 to BD4
AH – Vibrations	AH1, AH2	BE – Nature of processed or stored materials	BE1, BE2
AK – Presence of flora and/or moulds growth	AK1, AK2	CA – Construction materials	CA1, CA2
AL – Presence of fauna	AL1	CB – Building design	CB1 to CB3
AN – Solar radiation	AN1, AN2		

Note: The cable can be installed into these types of environment as long as the sheath of the cable remains undamaged during installation and operation. The terminal equipment into which the cable is connected must comply with at least the same operating environment requirements as the cable itself.

Number of cores x nominal cross section (mm ²)	Max. conductor resistance (Ω/km)	Current rating in the ground (A)	Current rating in the air (A)	Outer diameter ca. (mm)	Total weight ca. (kg/km)	Standard lengths/packing (m)
PRAFlaSafe® + X						
2 x 1.5 RE	12.531	37.0	28.0	9.8	145	1,000 D
3 x 1.5 RE	12.531	31.0	24.0	10.2	165	1,000 D
4 x 1.5 RE	12.531	31.0	24.0	11.0	190	1,000 D
5 x 1.5 RE	12.531	21.0	16.0	11.9	215	1,000 D
7 x 1.5 RE	12.531	18.5	15.5	12.9	265	1,000 D
12 x 1.5 RE	12.531	14.5	12.5	16.3	395	500 D
19 x 1.5 RE	12.531	12.0	10.5	19.0	555	500 D
24 x 1.5 RE	12.531	10.5	9.5	22.8	745	500 D
37 x 1.5 RE	12.531	9.5	8.5	25.7	1,020	500 D
48 x 1.5 RE	12.531	8.5	7.5	29.3	1,280	500 D
2 x 2.5 RE	7.520	47.0	37.0	10.6	180	1,000 D
3 x 2.5 RE	7.520	40.0	32.0	11.1	205	1,000 D
4 x 2.5 RE	7.520	40.0	32.0	12.0	240	1,000 D
5 x 2.5 RE	7.520	27.0	22.0	13.1	280	1,000 D
7 x 2.5 RE	7.520	24.0	20.5	14.1	350	1,000 D
12 x 2.5 RE	7.520	19.0	16.5	18.1	535	500 D
19 x 2.5 RE	7.520	16.0	14.0	21.6	805	500 D
24 x 2.5 RE	7.520	14.0	12.5	25.1	1,010	500 D
37 x 2.5 RE	7.520	12.5	11.5	28.7	1,420	500 D
48 x 2.5 RE	7.520	11.0	10.0	33.0	1,820	500 D
2 x 4 RE	4.700	61.0	49.0	12.5	255	1,000 D
3 x 4 RE	4.700	52.0	42.0	13.2	300	1,000 D
4 x 4 RE	4.700	52.0	42.0	14.3	350	1,000 D
5 x 4 RE	4.700	35.0	28.0	15.4	415	1,000 D

PRAFlaSafe® + X
1-CXKH-R B2_{ca} s1d1a1

Number of cores x nominal cross section (mm ²)	Max. conductor resistance (Ω/km)	Current rating in the ground (A)	Current rating in the air (A)	Outer diameter ca. (mm)	Total weight ca. (kg/km)	Standard lengths/packing (m)
PRAFlaSafe® + X						
7 x 4 RE	4.700	31.0	27.0	16.6	510	1,000 D
12 x 4 RE	4.700	24.5	22.0	22.4	850	500 D
1 x 6 RE	3.133	102.0	72.0	8.7	135	1,000 D
2 x 6 RE	3.133	75.0	62.0	13.5	315	1,000 D
3 x 6 RE	3.133	64.0	53.0	14.2	370	1,000 D
4 x 6 RE	3.133	64.0	53.0	15.4	445	1,000 D
5 x 6 RE	3.133	46.0	36.0	16.7	530	1,000 D
1 x 10 RE	1.880	136.0	99.0	9.5	175	1,000 D
2 x 10 RE	1.880	99.0	85.0	15.0	420	1,000 D
3 x 10 RE	1.880	86.0	74.0	15.8	505	1,000 D
4 x 10 RE	1.880	86.0	74.0	17.3	610	1,000 D
5 x 10 RE	1.880	60.0	49.0	19.0	740	500 D
1 x 16 RE	1.175	176.0	131.0	10.3	235	1,000 D
2 x 16 RE	1.175	129.0	113.0	16.8	565	500 D
3 x 16 RE	1.175	112.0	98.0	18.0	700	500 D
4 x 16 RE	1.175	112.0	98.0	20.3	905	500 D
5 x 16 RE	1.175	77.0	65.0	22.2	1,090	500 D
1 x 25 RM	0.752	229.0	177.0	12.5	345	1,000 D
3 x 25 RE	0.752	145.0	133.0	21.8	1,070	500 D
3 x 25 RM	0.752	145.0	133.0	23.8	1,180	500 D
3 x 25 RE + 16 RE	0.752/1.175	145.0	133.0	24.0	1,250	500 D
3 x 25 RM + 16 RE	0.752/1.175	145.0	133.0	25.9	1,350	500 D
4 x 25 RM	0.752	145.0	133.0	25.9	1,440	500 D
5 x 25 RM	0.752	98.0	90.0	28.4	1,730	500 D
1 x 35 RM	0.537	275.0	217.0	13.5	435	1,000 D
2 x 35 RM	0.537	199.0	186.0	24.0	1,190	500 D
3 x 35 RM	0.537	174.0	162.0	25.4	1,470	500 D
3 x 35 RM + 16 RE	0.537/1.175	174.0	162.0	27.8	1,650	500 D
3 x 35 RM + 25 RM	0.537/0.752	174.0	162.0	27.8	1,730	500 D
4 x 35 SM	0.537	174.0	162.0	25.1	1,820	500 D
5 x 35 RM	0.537	117.0	109.0	30.7	2,200	500 D
1 x 50 RM	0.387	326.0	26.0	15.2	585	1,000 D
3 x 50 RM	0.387	206.0	197.0	29.8	2,030	500 D
3 x 50 SM + 25 RM	0.387/0.752	206.0	197.0	28.1	2,230	500 D
3 x 50 SM + 35 RM	0.387/0.537	206.0	197.0	28.1	2,330	500 D
4 x 50 SM	0.387	206.0	197.0	28.1	2,490	500 D
5 x 50 SM	0.387	139.0	133.0	30.3	3,020	500 D
1 x 70 RM	0.268	400.0	336.0	16.8	765	1,000 D
3 x 70 RM	0.268	254.0	250.0	32.3	2,720	500 D
3 x 70 SM + 35 RM	0.268/0.537	254.0	250.0	32.7	3,080	500 D
3 x 70 SM + 50 RM	0.268/0.387	254.0	250.0	32.7	3,250	500 D
4 x 70 SM	0.268	254.0	250.0	32.7	3,530	500 D

PRAFlaSafe® + X

1-CXKH-R B2_{ca} s1d1a1

Number of cores x nominal cross section (mm ²)	Max. conductor resistance (Ω/km)	Current rating in the ground (A)	Current rating in the air (A)	Outer diameter ca. (mm)	Total weight ca. (kg/km)	Standard lengths/packing (m)
PRAFlaSafe® + X						
5 x 70 SM	0.268	183.0	180.0	34.9	4,060	500 D
1 x 95 RM	0.198	480.0	415.0	19.1	1,010	1,000 D
3 x 95 SM	0.198	305.0	308.0	30.8	3,790	500 D
3 x 95 SM + 50 RM	0.198/0.387	305.0	308.0	36.6	4,180	500 D
4 x 95 SM	0.198	305.0	3308.0	36.6	4,660	500 D
5 x 95 SM	0.198	213.0	215.0	39.0	5,480	500 D
1 x 120 RM	0.157	548.0	485.0	21.3	1,290	1,000 D
3 x 120 SM	0.157	348.0	359.0	33.9	4,650	500 D
3 x 120 SM + 50 SM	0.157/0.387	348.0	359.0	40.3	4,970	500 D
3 x 120 SM + 70 RM	0.157/0.268	348.0	359.0	40.3	5,170	500 D
4 x 120 SM	0.157	348.0	359.0	40.3	5,690	500 D
5 x 120 SM	0.157	239.0	247.0	42.6	6,740	500 D
1 x 150 RM	0.124	616.0	557.0	22.9	1,480	500 D
3 x 150 SM	0.124	392.0	412.0	37.8	5,460	500 D
3 x 150 SM + 70 RM	0.124/0.268	392.0	412.0	44.6	6,280	500 D
4 x 150 SM	0.124	392.0	412.0	44.6	7,130	500 D
5 x 150 SM	0.124	266.0	279.0	47.2	8,400	500 D
1 x 185 RM	0.102	698.0	646.0	25.0	1,800	500 D
3 x 185 SM	0.102	444.0	475.0	41.9	6,840	500 D
3 x 185 SM + 95 SM	0.102/0.198	444.0	475.0	49.6	7,880	500 D
4 x 185 SM	0.102	444.0	475.0	49.6	8,830	500 D
5 x 185 SM	0.102	300.0	279.0	52.6	10,470	500 D
1 x 240 RM	0.078	815.0	901.0	27.5	2,900	500 D
3 x 240 SM	0.078	517.0	649.0	46.5	8,660	500 D
3 x 240 SM + 120 SM	0.078/0.157	517.0	649.0	55.6	9,990	500 D
4 x 240 SM	0.078	517.0	649.0	55.6	11,260	500 D
5 x 240 SM	0.078	348.0	466.0	58.4	13,460	500 D

Subject to technical changes.