

# PRAFlaSafe® +AX 1-AXKH-R B2<sub>ca</sub> s1d1a1

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

## DESIGN



- 1 | Aluminium conductor, round solid (RE), round stranded (RM), sector-shaped solid (SE), resp. sector-shaped stranded (SM)
- 2 | Core insulation (XLPE)
- 3 | Inner covering (halogen-free polymer compound)
- 4 | Sheath (halogen-free polymer compound, black UV resistant)

## APPLICATION

This cable is intended for the stationary distribution of electrical energy and can be used in environments in accordance with the table "Possible external influences" 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 all the relevant requirements in the table "Possible external influences". The cables are intended for fixed, universal installation – outside in air or underground, but also inside buildings such as hotels, hospitals, underground railways, airports etc. to protect people and technical building equipment in the event of fire if circuit integrity is not 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:**  
According to table "Possible external influences" below and EN 60364-5-51, ČSN 33 2000-5-51 ed. 3

**Cable Installation:**  
Outside or inside according to EN 60364-5-52, ČSN 33 2000-5-52 ed. 2, Annex NA



**Core identification:**  
HD 308 S2, EN 50334, ČSN 33 0166 ed. 2



**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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Possible external influences	Code	Possible external influences	Code
AA – Ambient temperature (°C)	AA2 – AA8	AP – Seismic effect	AP1
AB – Atmospheric humidity	AB2 – AB8	AQ – Lightning	AQ1
AC – Altitude	AC1, AC2	AR – Movement of air	AR1 – AR3
AD – Presence of water	AD1 – AD7	AS – Wind	AS1 – AS2
AE – Presence of foreign solid bodies or dust	AE1 – AE6	BA – Capability of persons	BA4, BA5
AF – Presence of corrosive or polluting substances	AF1 – AF3	BC – Contact of persons with earth potential	BC1 – BC3
AG – Mechanical shock	AG1, AG2	BD – Condition of evacuation in case of emergency	BD1 – 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 – CB3
AN – Solar radiation	AN1, AN2		

Number of cores x nominal cross section (mm <sup>2</sup> )	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)
<b>PRAFlaSafe® +AX</b>						
1 x 16 RE	1.910	135	102	8.5	90	1,000 D
4 x 16 RE	1.910	89	76	18.0	435	500 D
4 x 25 RE	1.200	112	102	21	600	500 D
1 x 25 RM	1.200	177	136	10.5	135	1,000 D
3 x 25 RM	1.200	112	102	21.0	580	500 D
4 x 25 RM	1.200	112	102	22.5	680	500 D
3 x 25 + 16 RM/RE	1.200/1.910	112	102	22.5	680	500 D
5 x 25 RM	1.200	76	69	25.5	840	500 D
1 x 35 RM	0.868	212	166	11.5	170	1,000 D
3 x 35 RM	0.868	135	126	23.0	725	500 D
3 x 35 + 25 SM/RM	0.868/1.200	135	126	23.0	705	500 D
4 x 35 SM	0.868	135	126	23.0	710	500 D
4 x 35 RE	0.868	135	126	24.0	800	500 D
5 x 35 RM	0.868	91	85	28.5	1,055	500 D
1 x 50 RM	0.641	252	205	13.0	225	1,000 D
3 x 50 RM	0.641	158	149	27.0	1,005	500 D
4 x 50 SM	0.641	158	149	27.0	935	500 D
4 x 50 SE	0.641	158	149	25.0	900	500 D
3 x 50 + 35 SM/RM	0.641/0.868	158	149	27.0	945	500 D
3 x 50 + 25 SM/RM	0.641/1.200	158	149	27.0	940	500 D
5 x 50 RM	0.641	106	100	33.0	1,410	500 D
1 x 70 RM	0.443	310	260	14.5	300	1,000 D
3 x 70 RM	0.443	196	191	31.0	1,350	500 D
3 x 70 + 50 SM/RM	0.443/0.641	196	191	30.5	1,255	500 D
3 x 70 + 35 SM/RM	0.443/0.868	196	191	30.5	1,260	500 D
4 x 70 SE	0.443	196	191	29.5	1,180	500 D

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<b>PRAFlaSafe® +AX</b>						
4 x 70 SM	0.443	196	191	30.5	1,260	500 D
5 x 70 RM	0.443	196	137	38.0	1,900	500 D
1 x 95 RM	0.320	372	321	16.5	385	1,000 D
3 x 95 SM	0.320	234	234	30.5	1,255	500 D
4 x 95 SE	0.320	234	234	34.2	1,545	500 D
4 x 95 SM	0.320	234	234	35.0	1,630	500 D
3 x 95 + 50 SM/RM	0.32/0.641	234	234	35.0	1,625	500 D
3 x 95 + 70 SM/RM	0.32/0.443	234	234	35.0	1,630	500 D
5 x 95 RM	0.320	163	163	43.0	2,495	500 D
1 x 120 RM	0.253	425	376	18.0	475	1,000 D
3 x 120 SM	0.253	268	273	33.0	1,515	500 D
3 x 120 + 50 SM/RM	0.253/0.641	268	273	38.0	1,980	500 D
4 x 120 SE	0.253	268	273	37.0	1,855	500 D
4 x 120 SM	0.253	268	273	38.0	1,985	500 D
5 x 120 RM	0.253	184	188	47.5	3,105	500 D
1 x 150 RM	0.206	476	431	20.0	575	1,000 D
3 x 150 SM	0.206	300	311	37.0	1,845	500 D
3 x 150 + 70 SM/RM	0.206/0.443	300	311	43.0	2,445	500 D
4 x 150 SM	0.206	300	311	43.0	2,420	500 D
5 x 150 SM	0.206	203	211	47.0	3,015	500 D
1 x 185 RM	0.164	541	501	22.0	705	1,000 D
3 x 185 + 95 SM/RM	0.164/0.320	342	360	48.5	3,085	500 D
4 x 185 SM	0.164	342	360	48.5	3,040	500 D
5 x 185 SM	0.164	342	243	53.0	3,750	500 D
1 x 240 RM	0.125	631	600	25.0	910	1,000 D
3 x 240 + 120 SM/RM	0.125/0.253	398	427	54.5	3,945	500 D
4 x 240 SM	0.125	398	427	54.5	3,890	500 D
5 x 240 SM	0.125	268	287	63.0	4,880	500 D
1 x 300 RM	0.100	716	696	27.5	1,095	1,000 D

Subject to technical changes.