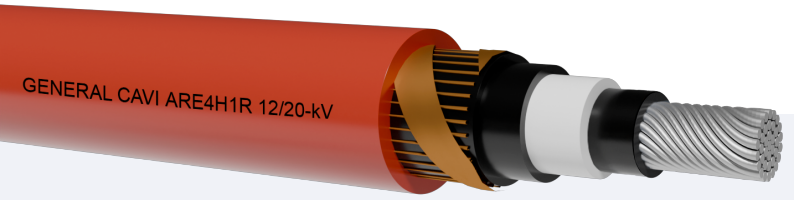
ARE4H1R 12/20 kV

Model Product: 745 - 20160412



Aluminium rigid compact conductor, class 2.
Inner semi-conducting layer
XLPE Crosslinked polyethylene insulation(no dry cool).
Outer semi-conducting layer special high module hepr for 1.8 / 3 kV only on request
Red copper wire shield.
PVC sheath in RZ/ST2 quality

STANDARDS

CEI 20-13, HD 620

Cables with aluminum conductor for connections between substations and large users

Nominal voltage U0: 12 kV

Nominal voltage U: 20 kV

Test voltage: 42 kV

Maximun voltage Um: 24 kV

Maximun operating temperature: +90°C

Maximun short circuit temperature: +250°C

Minimum installation and laying temperature: 0°C

Min. operating temperature (without mechanical shocks): -15°C

COMMON FEATURES

Suitable for the transport of energy between the substations and large users. Laying underground in accordance with Art. 4.3.11 of IEC 11-17.Storage is recommended where high risk of theft.

EMPLOYMENT

Minimum bending radius per D cable diameter (in mm): 12D

Maximum pulling stress: 50 N/mmq

PACKING

Drums to agree.

CORE COLOURS

Single core: White

SHEATH COLOUR

Red

NOTE

The cable meets the requirements according to HD 620 for insulation, for all other characteristics compared to CEI 20-13
The cable can be supplied in the visible pole helical RE4H1RX

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Conductor Number	Nominal Section	Approx cond. diameter	Approx insulation diameter	Approx external diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Single core						
1x	35	7	17,80	24.7	640	213
1x	50	8.2	18.9	26	710	312
1x	70	9.7	20.4	28	820	336
1x	95	11.4	22.2	30	940	360
1x	120	12.9	23.8	33	1080	396
1x	150	14.0	25	35	1180	420
1x	185	15.8	27	37	1360	444
1x	240	18.2	29	40	1600	480
1x	300	20.8	31.5	42	1890	504
1x	400	23.8	35	46	2270	552
1x	500	26.7	37	47	2685	564
1x	630	30.5	40	52	3280	624

Cond.xSec	Elettric Resistace 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz		Phase Reactance		Current carrying capacities			
			Trefoil formation	Flat	Trefoil formation	Flat	Trefoil formation in air	Flat in air	Trefoil formation in ground	Flat in ground
(N°x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(A)	(A)	(A)	(A)
Single core										
1x35	0.868	0.17	1.13	1.130	0.14	0.20	154	162	147	151
1x50	0.641	0.19	0.832	0.832	0.13	0.19	185	199	174	198
1x70	0.433	0.21	0.580	0.580	0.13	0.19	230	244	212	222
1x95	0.320	0.23	0.416	0.416	0.12	0.18	280	290	253	267
1x120	0.253	0.25	0.333	0.333	0.12	0.18	323	340	288	299
1x150	0.206	0.27	0.270	0.270	0.11	0.17	365	394	322	330
1x185	0.164	0.29	0.218	0.218	0.11	0.17	421	441	365	375
1x240	0.125	0.33	0.168	0.165	0.10	0.16	498	533	423	438
1x300	0.100	0.36	0.136	0.132	0.10	0.16	576	623	478	488
1x400	0.0778	0.40	0.109	0.105	0.099	0.16	673	722	545	563
1x500	0.0605	0.44	0.0890	0.0828	0.095	0.15	781	846	620	632
1x630	0.0469	0.50	0.0739	0.0662	0.093	0.15	909	946	704	710