RG16H1OR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

MV cables rubber insulated pole HEPR G7 quality, PVC sheathed.

Rigid class 2 red copper conductor.
Inner semi-conducting layer
Elastomeric mixture insulation (G16 quality).
Outer semi-conducting layer special high module hepr for 1.8 / 3 kV only on request
Two alternaded copper tapes screen
Not fibrous and not hygroscopic filler
Sheath of PVC R12 type. For MT

STANDARDS

CEI 20-13, IEC 60502 CEI 20-16 (IEC 60840 per 26/45 kV)
EN 50575:2014 + EN 50575/A1:2016 (IEC 60332-1-2)

Nominal voltage U0: da 1,8kV a 26 kV
Nominal voltage U: da 3 kV a 45 kV
Maximun voltage Um: da 3,6 kV a 52 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. For free-hanging, tube or channel. Also allowed for laying underground unprotected AD7.

EMPLOYMENT

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

Maximum pulling stress: 60 N/mmq

CORE COLOURS

Three cores: Identification of phases: colored ribbons or wires

SHEATH COLOUR

Red

INK MARKING

GENERAL CAVI Eca RG16H1OR12 (VOLTAGE INSULATION) 3x (SECTION) YEAR BUILT LOT OF WORK

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(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

Uo/U : 1,8/3 kV - U max : 3,6 kV(EX GRADO 8)

Conductor Number	Nominal Section	Approx conductor diameter	Approx insulation diameter	Approx external production diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	10	4.0	8.0	27.25	904	330
3x	16	4.8	8.8	29.5	1155	360
3x	25	6.0	10.0	32.5	1575	390
3x	35	7.0	11.0	34.5	1952	430
3x	50	8.1	12.1	37.2	2338	470
3x	70	9.9	13.9	41.4	3150	530
3x	95	11.5	15.5	45.0	4024	570
3x	120	12.9	16.9	48.7	4918	620
3x	150	14.2	18.2	52.2	5791	660
3x	185	15.9	19.9	56.5	7086	720
3x	240	18.3	22.3	62.0	8975	800
3x	300	20.7	24.7	67.35	11069	870
3x	400	23.5	27.5	74.2	13756	950

Formation	Elettric Resistace 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					In air	In ground
(N° x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x10	1.83	0.19	2.34	0.11	85	93
3x16	1.15	0.23	1.47	0.10	109	120
3x25	0.727	0.27	0.927	0.097	145	155
3x35	0.524	0.30	0.669	0.093	175	185
3x50	0.387	0.34	0.494	0.088	208	216
3x70	0.268	0.40	0.342	0.084	260	265
3x95	0.193	0.45	0.247	0.081	318	315
3x120	0.153	0.50	0.197	0.079	367	360
3x150	0.124	0.55	0.159	0.077	415	400
3x185	0.0991	0.60	0.129	0.076	476	453
3x240	0.0754	0.68	0.0990	0.074	555	520
3x300	0.0601	0.75	0.0807	0.072	635	585
3x400	0.0470	0.83	0.0651	0.071	716	651

RG16H1OR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

Uo/U : 3,6/6 kV - U max : 7,2 kV(EX GRADO 11)

Conductor Number	Nominal Section	Approx conductor diameter	Approx insulation diameter	Approx external production diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mmq)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	10	4.0	11.6	31.8	1287	400
3x	16	4.8	12.4	34.4	1530	420
3x	25	6.0	13.6	37.4	1980	470
3x	35	7.0	14.6	39.7	2406	500
3x	50	8.1	15.7	42.8	2896	530
3x	70	9.9	17.5	46.3	3663	570
3x	95	11.5	19.1	50.0	4653	640
3x	120	12.9	20.5	54.2	5544	680
3x	150	14.2	21.8	57.3	6435	720
3x	185	15.9	23.6	61.5	7821	780
3x	240	18.3	26.0	66.8	9900	860
3x	300	20.7	28.4	72.9	12375	930
3x	400	23.5	32.4	78.2	15420	997

Formation	Elettric Resistace 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					In air	In ground
(N° x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x10	1.83	0.15	2.34	0.12	85	93
3x16	1.15	0.17	1.47	0.12	109	120
3x25	0.727	0.20	0.927	0.11	145	153
3x35	0.524	0.23	0.669	0.10	175	183
3x50	0.387	0.26	0.494	0.097	211	216
3x70	0.268	0.30	0.342	0.092	262	263
3x95	0.193	0.33	0.247	0.089	318	315
3x120	0.153	0.37	0.197	0.086	370	359
3x150	0.124	0.40	0.159	0.084	415	400
3x185	0.0991	0.44	0.129	0.082	477	451
3x240	0.0754	0.49	0.0990	0.079	555	518
3x300	0.0601	0.54	0.0807	0.077	635	583
3x400	0.0470	0.60	0.0651	0.075	717	651

RG16H1OR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

Uo/U : 6/10 kV - U max : 12 kV(EX GRADO 17)

Conductor Number	Nominal Section	Approx conductor diameter	Approx insulation diameter	Approx external production diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	10	4.0	14.2	36.9	1791	490
3x	16	4.8	14.2	39.0	2070	530
3x	25	6.0	15.4	42.0	2497	550
3x	35	7.0	16.4	44.0	2945	590
3x	50	8.1	17.5	47.0	3463	620
3x	70	9.9	19.3	51.0	4378	680
3x	95	11.5	20.9	55.0	5403	750
3x	120	12.9	22.3	57.1	6358	780
3x	150	14.2	23.6	62.0	7413	820
3x	185	15.9	25.4	66.0	8806	880
3x	240	18.3	27.8	72.1	10935	960
3x	300	20.7	30.2	77.8	13293	1040
3x	400	23.5	34.5	84.5	15900	1050

Formation	Electric resistance at 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					In air	In ground
(N° x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x10	1.83	0.16	2.34	0.14	73	78
3x16	1.15	0.18	1.47	0.13	107	112
3x25	0.727	0.21	0.927	0.12	145	149
3x35	0.524	0.23	0.669	0.11	175	178
3x50	0.387	0.26	0.494	0.11	208	210
3x70	0.268	0.29	0.342	0.10	260	257
3x95	0.193	0.32	0.247	0.097	316	307
3x120	0.153	0.36	0.197	0.094	365	350
3x150	0.124	0.38	0.159	0.091	407	390
3x185	0.0991	0.42	0.129	0.088	469	440
3x240	0.0754	0.47	0.0990	0.085	550	510
3x300	0.0601	0.52	0.0807	0.084	630	580
3x400	0.0470	0.57	0.0651	0.082	720	655

RG16H1OR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

Uo/U : 8,7/15 kV - U max : 17,5 kV(EX GRADO 24)

Conductor Number	Nominal Section	Approx conductor diameter	Approx insulation diameter	Approx external production diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	16	4.8	17.4	45.5	2567	600
3x	25	6.0	17.4	48.0	3025	630
3x	35	7.0	18.4	51.2	3512	670
3x	50	8.1	19.5	53.5	4109	710
3x	70	9.9	21.3	58.0	5035	760
3x	95	11.5	22.9	61.5	6119	820
3x	120	12.9	24.3	65.0	7094	870
3x	150	14.2	25.6	68.2	8199	900
3x	185	15.9	27.4	72.5	9652	960
3x	240	18.3	29.8	78.2	11860	1040
3x	300	20.7	32.2	78.6	14189	1110

Formation	Electric resistance at 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					In air	In ground
(N° x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x16	1,15	0.15	1,47	0,14	98	101
3x25	0.727	0.18	0.927	0.13	145	145
3x35	0.524	0.19	0.669	0.12	177	173
3x50	0.387	0.21	0.494	0.12	210	204
3x70	0.268	0.24	0.342	0.11	262	250
3x95	0.193	0.26	0.247	0.10	315	298
3x120	0.153	0.29	0.197	0.10	361	339
3x150	0.124	0.31	0.159	0.097	407	378
3x185	0.0991	0.34	0.129	0.094	470	429
3x240	0.0754	0.37	0.0990	0.090	550	500
3x300	0.0601	0.42	0.0807	0.088	630	565

RG16H1OR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

Uo/U : 12/20 kV - U max : 24 kV(EX GRADO 32)

Conductor Number	Nominal Section	Approx conductor diameter	Approx insulation diameter	Approx external production diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	25	6.0	20.4	54.8	3532	720
3x	35	7.0	20.4	57.6	4050	740
3x	50	8.1	21.5	60.1	4637	770
3x	70	9.9	23.3	64.5	5652	830
3x	95	11.5	24.9	69.5	6786	880
3x	120	12.9	26.3	74.8	7791	920
3x	150	14.2	27.6	75.0	8925	970
3x	185	15.9	29.4	80.3	10428	1030
3x	240	18.3	31.8	84.0	12627	1100
3x	300	20.7	34.2	91.5	15094	1180

Formation	Elettric Resistace 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					In air	In ground
(N° x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x25	0.727	0.15	0.927	0.14	145	148
3x35	0.524	0.17	0.669	0.13	177	175
3x50	0.387	0.18	0.494	0.12	210	207
3x70	0.268	0.21	0.342	0.11	262	253
3x95	0.193	0.23	0.247	0.10	315	301
3x120	0.153	0.25	0.197	0.10	361	342
3x150	0.124	0.27	0.159	0.10	407	381
3x185	0.0991	0.29	0.129	0.098	470	431
3x240	0.0754	0.32	0.0990	0.094	550	500
3x300	0.0601	0.35	0.0807	0.092	630	562

RG16H1OR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

Uo/U : 18/30 kV - U max : 36 kV(EX GRADO 47)

Conductor Number	Nominal Section	Approx conductor diameter	Approx insulation diameter	Approx external production diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	35	7.0	28.0	70.6	5910	920
3x	50	8.1	27.1	72.0	6420	940
3x	70	9.9	28.9	75.9	7500	1000
3x	95	11.5	30.5	80.1	8740	1050
3x	120	12.9	31.9	83.2	9840	1090
3x	150	14.2	33.2	86.9	11070	1140
3x	185	15.9	35.0	91.0	12730	1200
3x	240	18.3	37.4	96.3	15060	1270

Formation	Electric resistance at 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					In air	In ground
(N° x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x35	0.524	0.14	0.669	0.14	177	174
3x50	0.387	0.15	0.494	0.13	210	205
3x70	0.268	0.16	0.342	0.13	260	250
3x95	0.193	0.18	0.247	0.12	315	300
3x120	0.153	0.19	0.197	0.12	360	340
3x150	0.124	0.20	0.159	0.11	405	380
3x185	0.0991	0.22	0.129	0.11	465	430
3x240	0.0754	0.24	0.0990	0.10	545	496

RG16H1OR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI) CPR Eca

Model Product: 7I1-7L1-7M1-7N1-7O1-7P1-7Q1-7R1 - 20201120

ALTA TENSIONE Uo/U : 26/45 kV - U max : 52 kV (EX GRADO 67)

Conductor Number	Nominal Section	Approx conductor diameter	Approx insulation diameter	Approx external production diameter	Approx cable weight	Minimum radius bending
(N°)	(mmq)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	70	9.9	33.3	86.0	9130	1160
3x	95	11.5	34.9	91.0	10450	1210
3x	120	12.9	36.5	94.3	11650	1260
3x	150	14.2	36.85	92.7	12000	1230
3x	185	15.9	38.85	97.0	13570	1290

Formation	Elettric Resistace 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					In air	In ground
(N° x mmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x70	0.268	0.15	0.342	0.14	255	241
3x95	0.193	0.16	0.247	0.13	308	288
3x120	0.153	0.17	0.196	0.13	353	327
3x150	0.124	0.19	0.160	0.12	398	366
3x185	0.0991	0.21	0.129	0.12	457	416