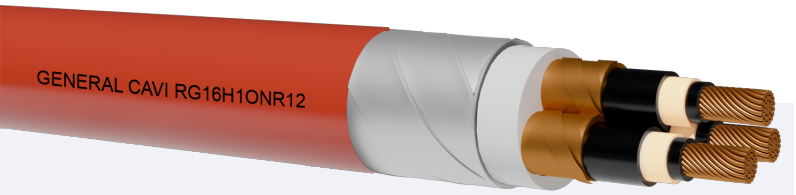
RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 20201120



MEDIUM VOLTAGE CABLE RUBBER INSULATED HEPR QUALITY G16 ARMOUR TO STRIP STEEL GALVANIZED PVC SHEATHEDB R12

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
PVC+not fibruous and not hygroscopic filler
Galvanized steel tapes armour.
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.

EMPLOYMENT

Minimum bending radius per D cable diameter (in mm): 16 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 RG16H1ONR12(VOLTAGE INSULATION) 3x (SECTION) YEAR BUILT LOT OF WORK

RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 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	30.5	1343	488
3x	16	4.8	8.8	32.7	1642	523
3x	25	6.0	10.0	35.7	1990	571
3x	35	7.0	11.0	37.7	2388	603
3x	50	8.1	12.1	40.4	2985	646
3x	70	9.9	13.9	44.5	3861	712
3x	95	11.5	15.5	48.2	4876	771
3x	120	12.9	16.9	51.9	5871	830
3x	150	14.2	18.2	55.4	6915	886
3x	185	15.9	19.9	59.7	8278	955
3x	240	18.3	22.3	64.8	10398	1037
3x	300	20.7	24.7	70.5	13154	1128
3x	400	23.5	27.5	77.4	15821	1238

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	81	89
3x16	1,15	0.23	1.47	0.10	105	115
3x25	0.727	0.27	0.927	0.097	138	148
3x35	0.524	0.30	0.669	0.093	166	175
3x50	0.387	0.34	0.494	0.088	200	208
3x70	0.268	0.40	0.342	0.084	250	255
3x95	0.193	0.45	0.247	0.081	305	303
3x120	0.153	0.50	0.197	0.079	351	345
3x150	0.124	0.55	0.159	0.077	398	385
3x185	0.0991	0.60	0.129	0.076	455	435
3x240	0.0754	0.68	0.0990	0.074	540	505
3x300	0.0601	0.75	0.0807	0.072	615	565
3x400	0.0470	0.83	0.0651	0.071	715	645

RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 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)	(mm)	(mm)	(mm)	(kg/km)	(mm)
Three cores						
3x	10	4.0	11.6	36.0	1525	576
3x	16	4.8	12.4	37.6	1812	602
3x	25	6.0	13.6	40.6	2267	650
3x	35	7.0	14.6	42.9	2723	686
3x	50	8.1	15.7	45.8	3544	733
3x	70	9.9	17.5	49.5	4455	792
3x	95	11.5	19.1	53.5	4554	856
3x	120	12.9	20.5	57.4	6336	918
3x	150	14.2	21.8	60.5	7623	968
3x	185	15.9	23.6	64.6	9009	1034
3x	240	18.3	26.0	70.0	11187	1120
3x	300	20.7	28.4	76.1	13662	1218
3x	400	23.5	32.4	82.5	16731	1320

Formation	Electrc Resistance	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	78	85
3x16	1.15	0.17	1.47	0.12	103	108
3x25	0,727	0.20	0.927	0.11	130	138
3x35	0.524	0.23	0.669	0.10	160	165
3x50	0.387	0.26	0.494	0.097	190	195
3x70	0.268	0.30	0.342	0.092	235	240
3x95	0.193	0.33	0.247	0.089	285	285
3x120	0.153	0.37	0.197	0.086	330	330
3x150	0.124	0.40	0.159	0.084	373	365
3x185	0.0991	0.44	0.129	0.082	430	415
3x240	0.0754	0.49	0.0990	0.079	503	480
3x300	0.0601	0.54	0.0807	0.077	577	540
3x400	0.0470	0.60	0.0651	0.075	670	620

RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 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	39.4	2607	630
3x	16	4.8	14.2	41.7	2965	667
3x	25	6.0	15.4	44.3	3453	709
3x	35	7.0	16.4	47.6	4040	762
3x	50	8.1	17.5	50.1	4617	802
3x	70	9.9	19.3	54.6	5622	874
3x	95	11.5	20.9	58.5	6746	936
3x	120	12.9	22.3	62.1	7831	994
3x	150	14.2	23.6	65.4	8965	1046
3x	185	15.9	25.4	69.2	10408	1107
3x	240	18.3	27.8	75.5	12756	1208
3x	300	20.7	30.2	81.5	15258	1304
3x	400	23.9	33.5	88.3	18810	1412

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	95	98
3x25	0.727	0.18	0.927	0.13	142	140
3x35	0.524	0.19	0.669	0.12	171	168
3x50	0.387	0.21	0.494	0.12	205	200
3x70	0.268	0.24	0.342	0.11	252	245
3x95	0.193	0.26	0.247	0.10	303	290
3x120	0.153	0.29	0.197	0.10	347	327
3x150	0.124	0.31	0.159	0.097	390	365
3x185	0.0991	0.34	0.129	0.094	446	413
3x240	0.0754	0.37	0.0990	0.090	520	476
3x300	0.0601	0.42	0.0807	0.088	595	535
3x400	0.0470	0.44	0.0651	0.086	675	620

RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 20201120

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

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)
Three cores						
3x	16	4.8	17.4	49.5	3632	670
3x	25	6.0	17.4	50.5	4189	710
3x	35	7.0	18.4	52.5	4746	750
3x	50	8.1	19.5	55.5	5343	780
3x	70	9.9	21.3	60.0	6487	840
3x	95	11.5	22.9	63.0	7671	900
3x	120	12.9	24.3	67.0	8726	940
3x	150	14.2	25.6	70.0	9980	990
3x	185	15.9	27.4	73.5	11464	1040
3x	240	18.3	29.8	80.0	13811	1120

Formation	Electric resistance at 20°C	Capacities 50 Hz	Apparent resistance at 90°C and 50 Hz	Phase Reactance	Current carrying capacities	
					Flat in air	In ground
(N°xmmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x16	1.15	0.15	1.47	0.14	95	98
3x25	0.727	0.18	0.927	0.13	142	140
3x35	0.524	0.19	0.669	0.12	171	168
3x50	0.387	0.21	0.494	0.12	205	200
3x70	0.268	0.24	0.342	0.11	252	245
3x95	0.193	0.26	0.247	0.10	303	290
3x120	0.153	0.29	0.197	0.10	347	327
3x150	0.124	0.31	0.159	0.097	390	365
3x185	0.0991	0.34	0.129	0.094	446	413
3x240	0.0754	0.37	0.0990	0.090	520	476

RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 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	57.6	4826	921
3x	35	7.0	20.4	58.3	5393	933
3x	50	8.1	21.5	61.2	6099	979
3x	70	9.9	23.3	65.6	7214	1050
3x	95	11.5	24.9	69.7	8448	1115
3x	120	12.9	26.3	73.2	9602	1173
3x	150	14.2	27.6	76.5	10826	1218
3x	185	15.9	29.4	80.5	12338	1288
3x	240	18.3	31.8	86.8	14510	1389
3x	300	20.7	34.2	93.5	17300	1496

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						
3x25	0.727	0.18	0.927	0.14	141	150
3x35	0.524	0.17	0.0669	0.13	173	177
3x50	0.387	0.19	0.494	0.12	203	208
3x70	0.268	0.21	0.342	0.11	251	255
3x95	0.193	0.23	0.247	0.11	303	301
3x120	0.153	0.25	0.197	0.10	348	342
3x150	0.124	0.27	0.159	0.10	393	381
3x185	0.0991	0.29	0.129	0.098	448	431
3x240	0.0754	0.33	0.0990	0.094	520	495
3x300	0.0601	0.36	0.0807	0.092	595	555

RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 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	75.5	7760	1208
3x	50	8.1	27.1	76.0	8210	1216
3x	70	9.9	28.9	78.0	9460	1248
3x	95	11.5	30.5	81.0	10810	1296
3x	120	12.9	31.9	84.5	12080	1352
3x	150	14.2	33.2	89.0	13420	1424
3x	185	15.9	35.0	93.0	15070	1488
3x	240	18.3	37.4	98.0	17550	1568

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)	(0hm/km)	(A)	(A)
Three cores						
3x35	0.524	0.14	0.669	0.14	172	175
3x50	0.387	0.15	0.494	0.13	202	205
3x70	0.268	0.16	0.342	0.13	250	252
3x95	0.193	0.18	0.247	0.12	302	300
3x120	0.153	0.19	0.197	0.12	345	340
3x150	0.124	0.20	0.159	0.11	390	378
3x185	0.0991	0.22	0.129	0.11	445	428
3x240	0.0754	0.24	0.0990	0.10	520	491

RG16H1ONR12 da 1,8/3 kV a 26/45 kV

(TRIPOLARI ARMATI)CPR Eca

Model Product: 7I2-7L2-7M2-7N2-7O2-7P2-7Q2-7R2 - 20201120

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	92.7	9157	1483
3x	95	11.6	34.9	95.6	10500	1530
3x	120	13.1	36.9	98.7	11980	1579
3x	150	14.4	36.8	100,3	12450	1605
3x	185	16.1	38.8	103.9	13990	1662

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°xmmq)	(Ohm/km)	(microF/km)	(Ohm/km)	(Ohm/km)	(A)	(A)
Three cores						
3x70	0.268	0.21	0.343	0.14	255	241
3x95	0.193	0.20	0.247	0.13	308	288
3x120	0.153	0.19	0.196	0.13	353	327
3x150	0.124	0.18	0.160	0.12	398	366
3x185	0.0991	0.18	0.129	0.12	457	416