



STANDARDS:

CONSTRUCTION

IEC 60502-1

REN F-CTCB Rev.D 04.10.21

FIRE PERFORMANCE*

IEC 60332-1-2



CPR CLASSIFICATION:

Range 2x2,5 - 3x35 / 4x1,5 - 4x16 / 5x2,5 - 5x16 / 3x16 - 1x10 /
 3x16+2x10 / 6x6 / 7x2,5 - 7x6 / 10x2,5 / 12x1,5 - 12x2,5 / 14x1,5 - 14x6
 / 17x2,5 - 17x4 / 19x1,5 - 19x4 / 24x1,5 - 2,5 / 27x2,5 / 30x1,5 - 30x2,5 /
 35x2,5 / 37x1,5 - 37x2,5 / 40x2,5 / 43x1,5 / 50 mm²

DOP 0064 Rev.002

Class **E_{ca}**

CONSTRUCTION:

1. CONDUCTOR

Copper class to IEC 60228.

2. INSULATION

Polyvinyl chloride (PVC) type PVC/A according to IEC 60502-1.

3. INNER COVERING

Polyvinyl chloride (PVC).

4. SCREEN

Copper tape.

5. SHEATH

Polyvinyl chloride (PVC) type ST2 according to EN 50636-4-1 .

APPLICATIONS:

Power cables up to 1 kV to REN substation systems.

Maximum temperature rating of the conductor: +70C

* Performance outside CPR scope.





PHYSICAL AND ELECTRICAL CHARACTERISTICS:

General Cable Code	Cross section (mm ²)	Diameter under armour (mm)	Nominal overall diameter (mm)	Nominal weight (kg/km)	Minimum bending radius (mm)	Maximum current rating Air 30 °C *	Maximum current rating Buried 20 °C **	Voltage drop cos $\mu=0.8$ (V/A.km)
3177114	1x50	13.0	16.3	700	165	167	116	0.751
3177115	1x70	14.5	17.8	915	180	216	143	0.548
3177116	1x95	16.4	19.7	1,190	200	264	169	0.421
3177117	1x120	18.5	21.8	1,470	220	308	192	0.349
3177118	1x150	19.8	23.1	1,735	235	356	217	0.300
3177119	1x185	21.8	25.1	2,130	255	409	243	0.257
3177120	1x240	24.7	28.0	2,735	280	485	280	0.216
3177121	1x300	27.6	30.9	3,400	310	561	316	0.188
3177122	1x400	30.7	34.3	4,295	345	656	-	0.166
3177206	2x1.5	8.2	11.8	255	120	22	22	20.178
3177207	2x2.5	9.0	12.6	300	130	30	29	12.394
3177208	2x4	10.7	14.3	380	145	40	37	7.752
3177209	2x6	11.9	15.5	455	155	51	46	5.209
3177210	2x10	13.6	16.9	535	170	70	60	3.130
3177211	2x16	15.3	18.6	695	190	94	78	1.998
3177212	2x25	18.5	21.8	1,000	220	119	99	1.296
3177213	2x35	20.3	23.6	1,250	240	148	119	0.957
3177214	2x50	23.9	27.2	1,660	275	180	140	0.726
3177215	2x70	27.3	30.9	2,235	310	232	173	0.526
3177216	2x95	31.1	34.7	2,930	350	282	204	0.401
3177217	2x120	35.3	39.4	3,705	395	328	231	0.332
3177011	3x16/10	17.6	20.8	985	210	80	64	1.998
3177012	3x25/16	21.0	24.3	1,425	245	101	82	1.296
3177013	3x35/16	22.5	25.8	1,645	260	126	98	0.957
3177014	3x50/25	26.5	30.1	2,255	305	153	116	0.728
3177015	3x70/35	29.9	33.8	3,050	340	196	143	0.527
3177016	3x95/50	34.4	38.8	4,095	390	238	169	0.401
3177017	3x120/70	38.1	42.5	5,170	425	276	192	0.333
3177018	3x150/70	41.8	46.4	6,095	465	319	217	0.285
3177019	3x185/95	46.2	50.9	7,555	510	364	243	0.243
3177020	3x240/120	52.6	57.6	9,745	580	430	280	0.203

* Current ratings according to IEC 60364-5-52, table B.52.10, method of installation F for single-core cables and table B.52.2, method of installation E for two-core cables.

** Current ratings according to IEC 60364-5-52, table B.52.5, Method of installation D1.

Nominal values subject to variation depending on manufacturing tolerance.



PHYSICAL AND ELECTRICAL CHARACTERISTICS:

General Cable Code	Cross section (mm ²)	Diameter under armour (mm)	Nominal overall diameter (mm)	Nominal weight (kg/km)	Minimum bending radius (mm)	Maximum current rating Air 30 °C * (A)	Maximum current rating Buried 20 °C ** (A)	Voltage drop cos $\mu=0.8$ (V/A.km)
3177306	3x1,5	8,7	12,3	285	125	18,5	18	20,178
3177307	3x2,5	9,5	13,1	330	135	25	24	12,394
3177308	3x4	11,4	15,0	435	150	34	30	7,752
3177309	3x6	12,7	16,0	475	160	43	38	5,209
3177310	3x10	14,5	17,8	645	180	60	50	3,130
3177312	3x25	19,8	23,1	1.250	235	101	82	1,296
3177313	3x35	20,6	23,9	1.425	240	126	98	0,957
3177315	3x70	27,4	31,0	2.585	310	196	143	0,527
3177316	3x95	31,5	35,5	3.475	355	238	169	0,401
3177406	4x1,5	9,5	13,2	320	135	18,5	18	20,178
3177407	4x2,5	10,4	14,1	380	110	25	24	12,394
3177408	4x4	12,5	15,9	460	160	34	30	7,752
3177409	4x6	14,0	17,3	570	175	43	38	5,209
3177410	4x10	16,0	19,4	785	195	60	50	3,130
3177411	4x16	18,1	21,4	1.050	215	80	64	1,998
3177412	4x25	21,9	25,2	1.545	255	101	82	1,296
3177413	4x35	22,5	25,8	1.830	260	126	98	0,957
3177414	4x50	26,5	30,2	2.485	305	153	116	0,728
3177415	4x70	29,9	33,9	3.375	340	196	143	0,527
3177416	4x95	34,4	38,8	4.545	390	238	169	0,401
3177507	5x2,5	11,5	15,1	435	155	25	24	12,394
3177508	5x4	13,8	17,2	540	175	34	30	7,752
3177509	5x6	15,4	18,8	675	190	43	38	5,209
3177510	5x10	17,7	21,0	925	215	60	50	3,130
3177511	5x16	20,1	23,3	1.260	235	80	64	1,998
3177512	5x25	24,4	27,7	1.865	280	101	82	1,296
3177513	5x35	26,9	30,5	2.420	305	126	98	0,957
3177514	5x50	32,1	36,2	3.310	365	153	116	0,726
3177515	5x70	36,2	40,3	4.450	405	196	143	0,526

* Current ratings according to IEC 60364-5-52, table B.52.12, method of installation E for three-core cables.

** Current ratings according to IEC 60364-5-52, table B.52.4, Method of installation D1.

Nominal values subject to variation depending on manufacturing tolerance.



PHYSICAL AND ELECTRICAL CHARACTERISTICS:

General Cable Code	Cross section (mm ²)	Diameter under armour (mm)	Nominal overall diameter (mm)	Nominal weight (kg/km)	Minimum bending radius (mm)	Maximum current rating Air 30 °C * (A)	Maximum current rating Buried 20 °C ** (A)	Voltage drop cos $\mu=0,8$ (V/A.km)
3177611	3x16/2x10	18.5	21.8	1,120	220	80	64	1.998
3177612	3x25/2x16	22.5	25.8	1,625	260	101	82	1.296
3177613	3x35/2x16	24.8	28.0	1,960	285	126	98	0.957
3177614	3x50/2x25	29.6	33.2	2,755	335	153	116	0.726
3177615	3x70/2x35	33.4	37.4	3,685	375	196	143	0.526
3177616	3x95/2x50	38.1	42.5	4,920	425	238	169	0.401
3140069	6x6	-	20.4	740	205	43	-	-
3140076	7x1.5	-	15.0	410	155	18.5	-	-
3140077	7x2.5	-	15.9	450	160	25	-	-
3140078	7x4	-	18.5	635	185	34	-	-
3140079	7x6	-	20.3	800	205	43	-	-
3140107	10x2.5	-	19.0	595	145	25	-	-
3140126	12x1.5	-	18.7	560	145	18.5	-	-
3140127	12x2.5	-	19.9	685	200	25	-	-
3140146	14x1.5	-	19.1	595	195	18.5	-	-
3140147	14x2.5	-	20.7	760	210	25	-	-
3140177	17x2.5	-	22.5	905	225	25	-	-
3140178	17x4	-	26.7	1,320	270	34	-	-
3140196	19x1.5	-	20.8	735	210	18.5	-	-
3140197	19x2.5	-	22.8	965	230	25	-	-
3140246	24x1.5	-	23.8	905	240	18.5	-	-
3140247	24x2.5	-	26.1	1,200	265	25	-	-
3140277	27x2.5	-	26.7	1,310	270	25	-	-
3140306	30x1.5	-	25.1	1,060	255	18.5	-	-
3140307	30x2.5	-	27.6	1,410	280	25	-	-
3140357	35x2.5	-	30.2	1,660	305	25	-	-
3140376	37x1.5	-	26.8	1,250	270	18.5	-	-
3140377	37x2.5	-	30.2	1,705	305	25	-	-
3140407	40x2.5	-	31.7	1,885	240	25	-	-
3140436	43x1.5	-	30.2	1,495	230	18.5	-	-
3140506	50x1.5	-	31.9	1,690	240	18.5	-	-

* Current ratings according to IEC 60364-5-52, table B.52.12, method of installation E for three-core cables.

** Current ratings according to IEC 60364-5-52, table B.52.4, Method of installation D1.

Nominal values subject to variation depending on manufacturing tolerance.