

Control Cables, with Solid Copper Conductors, PVC Insulated, Copper Tape Shielded and PVC Sheathed

CONSTRUCTION

- Conductor** : Plain annealed solid copper conductor, as per Class 1 of IEC 60228.
- Insulation** : An extruded layer of Polyvinyl chloride (PVC) insulation, rated 70 °C at normal operation to IEC 60502-1.
- Bedding** : An extruded layer of Polyvinyl chloride (PVC).
- Shielding** : Copper tape applied helically with suitable overlap.
- Outer sheath** : An extruded layer of Polyvinyl chloride (PVC) sheathing compound type ST1 to IEC 60502-1.



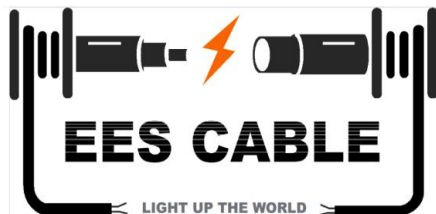
APPLICATION

For use indoors – in cable trenches or ducts; and outdoors - for connecting signaling and control units in industries, railways, traffic signals, power stations, industrial plants and switchgears if mechanical protection is not required, or in applications where the cable is not exposed to mechanical damage.

TECHNICAL DATA

- Nominal voltage $U_0/U = 0.6/1$ kV
- Power frequency test voltage 3.5 kV for 5 minutes
- Max. admissible temperature of conductor at normal operation 70 °C
- Max. admissible temperature of conductor at short circuit 160 °C for 5 seconds

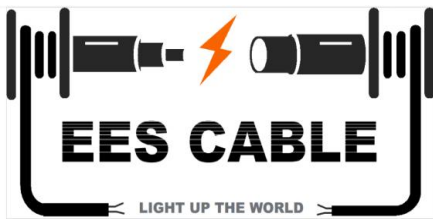
Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
1.5 mm²								
5 X 1.5	12.1000	14.6000	18.0	15.5	13.5	14.2	305	C108PA105N0CBK12IMR
7 X 1.5	12.1000	14.6000	16.0	14.0	12.5	15.1	350	C108PA107N0CBK21IMR
10 X 1.5	12.1000	14.6000	14.0	12.5	11.5	18.1	465	C108PA110N0CBK21IMR
12 X 1.5	12.1000	14.6000	13.0	11.5	10.5	18.6	520	C108PA112N0CBK21IMR
14 X 1.5	12.1000	14.6000	12.0	10.5	9.5	19.4	575	C108PA114N0CBK21IMR
16 X 1.5	12.1000	14.6000	11.0	10.0	9.0	20.2	635	C108PA116N0CBK21IMR
19 X 1.5	12.1000	14.6000	10.0	9.0	8.0	21.1	715	C108PA119N0CBK21IMR
24 X 1.5	12.1000	14.6000	9.0	8.0	7.5	25.3	930	C108PA124N0CBK21IMF
30 X 1.5	12.1000	14.6000	8.0	7.5	6.5	27.5	1115	C108PA130N0CBK21IMF
37 X 1.5	12.1000	14.6000	7.5	6.5	6.0	29.4	1205	C108PA137N0CBK21IMF



CONTROL CABLES / IEC 60502-1

CU / PVC / CT SHIELDED / PVC 0.6 / 1 kV

Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
2.5 mm²								
5 X 2.5	7.4100	8.8700	24.0	20.5	18.0	15.1	380	C110PA105N0CBK12IMR
7 X 2.5	7.4100	8.8700	22.0	18.5	16.0	16.2	450	C110PA107N0CBK21IMR
10 X 2.5	7.4100	8.8700	20.0	16.5	14.5	19.6	560	C110PA110N0CBK21IMR
12 X 2.5	7.4100	8.8700	18.0	15.5	13.5	20.1	650	C110PA112N0CBK21IMR
14 X 2.5	7.4100	8.8700	16.0	14.0	12.0	21.0	750	C110PA114N0CBK21IMR
16 X 2.5	7.4100	8.8700	15.0	13.0	11.0	22.0	830	C110PA116N0CBK21IMR
19 X 2.5	7.4100	8.8700	14.0	12.0	10.5	23.0	970	C110PA119N0CBK21IMR
24 X 2.5	7.4100	8.8700	13.0	11.0	9.5	26.4	1260	C110PA124N0CBK21IMF
30 X 2.5	7.4100	8.8700	11.5	10.0	8.5	27.8	1380	C110PA130N0CBK21IMF
37 X 2.5	7.4100	8.8700	10.0	9.0	7.5	30.0	1670	C110PA137N0CBK21IMF
4.0 mm²								
5 X 4.0	4.6100	5.5100	31.0	25.5	24.0	18.5	540	C112PA105N0CBK12IMR
7 X 4.0	4.6100	5.5100	28.0	23.0	21.5	19.9	670	C112PA107N0CBK21IMR
10 X 4.0	4.6100	5.5100	25.0	21.0	19.5	23.2	800	C112PA110N0CBK21IMR
12 X 4.0	4.6100	5.5100	23.0	19.5	18.0	23.9	920	C112PA112N0CBK21IMR
14 X 4.0	4.6100	5.5100	20.5	17.0	16.0	25.0	1080	C112PA114N0CBK21IMR
16 X 4.0	4.6100	5.5100	19.5	16.0	15.0	26.2	1230	C112PA116N0CBK21IMR
19 X 4.0	4.6100	5.5100	18.0	15.0	14.0	27.5	1430	C112PA119N0CBK21IMR
24 X 4.0	4.6100	5.5100	16.0	13.5	12.5	32.0	1780	C112PA124N0CBK21IMF
30 X 4.0	4.6100	5.5100	14.5	12.0	11.0	34.0	2210	C112PA130N0CBK21IMF
37 X 4.0	4.6100	5.5100	13.0	11.0	10.0	36.7	2790	C112PA137N0CBK21IMF



Control Cables, with Stranded Copper Conductors, PVC Insulated, Copper Tape Shielded and PVC Sheathed

CONSTRUCTION

- Conductor** : Plain annealed stranded circular copper conductor, as per Class 2 of IEC 60228.
- Insulation** : An extruded layer of Polyvinyl chloride (PVC) insulation, rated 70 °C at normal operation to IEC 60502-1.
- Bedding** : An extruded layer of Polyvinyl chloride (PVC).
- Shielding** : Copper tape applied helically with suitable overlap.
- Outer sheath** : An extruded layer of Polyvinyl chloride (PVC) sheathing compound type ST1 to IEC 60502-1.



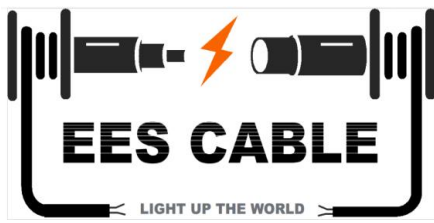
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TECHNICAL DATA

- Nominal voltage $U_0/U = 0.6/1$ kV
- Power frequency test voltage 3.5 kV for 5 minutes
- Max. admissible temperature of conductor at normal operation 70 °C
- Max. admissible temperature of conductor at short circuit 160 °C for 5 seconds

Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
1.5 mm²								
5 X 1.5	12.1000	14.6000	18.0	15.5	13.5	15.7	340	C208PA105N0CBK21IMR
7 X 1.5	12.1000	14.6000	16.0	14.0	12.5	16.5	370	C208PA107N0CBK21IMR
10 X 1.5	12.1000	14.6000	14.0	12.5	11.5	18.9	495	C208PA110N0CBK21IMR
12 X 1.5	12.1000	14.6000	13.0	11.5	10.5	19.4	550	C208PA112N0CBK21IMR
14 X 1.5	12.1000	14.6000	12.0	10.5	9.5	20.2	610	C208PA114N0CBK21IMR
16 X 1.5	12.1000	14.6000	11.0	10.0	9.0	21.1	670	C208PA116N0CBK21IMR
19 X 1.5	12.1000	14.6000	10.0	9.0	8.0	22.1	760	C208PA119N0CBK21IMR
24 X 1.5	12.1000	14.6000	9.0	8.0	7.5	25.3	930	C208PA124N0CBK21IMF
30 X 1.5	12.1000	14.6000	8.0	7.5	6.5	27.5	1115	C208PA130N0CBK21IMF
37 X 1.5	12.1000	14.6000	7.5	6.5	6.0	28.5	1290	C208PA137N0CBK21IMF



CONTROL CABLES / IEC 60502-1

CU / PVC / CT SHIELDED / PVC 0.6 / 1 kV

Number & Nominal cross sectional area	ELECTRICAL DATA					DIMENSIONS AND WEIGHTS		AES Code
	Max. Conductor Resistance		Current Rating			Approx. overall diameter	Approx. overall weight	
	DC at 20 °C	AC at 70 °C	Laid in ground	Laid in ducts	Laid in free air			
No. X mm ²	Ω / km	Ω / km	A	A	A	mm	Kg / km	
2.5 mm²								
5 X 2.5	7.4100	8.8700	24.0	20.5	18.0	15.8	390	C210PA105N0CBK21IMR
7 X 2.5	7.4100	8.8700	22.0	18.5	16.0	16.9	470	C210PA107N0CBK21IMR
10 X 2.5	7.4100	8.8700	20.0	16.5	14.5	20.5	630	C210PA110N0CBK21IMR
12 X 2.5	7.4100	8.8700	18.0	15.5	13.5	21.1	710	C210PA112N0CBK21IMR
14 X 2.5	7.4100	8.8700	16.0	14.0	12.0	22.0	800	C210PA114N0CBK21IMR
16 X 2.5	7.4100	8.8700	15.0	13.0	11.0	23.0	875	C210PA116N0CBK21IMR
19 X 2.5	7.4100	8.8700	14.0	12.0	10.5	24.1	1000	C210PA119N0CBK21IMR
24 X 2.5	7.4100	8.8700	13.0	11.0	9.5	27.7	1225	C210PA124N0CBK21IMF
30 X 2.5	7.4100	8.8700	11.5	10.0	8.5	26.8	1240	C210PA130N0CBK21IMF
37 X 2.5	7.4100	8.8700	10.0	9.0	7.5	31.5	1750	C210PA137N0CBK21IMF
4.0 mm²								
5 X 4.0	4.6100	5.5100	31.0	25.5	24.0	18.5	540	C212PA105N0CBK21IMR
7 X 4.0	4.6100	5.5100	28.0	23.0	21.5	19.9	670	C212PA107N0CBK21IMR
10 X 4.0	4.6100	5.5100	25.0	21.0	19.5	24.4	850	C212PA110N0CBK21IMR
12 X 4.0	4.6100	5.5100	23.0	19.5	18.0	25.2	980	C212PA112N0CBK21IMR
14 X 4.0	4.6100	5.5100	20.5	17.0	16.0	26.3	1160	C212PA114N0CBK21IMR
16 X 4.0	4.6100	5.5100	19.5	16.0	15.0	27.6	1310	C212PA116N0CBK21IMR
19 X 4.0	4.6100	5.5100	18.0	15.0	14.0	29.0	1520	C212PA119N0CBK21IMR
24 X 4.0	4.6100	5.5100	16.0	13.5	12.5	33.8	1900	C212PA124N0CBK21IMF
30 X 4.0	4.6100	5.5100	14.5	12.0	11.0	35.9	2350	C212PA130N0CBK21IMF
37 X 4.0	4.6100	5.5100	13.0	11.0	10.0	38.8	2970	C212PA137N0CBK21IMF