Control Cables, with Solid Copper Conductors, PVC Insulated 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 ºC at normal operation to IEC 60502-1.

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 Uo/U = 0.6/1 kV
- Power frequency test voltage 3.5 kV for 5 minutes
- Max. admissible temperature of conductor at normal operation 70 ºC
- Max. admissible temperature of conductor at short circuit 160 ºC 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 ºC	AC at 70 ºC	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 mm^2								
5 X 1.5	12.1000	14.6000	18.0	15.5	13.5	11.8	200	C108PA10500CBK12IMR
7 X 1.5	12.1000	14.6000	16.0	14.0	12.5	12.7	250	C108PA10700CBK21IMR
10 X 1.5	12.1000	14.6000	14.0	12.5	11.5	15.7	340	C108PA11000CBK21IMR
12 X 1.5	12.1000	14.6000	13.0	11.5	10.5	16.2	385	C108PA11200CBK21IMR
14 X 1.5	12.1000	14.6000	12.0	10.5	9.5	17.0	435	C108PA11400CBK21IMR
16 X 1.5	12.1000	14.6000	11.0	10.0	9.0	17.8	490	C108PA11600CBK21IMR
19 X 1.5	12.1000	14.6000	10.0	9.0	8.0	18.7	560	C108PA11900CBK21IMR
24 X 1.5	12.1000	14.6000	9.0	8.0	7.5	21.7	700	C108PA12400CBK21IMF
30 X 1.5	12.1000	14.6000	8.0	7.5	6.5	23.8	850	C108PA13000CBK21IMF
37 X 1.5	12.1000	14.6000	7.5	6.5	6.0	24.7	1000	C108PA13700CBK21IMF

CONTROL CABLES / IEC 60502-1

CU / PVC / 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 mm^2								
5 X 2.5	7.4100	8.8700	24.0	20.5	18.0	12.9	260	C110PA10500CBK12IMR
7 X 2.5	7.4100	8.8700	22.0	18.5	16.0	13.8	330	C110PA10700CBK21IMR
10 X 2.5	7.4100	8.8700	20.0	16.5	14.5	17.2	450	C110PA11000CBK21IMR
12 X 2.5	7.4100	8.8700	18.0	15.5	13.5	17.7	540	C110PA11200CBK21IMR
14 X 2.5	7.4100	8.8700	16.0	14.0	12.0	18.6	600	C110PA11400CBK21IMR
16 X 2.5	7.4100	8.8700	15.0	13.0	11.0	19.6	670	C110PA11600CBK21IMR
19 X 2.5	7.4100	8.8700	14.0	12.0	10.5	20.6	780	C110PA11900CBK21IMR
24 X 2.5	7.4100	8.8700	13.0	11.0	9.5	24.0	1030	C110PA12400CBK21IMF
30 X 2.5	7.4100	8.8700	11.5	10.0	8.5	25.4	1160	C110PA13000CBK21IMF
37 X 2.5	7.4100	8.8700	10.0	9.0	7.5	27.4	1410	C110PA13700CBK21IMF
4.0 mm^2								
5 X 4.0	4.6100	5.5100	31.0	25.5	24.0	15.3	430	C112PA10500CBK12IMR
7 X 4.0	4.6100	5.5100	28.0	23.0	21.5	16.5	480	C112PA10700CBK21IMR
10 X 4.0	4.6100	5.5100	25.0	21.0	19.5	20.8	670	C112PA11000CBK21IMR
12 X 4.0	4.6100	5.5100	23.0	19.5	18.0	21.5	780	C112PA11200CBK21IMR
14 X 4.0	4.6100	5.5100	20.5	17.0	16.0	22.6	890	C112PA11400CBK21IMR
16 X 4.0	4.6100	5.5100	19.5	16.0	15.0	23.8	1000	C112PA11600CBK21IMR
19 X 4.0	4.6100	5.5100	18.0	15.0	14.0	25.1	1170	C112PA11900CBK21IMR
24 X 4.0	4.6100	5.5100	16.0	13.5	12.5	29.6	1460	C112PA12400CBK21IMF
30 X 4.0	4.6100	5.5100	14.5	12.0	11.0	31.6	1830	C112PA13000CBK21IMF
37 X 4.0	4.6100	5.5100	13.0	11.0	10.0	34.1	2320	C112PA13700CBK21IMF

Control Cables, with Stranded Copper Conductors, PVC Insulated 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 ºC at normal operation to IEC 60502-1.

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 Uo/U = 0.6/1 kV
- Power frequency test voltage 3.5 kV for 5 minutes
- Max. admissible temperature of conductor at normal operation 70 ºC
- Max. admissible temperature of conductor at short circuit 160 ºC 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 ºC	AC at 70 ºC	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 mm^2								
5 X 1.5	12.1000	14.6000	18.0	15.5	13.5	12.3	215	C208PA10500CBK12IMR
7 X 1.5	12.1000	14.6000	16.0	14.0	12.5	13.3	265	C208PA10700CBK21IMR
10 X 1.5	12.1000	14.6000	14.0	12.5	11.5	16.5	360	C208PA11000CBK21IMR
12 X 1.5	12.1000	14.6000	13.0	11.5	10.5	17.0	410	C208PA11200CBK21IMR
14 X 1.5	12.1000	14.6000	12.0	10.5	9.5	17.8	465	C208PA11400CBK21IMR
16 X 1.5	12.1000	14.6000	11.0	10.0	9.0	18.7	530	C208PA11600CBK21IMR
19 X 1.5	12.1000	14.6000	10.0	9.0	8.0	19.7	600	C208PA11900CBK21IMR
24 X 1.5	12.1000	14.6000	9.0	8.0	7.5	22.9	740	C208PA12400CBK21IMF
30 X 1.5	12.1000	14.6000	8.0	7.5	6.5	24.2	890	C208PA13000CBK21IMF
37 X 1.5	12.1000	14.6000	7.5	6.5	6.0	26.1	1070	C208PA13700CBK21IMF

CONTROL CABLES / IEC 60502-1

CU / PVC / 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 mm^2								
5 X 2.5	7.4100	8.8700	24.0	20.5	18.0	13.4	275	C210PA10500CBK12IMR
7 X 2.5	7.4100	8.8700	22.0	18.5	16.0	14.5	350	C210PA10700CBK21IMR
10 X 2.5	7.4100	8.8700	20.0	16.5	14.5	18.1	480	C210PA11000CBK21IMR
12 X 2.5	7.4100	8.8700	18.0	15.5	13.5	18.7	555	C210PA11200CBK21IMR
14 X 2.5	7.4100	8.8700	16.0	14.0	12.0	19.6	630	C210PA11400CBK21IMR
16 X 2.5	7.4100	8.8700	15.0	13.0	11.0	20.6	710	C210PA11600CBK21IMR
19 X 2.5	7.4100	8.8700	14.0	12.0	10.5	21.7	820	C210PA11900CBK21IMR
24 X 2.5	7.4100	8.8700	13.0	11.0	9.5	25.3	1020	C210PA12400CBK21IMF
30 X 2.5	7.4100	8.8700	11.5	10.0	8.5	26.8	1235	C210PA13000CBK21IMF
37 X 2.5	7.4100	8.8700	10.0	9.0	7.5	28.9	1495	C210PA13700CBK21IMF
4.0 mm^2								
5 X 4.0	4.6100	5.5100	31.0	25.5	24.0	16.1	410	C212PA10500CBK12IMR
7 X 4.0	4.6100	5.5100	28.0	23.0	21.5	17.4	520	C212PA10700CBK21IMR
10 X 4.0	4.6100	5.5100	25.0	21.0	19.5	22.0	720	C212PA11000CBK21IMR
12 X 4.0	4.6100	5.5100	23.0	19.5	18.0	22.7	840	C212PA11200CBK21IMR
14 X 4.0	4.6100	5.5100	20.5	17.0	16.0	23.9	950	C212PA11400CBK21IMR
16 X 4.0	4.6100	5.5100	19.5	16.0	15.0	25.2	1070	C212PA11600CBK21IMR
19 X 4.0	4.6100	5.5100	18.0	15.0	14.0	26.6	1260	C212PA11900CBK21IMR
24 X 4.0	4.6100	5.5100	16.0	13.5	12.5	31.4	1580	C212PA12400CBK21IMF
30 X 4.0	4.6100	5.5100	14.5	12.0	11.0	33.5	1965	C212PA13000CBK21IMF
37 X 4.0	4.6100	5.5100	13.0	11.0	10.0	36.2	2510	C212PA13700CBK21IMF