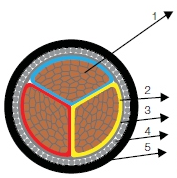
AVOCAB
WIRES & CABLES

THREE CORE ALUMINIUM PVC ARMOURED & UNARMOURED POWER CABLES

No of cores & cross sectional area	Min No of Wires	Thickness of pvc insulation (Nom)	Min Thickness of pvc inner sheath	ARMOURED								UNARMOURED			Max D.C Resistance at 20	Max A.C Resistance at 70	Approx Reactance at 50 Hz	Approx Capacitance	CURRENT RATING		
				Nominal Dimension of Armour		Min. Thickness of pvc outer sheath (approx)		Overall Diameter (Approx)		Approx Net Wt of Cable		Nom. Thickness of outer sheath	Overall Diameter (Approx)	Net Wt. of Cable (Approx)					Direct in Ground	In Duct	In Air
				Wire	Strip	wire	strip	Wire	Strip	Wire	Strip										
		(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(Kg/Km)	(Kg/Km)	(MM)	(MM)	(Kg/Km)	Ohms/Km	Ohms/Km	Ohm/Km	mFd/Km	Amps.	Amps.	Amps .
3 C X1.5	-	0.8	0.3	1.4	-	1.24	-	12.5	-	375	-	1.8	11.5	130	18.100	21.7000	0.1120	0.38	16	14	13
3 C X2.5	-	0.9	0.3	1.4	-	1.24	-	14.0	-	425	-	1.8	12.5	170	12.100	14.5000	0.1100	0.41	21	18	18
3 CX 4	-	1.0	0.3	1.4	-	1.24	-	15.5	-	500	-	1.8	13.5	210	7.410	8.9000	0.1050	0.45	28	23	23
3 C X6	-	1.0	0.3	1.4	-	1.24	-	17.0	-	575	-	1.8	15.0	255	4.610	5.5400	0.0988	0.52	35	30	30
3 C X10	-	1.0	0.3	1.4	-	1.4	-	19.0	-	700	-	1.8	16.5	325	3.080	3.7000	0.0938	0.60	46	39	40
3 C X16	6	1.0	0.3	-	0.8	-	1.40	-	20.0	-	650	1.8	17.5	360	1.910	2.3000	0.0862	0.80	60	50	51
3 C X25	6	1.2	0.3	-	0.8	-	1.40	-	22.0	-	800	2.0	22.0	520	1.200	1.4400	0.0854	0.84	76	63	70
3 C X35	6	1.2	0.3	-	0.8	-	1.40	-	25.0	-	950	2.0	23.0	640	0.868	1.0400	0.0827	0.96	92	77	86
3 C X50	6	1.4	0.3	-	0.8	-	1.56	-	27.0	-	1200	2.0	27.0	850	0.641	0.7700	0.0825	0.98	110	95	105
3 C X70	12	1.4	0.4	-	0.8	-	1.56	-	31.0	-	1500	2.2	31.0	1110	0.443	0.5330	0.0771	1.12	135	115	130
3 C X95	15	1.6	0.4	-	0.8	-	1.56	-	34.0	-	1900	2.2	33.0	1425	0.320	0.3850	0.0767	1.16	165	140	155
3 C X120	15	1.6	0.4	-	0.8	-	1.72	-	38.0	-	2240	2.2	36.0	1690	0.253	0.3050	0.0744	1.28	185	155	180
3 C X150	15	1.8	0.5	-	0.8	-	1.88	-	42.0	-	2700	2.4	41.0	2120	0.206	0.2490	0.0745	1.26	210	175	205
3 C X185	30	2.0	0.5	-	0.8	-	1.88	-	46.0	-	3200	2.6	45.0	2600	0.164	0.1980	0.0744	1.28	235	200	240
3 C X240	30	2.2	0.6	-	0.8	-	2.20	-	52.0	-	3990	2.8	50.0	3290	0.125	0.1520	0.0740	1.31	275	235	280
3 C X300	30	2.4	0.6	-	0.8	-	2.36	-	56.5	-	4850	3.0	55.5	4050	0.100	0.1220	0.0732	1.35	305	260	315
3 CX 400	53	2.6	0.7	-	0.8	-	2.52	-	64.0	-	6100	3.4	63.5	5290	0.078	0.0961	0.0727	1.40	335	290	375
3 C X500	53	3.0	0.7	-	0.8	-	2.84	-	72.0	-	7600	3.8	71.0	6570	0.061	-	-	-	350	310	410

ARMOURED CABLES

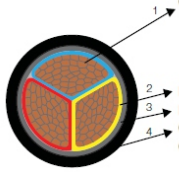
Cross-sectional view



1 Conductor Material : Aluminium / Copper as per Class-2 of IS: 8130
Shape of Conductor : For Al'm Cond. - 4, 6 & 10 Sq.mm Solid / Stranded Non Compacted Circular, 16 Sq.mm and above - Stranded Compacted Shaped
For Cu Cond. - 4 & 6 Sq.mm Solid / Stranded Non Compacted Circular, 10 Sq.mm - Stranded Compacted Circular, 16 Sq.mm and above - Stranded Compacted Shaped
2 Insulation Material : PVC Type-A OR HR PVC Type-C as per IS: 5831; Colour : Red, Yellow & Blue
3 Inner Sheath : PVC Type ST-1 as per IS: 5831; Options : PVC Type ST-2/FR Type/FRLS Type
4 Armouring : Single Layer of Galvanized Steel Round Wire / Flat Strip
5 Outer Sheath : PVC Type ST-1 as per IS: 5831; Options : PVC Type ST-2/FR Type/FRLS Type
Colour of Outer Sheath : Black or any other Colour as per requirement

UNARMOURED CABLES

Cross-sectional view



1 Conductor Material : Aluminium / Copper as per Class-2 of IS: 8130
Shape of Conductor : For Al'm Cond. - For Al'm Cond. - 4, 6 & 10 Sq.mm Solid / Stranded Non Compacted Circular, 16 Sq.mm and above - Stranded Compacted Shaped
For Cu Cond. - 4 & 6 Sq.mm Solid / Stranded Non Compacted Circular, 10 Sq.mm - Stranded Compacted Circular, 16 Sq.mm and above - Stranded Compacted Shaped
2 Insulation Material : PVC Type-A OR HR PVC Type-C as per IS: 5831; Colour : Red, Yelow & Blue
3 Inner Sheath : PVC Type ST-1 as per IS: 5831; Options : PVC Type ST-2/FR Type/FRLS Type
4 Outer Sheath : PVC Type ST-1 as per IS: 5831; Options : PVC Type ST-2/FR Type/FRLS Type
Colour of Outer Sheath : Black or any other Colour as per requirement

THREE CORE COPPER PVC ARMOURED & UNARMOURED POWER CABLES

No of cores & cross sectional area	Min No of Wires	Thickness of pvc insulation (Nom)	Min Thickness of pvc inner sheath	ARMOURED								UNARMOURED			Max D.C Resistance at 20	Max A.C Resistance at 70	Approx Reactance at 50 Hz	Approx Capacitance	CURRENT RATING		
				Nominal Dimension of Armour		Min. Thickness of pvc outer sheath (approx)		Overall Diameter (Approx)		Approx Net Wt of Cable		Nom. Thickness of outer sheath	Overall Diameter (Approx)	Net Wt. of Cable (Approx)					Direct in Ground	In Duct	In Air
				Wire	Strip	wire	strip	Wire	Strip	Wire	Strip										
		(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(MM)	(Kg/Km)	(Kg/Km)	(MM)	(MM)	(Kg/Km)	Ohms/Km	Ohms/Km	Ohm/Km	mFd/Km	Amps.	Amps.	Amps .
3 C X1.5	-	0.8	0.3	1.4	-	1.24	-	12.5	-	405	-	1.8	11.5	160	12.100	14.5000	0.1140	0.37	21	17	17
3 C X2.5	-	0.9	0.3	1.4	-	1.24	-	14.0	-	475	-	1.8	12.5	220	7.410	8.9000	0.1100	0.40	27	24	24
3 CX 4	-	1	0.3	1.4	-	1.24	-	15.5	-	580	-	1.8	13.5	290	4.610	5.5200	0.1060	0.44	36	30	30
3 C X6	-	1	0.3	1.4	-	1.24	-	17.0	-	700	-	1.8	15.5	370	3.080	3.6900	0.1001	0.51	45	38	39
3 C X10	6	1	0.3	1.4	-	1.40	-	19.0	-	890	-	1.8	16.5	510	1.830	2.1900	0.0907	0.67	60	50	52
3 C X16	6	1	0.3	-	0.8	-	1.40	-	20.0	-	950	1.8	17.5	660	1.150	1.3800	0.0862	0.80	77	64	66
3 C X25	6	1.2	0.3	-	0.8	-	1.40	-	22.0	-	1270	2.0	22.0	990	0.727	0.8700	0.0854	0.84	99	81	90
3 C X35	6	1.2	0.3	-	0.8	-	1.40	-	25.0	-	1600	2.0	23.0	1290	0.524	0.6300	0.0827	0.96	120	99	110
3 C X50	6	1.4	0.3	-	0.8	-	1.56	-	27.0	-	2150	2.0	27.0	1780	0.387	0.4640	0.0825	0.98	145	125	135
3 C X70	12	1.4	0.4	-	0.8	-	1.56	-	31.0	-	2800	2.2	31.0	2410	0.268	0.3210	0.0771	1.12	175	150	165
3 C X95	15	1.6	0.4	-	0.8	-	1.56	-	34.0	-	3670	2.2	33.0	3190	0.193	0.2320	0.0767	1.16	210	175	200
3 C X120	18	1.6	0.4	-	0.8	-	1.72	-	38.0	-	4470	2.2	36.0	3920	0.153	0.1840	0.0744	1.28	240	195	230
3 C X150	18	1.8	0.5	-	0.8	-	1.88	-	42.0	-	5500	2.4	41.0	4910	0.124	0.1500	0.0745	1.26	270	225	265
3 C X185	30	2	0.5	-	0.8	-	1.88	-	46.0	-	6650	2.6	45.0	6040	0.099	0.1210	0.0744	1.28	300	255	305
3 C X240	34	2.2	0.6	-	0.8	-	2.2	-	52.0	-	8450	2.8	50.0	7750	0.075	0.0930	0.074	1.31	345	295	355
3 C X300	34	2.4	0.6	-	0.8	-	2.36	-	56.0	-	10450	3.0	55.5	9620	0.060	0.0750	0.0732	1.35	385	335	400
3 CX 400	53	2.6	0.7	-	0.8	-	2.52	-	64.0	-	13525	3.4	63.5	12715	0.047	0.0604	0.0727	1.4	425	360	455
3 C X500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-