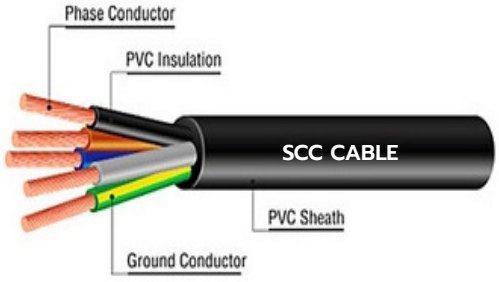
VCT

450/750 V 70 °C FLEXIBLE CONDUCTOR PVC INSULATED AND SHEATHED, ROUND TYPE

REF. TIS 11 PART 101-2553 TABLE 7



CABLE STRUCTURE

Conductor	: Flexible annealed copper, Single-core : Sizes 4 mm² up to 35 mm² Multi-cores : Sizes 4 mm² up to 35 mm²
Insulation	: Polyvinyl chloride (PVC/D)
Core identification	: Single-core : Black 2 Cores : Blue and Brown 3 Cores : Brown, Black and Grey 4 Cores : Blue, Brown, Black and Grey
Sheath	: Black polyvinyl chloride (PVC/ST5)

TECHNICAL DATA

Classification	: Maximum concuctor temperature 70 °C : Circuit voltage not exceeding 450/750 Volts
Rated voltage	: 450 Volts between Line to Earth : 750 Volts between Line to Line
Testing voltage	: 2,500 Volts
Reference standard	: Tis 11 Part 101-2553 Table 7
APPLICATION	: For mobile-electrical equipment used in mines, factories farm or household appliances. This cable is suitable for use in places where cables come in contact with oils.

Number of core	Nominal cross sectional area (mm²)	Class of Conductor	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter Maximum (mm)	Conductor resistance at 20 °C maximum (Ω/km)	Insulation resistance at 70 °C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	4	5	0.9	1.4	8.6	4.95	0.0084	41	90	100/C
	6	5	0.9	1.4	9.4	3.30	0.0071	53	120	100/C
	10	5	1.1	1.8	12.0	1.91	0.0068	74	210	100/C
	16	5	1.1	1.8	13.5	1.21	0.0050	99	270	100/C
	25	5	1.3	2.2	16.0	0.780	0.0048	129	410	100/C
	35	5	1.3	2.2	17.5	0.554	0.0041	160	550	500/D
2	4	5	0.9	1.6	14.5	4.95	0.0084	34	230	100/C
	6	5	0.9	1.6	16.0	3.30	0.0071	44	320	100/C

Number of core	Nominal cross sectional area (mm²)	Class of Conductor	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter Maximum (mm)	Conductor resistance at 20 °C maximum (Ω/km)	Insulation resistance at 70 °C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
2	10	5	1.1	1.8	20.0	4.95	0.0084	41	90	100/C
	16	5	1.1	2.2	23.0	3.30	0.0071	53	120	100/C
	25	5	1.3	2.4	27.5	1.91	0.0068	74	210	100/C
	35	5	1.3	2.6	31.0	1.21	0.0050	99	270	100/C
3	4	5	0.9	1.6	15.5	0.780	0.0084	29	280	100/C
	6	5	0.9	1.8	17.5	0.554	0.0071	38	390	500/D
	10	5	1.1	2.0	21.5	4.95	0.0068	53	650	500/D
	16	5	1.1	2.4	25.0	3.30	0.0050	71	900	500/D
	25	5	1.3	2.6	30.0	0.780	0.0048	94	1,300	500/D
	35	5	1.3	2.8	33.5	0.554	0.0041	116	1,700	500/D
4	4	5	0.9	1.8	17.0	4.95	0.0084	29	350	100/C
	6	5	0.9	2.0	19.5	3.30	0.0071	38	490	100/C
	10	5	1.1	2.2	24.0	1.91	0.0068	53	800	500/D
	16	5	1.1	2.6	28.0	1.21	0.0050	71	1,100	500/D
	25	5	1.3	2.8	33.0	0.780	0.0048	94	1,700	500/D
	35	5	1.3	3.1	37.0	0.554	0.0041	116	2,200	500/D

Class Of Conductor

5 : Flexible
C : Packing in coil (บรรจุในขด), D : Packing in drum (บรรจุในล้อ)

Number of core	Nominal crosssectional area (mm²)	A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω-km)
1	4	5.9200	0.58267	0.18305	5.9228
	6	3.9500	0.54956	0.17265	3.9538
	10	2.2900	0.54230	0.17037	2.2963
	16	1.4500	0.52085	0.16363	1.4592
	25	0.9334	0.51783	0.16268	0.9475
	35	0.6630	0.49968	0.15698	0.6813
2	4	5.9200	0.29835	0.09373	5.9207
	6	3.9500	0.27741	0.08715	3.9510
	10	2.2900	0.29736	0.08474	2.4418
	16	1.4520	0.25745	0.08088	1.4543
	25	0.9369	0.25468	0.08001	0.9403
	35	0.6677	0.24497	0.07696	0.6721
3	4	5.9200	0.27741	0.09373	5.9207
	6	3.9500	0.27741	0.08715	3.9510
	10	2.2900	0.26977	0.08475	2.2916
	16	1.4500	0.25745	0.08088	1.4523
	25	0.9335	0.25468	0.08001	0.9369
	35	0.6632	0.24497	0.07696	0.6677
4	4	5.9200	0.34495	0.10837	5.9210
	6	3.9500	0.32410	0.10182	3.9513
	10	2.2900	0.31624	0.09935	2.2922
	16	1.4500	0.30417	0.09556	1.7366
	25	0.9335	0.30171	0.09469	0.9383
	35	0.6631	0.29062	0.09130	0.6694