

60227 IEC 01 THW

 TIS 11 Part 3-2553

450/750 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED, SINGLE CORE



CONDUCTOR

INSULATION

CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Solid and stranded annealed copper, Size 1.5 mm ² up to 400 mm ²	Classification	: Maximum conductor temperature 70°C : Circuit voltage not exceeding 450/750 Volts 450 Volts between Line-to-Earth 750 Volts between Line-to-Line
Insulation	: Polyvinyl chloride (PVC/C)	Testing voltage	: 2,500 Volts
Core identification	Single-core : Any color	Reference standard	: TIS 11 Part 3-2553, Table 1
APPLICATION			
Building wiring for installation on insulator or in raceway, dry location.			

Nominal cross sectional area (mm ²)	Class of conductor	Insulation thickness nominal (mm)	Overall diameter		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)
			Minimum (mm)	Maximum (mm)					
1.5	1	0.7	2.6	3.2	12.1	0.011	21	21	100/C
1.5	2	0.7	2.7	3.3	12.1	0.010	21	22	100/C
2.5	1	0.8	3.2	3.9	7.41	0.010	29	32	100/C
2.5	2	0.8	3.3	4.0	7.41	0.009	29	35	100/C
4	1	0.8	3.6	4.4	4.61	0.0085	39	47	100/C
4	2	0.8	3.8	4.6	4.61	0.0077	39	50	100/C
6	1	0.8	4.1	5.0	3.08	0.0070	49	65	100/C
6	2	0.8	4.3	5.2	3.08	0.0065	49	70	100/C
10	1	1.0	5.3	6.4	1.83	0.0070	69	110	100/C
10	2	1.0	5.6	6.7	1.83	0.0065	69	120	100/C
16	2	1.0	6.4	7.8	1.15	0.0050	92	180	100/C
25	2	1.2	8.1	9.7	0.727	0.0050	125	280	100/C
35	2	1.2	9.0	10.9	0.524	0.0043	154	370	100/C
50	2	1.4	10.6	12.8	0.387	0.0043	188	500	500/D
70	2	1.4	12.1	14.6	0.268	0.0035	239	700	500/D
95	2	1.6	14.1	17.1	0.193	0.0035	297	1,000	500/D
120	2	1.6	15.6	18.8	0.153	0.0032	347	1,200	500/D
150	2	1.8	17.3	20.9	0.124	0.0032	398	1,500	500/D
185	2	2.0	19.3	23.3	0.0991	0.0032	461	1,900	500/D
240	2	2.2	22.0	26.6	0.0754	0.0032	552	2,500	500/D
300	2	2.4	24.5	29.6	0.0601	0.0030	640	3,100	500/D
400	2	2.6	27.5	33.2	0.0470	0.0028	749	3,900	500/D

Class of conductor 1 : Solid
2 : Strand

C : Packing in coil
D : Packing in drum

60227 IEC 01 THW

 TIS 11 Part 3-2553

450/750 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED, SINGLE CORE



CONDUCTOR

INSULATION

CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Solid and stranded annealed copper, Size 1.5 mm ² up to 400 mm ²	Classification	: Maximum conductor temperature 70°C : Circuit voltage not exceeding 450/750 Volts 450 Volts between Line-to-Earth 750 Volts between Line-to-Line
Insulation	: Polyvinyl chloride (PVC/C)	Testing voltage	: 2,500 Volts
Core identification	: Single-core : Any color	Reference standard	: TIS 11 Part 3-2553, Table 1
APPLICATION			
Building wiring for installation on insulator or in raceway, dry location.			

Size mm ²	A.C. Resistance R (Ohm/km.)	Inductance L (mH/km.)	Reactance XL (Ohm/km.)	Impedance Z (Ohm/km.)
1.5(1)	14.5	0.53540	0.1682	14.5010
1.5(7)	14.5	0.52489	0.1649	14.5009
2.5(1)	8.87	0.50866	0.1598	8.8714
2.5(7)	8.87	0.50102	0.1574	8.8714
4(1)	5.52	0.49847	0.1566	5.5222
4(7)	5.52	0.48701	0.1530	5.5221
6(1)	3.69	0.47174	0.1482	3.6930
6(7)	3.69	0.47174	0.1482	3.6930
10(1)	2.19	0.47174	0.1461	2.1949
10(7)	2.19	0.46505	0.1461	2.1949
16	1.38	0.44786	0.1407	1.3872
25	0.861	0.44532	0.1399	0.8723
35	0.6271	0.43481	0.1366	0.6418
50	0.4633	0.43481	0.1366	0.4830
70	0.3210	0.42590	0.1338	0.3478
95	0.2314	0.42367	0.1331	0.2669
120	0.1837	0.41953	0.1318	0.2261
150	0.1492	0.41921	0.1317	0.1990
185	0.1196	0.41858	0.1315	0.1778
240	0.0915	0.41635	0.1308	0.1596
300	0.0736	0.41508	0.1304	0.1497
400	0.0583	0.41317	0.1298	0.1423

() : No of copper wire