60227 IEC 10 NYY

TIS 11 Part 4-2553

300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

CABLE STRUCTURE

Conductor : Solid and Stranded annealed copper, Multi-core
Insulation : Polyvinyl chloride (PVC/C)
Core identification
2 Cores : Blue and Brown
3 Cores : Brown, Black and Grey
or Blue, Brown and Green/Yellow
4 Cores : Blue, Brown, Black and Grey
or Brown, Black, Grey and Green/Yellow
5 Cores : Blue, Brown, Black, Grey and Black
or Blue, Brown, Black, Grey and Green/Yellow
Inner sheath : Black polyvinyl chloride (PVC)
Outer sheath : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 300/500 Volts
300 Volts between Line-to-Earth
500 Volts between Line-to-Line

Testing voltage : 2,000 Volts
Reference standard : TIS 11 Part 4-2553, Table 1

APPLICATION

For installation exposed, or in raceway, wet or dry location.

Number of core	Nominal cross sectional area (mm²)	Class of conductor	Insulation thickness nominal (mm)	Inner sheath thickness nominal (mm)	Outer sheath 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)					
2	1.5	1	0.7	0.4	1.2	7.6	10.0	12.1	0.011	19	120	100/C
	1.5	2	0.7	0.4	1.2	7.8	10.5	12.1	0.010	19	130	100/C
	2.5	1	0.8	0.4	1.2	8.6	11.5	7.41	0.010	26	160	100/C
	2.5	2	0.8	0.4	1.2	9.0	12.0	7.41	0.009	26	180	100/C
	4	1	0.8	0.4	1.2	9.6	12.5	4.61	0.0085	34	210	100/C
	4	2	0.8	0.4	1.2	10.0	13.0	4.61	0.0077	34	220	100/C
	6	1	0.8	0.4	1.2	10.5	13.5	3.08	0.0070	44	270	100/C
	6	2	0.8	0.4	1.2	11.0	14.0	3.08	0.0065	44	190	100/C
	10	1	1.0	0.6	1.4	13.0	16.5	1.83	0.0070	60	420	500/D
	10	2	1.0	0.6	1.4	13.5	17.5	1.83	0.0065	60	460	500/D
	16	2	1.0	0.6	1.4	15.5	20.0	1.15	0.0052	80	650	500/D
	25	2	1.2	0.8	1.4	18.5	24.0	0.727	0.0050	107	950	500/D
	35	2	1.2	1.0	1.6	21.0	27.5	0.524	0.0044	131	1,300	500/D

Class of conductor
1 : Solid
2 : Strand

C : Packing in coil
D : Packing in drum

60227 IEC 10 NYY

TIS 11 Part 4-2553

300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

CABLE STRUCTURE

Conductor : Solid and Stranded annealed copper, Multi-core
Insulation : Polyvinyl chloride (PVC/C)
Core identification
2 Cores : Blue and Brown
3 Cores : Brown, Black and Grey
or Blue, Brown and Green/Yellow
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or Brown, Black, Grey and Green/Yellow
5 Cores : Blue, Brown, Black, Grey and Black
or Blue, Brown, Black, Grey and Green/Yellow
Inner sheath : Black polyvinyl chloride (PVC)
Outer sheath : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum conductor temperature 70ºC
: Circuit voltage not exceeding 300/500 Volts
300 Volts between Line-to-Earth
500 Volts between Line-to-Line

Testing voltage : 2,000 Volts
Reference standard : TIS 11 Part 4-2553, Table 1

APPLICATION

For installation exposed, or in raceway, wet or dry location.

Number of core	Nominal cross sectional area (mm²)	A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω/km)
2	1.5 (1)	14.47766	0.33715	0.10592	14.47805
	1.5 (7)	14.47766	0.32216	0.10121	14.47801
	2.5 (1)	8.86608	0.32386	0.10174	8.86666
	2.5 (7)	8.86608	0.31600	0.09928	8.86664
	4 (1)	5.51589	0.30370	0.09541	5.51672
	4 (7)	5.51589	0.29313	0.09209	5.51666
	6 (1)	3.68527	0.28640	0.08997	3.68636
	6 (7)	3.68527	0.27891	0.08762	3.68631
	10 (1)	2.18967	0.28221	0.08866	2.19147
	10 (7)	2.18968	0.27380	0.08602	2.19137
	16 (7)	1.37612	0.25760	0.08093	1.37850
	25 (7)	0.87009	0.25619	0.08048	0.87380
	35 (19)	0.62731	0.24617	0.07734	0.63206

( ) : No of copper wire

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TIS 11 Part 4-2553

300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

CABLE STRUCTURE

Conductor : Solid and Stranded annealed copper, Multi-core
Insulation : Polyvinyl chloride (PVC/C)
Core identification
2 Cores : Blue and Brown
3 Cores : Brown, Black and Grey
or Blue, Brown and Green/Yellow
4 Cores : Blue, Brown, Black and Grey
or Brown, Black, Grey and Green/Yellow
5 Cores : Blue, Brown, Black, Grey and Black
or Blue, Brown, Black, Grey and Green/Yellow
Inner sheath : Black polyvinyl chloride (PVC)
Outer sheath : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 300/500 Volts
300 Volts between Line-to-Earth
500 Volts between Line-to-Line
Testing voltage : 2,000 Volts
Reference standard : TIS 11 Part 4-2553, Table 1

APPLICATION

For installation exposed, or in raceway, wet or dry location.

Number of core	Nominal cross sectional area (mm^2)	Class of conductor	Insulation thickness nominal (mm)	Inner sheath thickness nominal (mm)	Outer sheath 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)					
3	1.5	1	0.7	0.4	1.2	8.0	10.5	12.1	0.011	17	140	100/C
	1.5	2	0.7	0.4	1.2	8.2	11.0	12.1	0.010	17	150	100/C
	2.5	1	0.8	0.4	1.2	9.2	12.0	7.41	0.010	22	190	100/C
	2.5	2	0.8	0.4	1.2	9.4	12.5	7.41	0.009	22	210	100/C
	4	1	0.8	0.4	1.2	10.0	13.0	4.61	0.0085	29	250	100/C
	4	2	0.8	0.4	1.2	10.5	13.5	4.61	0.0077	29	270	100/C
	6	1	0.8	0.4	1.4	11.5	14.5	3.08	0.0070	37	340	100/C
	6	2	0.8	0.4	1.4	12.0	15.5	3.08	0.0065	37	370	100/C
	10	1	1.0	0.6	1.4	14.0	17.5	1.83	0.0070	52	520	500/D
	10	2	1.0	0.6	1.4	14.5	19.0	1.83	0.0065	52	570	500/D
	16	2	1.0	0.8	1.4	16.5	27.5	1.15	0.0052	69	810	500/D
	25	2	1.2	0.8	1.6	20.5	26.0	0.727	0.0050	92	1,200	500/D
	35	2	1.2	1.0	1.6	22.0	29.0	0.524	0.0040	113	1,600	500/D

Class of conductor
1 : Solid
2 : Strand

C : Packing in coil
D : Packing in drum

60227 IEC 10 NYY

TIS 11 Part 4-2553

300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

CABLE STRUCTURE

Conductor : Solid and Stranded annealed copper, Multi-core
Insulation : Polyvinyl chloride (PVC/C)
Core identification
2 Cores : Blue and Brown
3 Cores : Brown, Black and Grey
or Blue, Brown and Green/Yellow
4 Cores : Blue, Brown, Black and Grey
or Brown, Black, Grey and Green/Yellow
5 Cores : Blue, Brown, Black, Grey and Black
or Blue, Brown, Black, Grey and Green/Yellow
Inner sheath : Black polyvinyl chloride (PVC)
Outer sheath : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum conductor temperature 70ºC
: Circuit voltage not exceeding 300/500 Volts
300 Volts between Line-to-Earth
500 Volts between Line-to-Line

Testing voltage : 2,000 Volts
Reference standard : TIS 11 Part 4-2553, Table 1

APPLICATION

For installation exposed, or in raceway, wet or dry location.

Number of core	Nominal cross sectional area (mm^2)	A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω/km)
3	1.5 (1)	14.47766	0.33715	0.10592	14.47805
	1.5 (7)	14.47766	0.32216	0.10121	14.47801
	2.5 (1)	8.86608	0.32386	0.10174	8.86666
	2.5 (7)	8.86608	0.31600	0.09928	8.86664
	4 (1)	5.51589	0.30370	0.09541	5.51672
	4 (7)	5.51589	0.29313	0.09209	5.51666
	6 (1)	3.68527	0.28640	0.08997	3.68636
	6 (7)	3.68527	0.27891	0.08762	3.68631
	10 (1)	2.18967	0.28221	0.08866	2.19147
	10 (7)	2.18968	0.27380	0.08602	2.19137
	16 (7)	1.37612	0.25760	0.08093	1.37850
	25 (7)	0.87009	0.25619	0.08048	0.87380
	35 (19)	0.62731	0.24617	0.07734	0.63206

(_) : No of copper wire

60227 IEC 10 NYY

TIS 11 Part 4-2553

300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

CABLE STRUCTURE

Conductor : Solid and Stranded annealed copper, Multi-core
Insulation : Polyvinyl chloride (PVC/C)
Core identification
2 Cores : Blue and Brown
3 Cores : Brown, Black and Grey
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4 Cores : Blue, Brown, Black and Grey
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5 Cores : Blue, Brown, Black, Grey and Black
or Blue, Brown, Black, Grey and Green/Yellow
Inner sheath : Black polyvinyl chloride (PVC)
Outer sheath : Black polyvinyl chloride (PVC/ST4)

TECHNICAL DATA

Classification : Maximum conductor temperature 70ºC
:Circuit voltage not exceeding 300/500 Volts
300 Volts between Line-to-Earth
500 Volts between Line-to-Line

Testing voltage : 2,000 Volts
Reference standard :TIS 11 Part 4-2553, Table 1

APPLICATION

For installation exposed, or in raceway, wet or dry location.

Number of core	Nominal cross sectional area (mm^2)	Class of conductor	Insulation thickness nominal (mm)	Inner sheath thickness nominal (mm)	Outer sheath 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)					
4	1.5	1	0.7	0.4	1.2	8.6	11.5	12.1	0.011	17	160	100/C
	1.5	2	0.7	0.4	1.2	9.0	12.0	12.1	0.010	17	180	100/C
	2.5	1	0.8	0.4	1.2	10.0	13.0	7.41	0.010	22	230	100/C
	2.5	2	0.8	0.4	1.2	10.0	13.5	7.41	0.009	22	250	100/C
	4	1	0.8	0.4	1.4	11.5	14.5	4.61	0.0085	29	320	100/C
	4	2	0.8	0.4	1.4	12.0	15.0	4.61	0.0077	29	340	100/C
	6	1	0.8	0.6	1.4	12.5	16.0	3.08	0.0070	37	440	500/D
	6	2	0.8	0.6	1.4	13.0	17.0	3.08	0.0065	37	470	500/D
	10	1	1.0	0.6	1.4	15.5	19.0	1.83	0.0070	52	660	500/D
	10	2	1.0	0.6	1.4	16.0	20.5	1.83	0.0065	52	700	500/D
	16	2	1.0	0.8	1.4	18.0	23.5	1.15	0.0052	69	1,000	500/D
	25	2	1.2	1.0	1.6	22.5	28.5	0.727	0.0050	92	1,600	500/D
	35	2	1.2	1.0	1.6	24.5	32.0	0.524	0.0044	113	2,000	500/D

Class of conductor
1 : Solid
2 : Strand

C : Packing in coil
D : Packing in drum

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TIS 11 Part 4-2553

300/500 V 70°C SOLID AND STRANDED CONDUCTOR PVC INSULATED AND DOUBLE SHEATHED

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Inner sheath : Black polyvinyl chloride (PVC)
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TECHNICAL DATA

Classification : Maximum conductor temperature 70ºC
: Circuit voltage not exceeding 300/500 Volts
300 Volts between Line-to-Earth
500 Volts between Line-to-Line

Testing voltage : 2,000 Volts
Reference standard :TIS 11 Part 4-2553, Table 1

APPLICATION

For installation exposed, or in raceway, wet or dry location.

Number of core	Nominal cross sectional area (mm^2)	A.C. Resistance R (Ω/km)	Inductance L (mH/km)	Reactance XL (Ω/km)	Impedance Z (Ω/km)
4	1.5 (1)	14.47766	0.37758	0.11862	14.47814
	1.5 (7)	14.47766	0.36259	0.11391	14.47811
	2.5 (1)	8.86608	0.36428	0.11444	8.86682
	2.5 (7)	8.86608	0.35643	0.11198	8.86679
	4 (1)	5.51589	0.34413	0.10811	5.51695
	4 (7)	5.51589	0.33356	0.10479	5.51689
	6 (1)	3.68526	0.32682	0.10267	3.68669
	6 (7)	3.68526	0.31933	0.10032	3.68662
	10 (1)	2.18966	0.32263	0.10136	2.19201
	10 (7)	2.18966	0.31422	0.09872	2.19189
	16 (7)	1.37609	0.29802	0.09363	1.37927
	25 (7)	0.87004	0.29662	0.09318	0.87502
	35 (19)	0.62724	0.28659	0.09004	0.63367

(_) : No of copper wire

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TECHNICAL DATA

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						Minimum (mm)	Maximum (mm)					
5	1.5	1	0.7	0.7	1.2	9.4	12.0	12.1	0.011	17	200	100/C
	1.5	2	0.7	0.7	1.2	9.8	12.5	12.1	0.010	17	220	100/C
	2.5	1	0.8	0.8	1.2	11.0	14.0	7.41	0.010	22	280	100/C
	2.5	2	0.8	0.8	1.2	11.0	14.5	7.41	0.009	22	310	100/C
	4	1	0.8	0.8	1.4	12.5	16.0	4.61	0.0085	29	410	100/C
	4	2	0.8	0.8	1.4	13.0	17.0	4.61	0.0077	29	430	100/C
	6	1	0.8	0.8	1.4	13.5	17.5	3.08	0.0070	37	530	500/D
	6	2	0.8	0.8	1.4	14.5	18.5	3.08	0.0065	37	570	500/D
	10	1	1.0	1.0	1.4	17.0	21.0	1.83	0.0070	52	800	500/D
	10	2	1.0	1.0	1.4	17.5	22.0	1.83	0.0065	52	870	500/D
	16	2	1.0	1.0	1.6	20.5	26.0	1.15	0.0052	69	1,300	500/D
	25	2	1.2	1.2	1.6	24.5	31.5	0.727	0.0050	92	1,900	500/D
	35	2	1.2	1.2	1.6	27.0	35.0	0.524	0.0044	113	2,500	500/D

Class of conductor
1 : Solid
2 : Strand

C : Packing in coil
D : Packing in drum

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TIS 11 Part 4-2553

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TECHNICAL DATA

Classification : Maximum conductor temperature 70°C
: Circuit voltage not exceeding 300/500 Volts
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500 Volts between Line-to-Line

Testing voltage : 2,000 Volts
Reference standard : TIS 11 Part 4-2553, Table 1

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	6 (7)	3.68526	0.31933	0.10032	3.68662
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	10 (7)	2.18966	0.31422	0.09872	2.19189
	16 (7)	1.37609	0.29802	0.09363	1.37927
	25 (7)	0.87004	0.29662	0.09318	0.87502
	35 (19)	0.62724	0.28659	0.09004	0.63367

(_) : No of copper wire