



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



CABLE STRUCTURE **TECHNICAL DATA**

Conductor Classification : Maximum conductor temperature 70°C : Solid and Stranded annealed copper,

: Circuit voltage not exceeding 300/500 Volts Multi-core

: Polyvinyl chloride (PVC/C) 300 Volts between Line-to-Earth Core identification 500 Volts between Line-to-Line

2 Cores : Blue and Brown 3 Cores: Brown, Black and Grey Testing voltage : 2,000 Volts

Reference standard : TIS 11 Part 4-2553, Table 1 or Blue, Brown and Green/Yellow

APPLICATION or Brown, Black, Grey and Green/Yellow For installation exposed, or in raceway, wet or dry 5 Cores : Blue, Brown, Black, Grey and Black

or Blue, Brown, Black, Grey and Green/Yellow location.

: Black polyvinyl chloride (PVC) Inner sheath : Black polyvinyl chloride (PVC/ST4) **Outer sheath**

4 Cores : Blue, Brown, Black and Grey

Insulation

Number	Nominal	Class of	Insulation	Inner sheath	Outer	Ove	erall	Conductor	Insulation	Continuous	Cable	Standard
of	cross	conductor	thickness	thickness	sheath	dian	neter	resistance	resistance	current rating	weight	length
core	sectional		nominal	nominal	thickness	Minimum	Maximum	at 20°C	at 70°C	in free air	approx.	
	area				nominal	IVIIIIIIIIIIIIII	WIGAIITIGITT	maximum	minimum	maximum		
	(mm²)		(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(MΩ-km)	(A)	(kg/km)	(m)
	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
2	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	8.0	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 C : Packing in coil 1 : Solid 2: Strand

D: Packing in drum



: Black polyvinyl chloride (PVC/ST4)



TIS 11 Part 4-2553

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



TECHNICAL DATA CABLE STRUCTURE : Solid and Stranded annealed copper, Classification : Maximum conductor temperature 70°C Conductor : Circuit voltage not exceeding 300/500 Volts Multi-core : Polyvinyl chloride (PVC/C) 300 Volts between Line-to-Earth Insulation Core identification 500 Volts between Line-to-Line 2 Cores : Blue and Brown 3 Cores : Brown, Black and Grey Testing voltage : 2,000 Volts Reference standard or Blue, Brown and Green/Yellow : TIS 11 Part 4-2553, Table 1 4 Cores : Blue, Brown, Black and Grey **APPLICATION** or Brown, Black, Grey and Green/Yellow 5 Cores : Blue, Brown, Black, Grey and Black For installation exposed, or in raceway, wet or dry or Blue, Brown, Black, Grey and Green/Yellow location. Inner sheath : Black polyvinyl chloride (PVC)

Number	Nominal	A.C. Resistance	Inductance	Reactance	Impedance
of	cross				
core	sectional				
	area	R	L	XL	Z
	(mm²)	(Ω/km)	(mH/km)	(Ω/km)	(Ω/km)
	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
2	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

Outer sheath





: 2,000 Volts

TIS 11 Part 4-2553

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



CABLE STRUCTURE TECHNICAL DATA

Conductor : Solid and Stranded annealed copper, Classification : Maximum conductor temperature 70°C

Multi-core : Circuit voltage not exceeding 300/500 Volts

Testing voltage

Insulation : Polyvinyl chloride (PVC/C)

Core identification : Polyvinyl chloride (PVC/C)

500 Volts between Line-to-Line

2 Cores : Blue and Brown

or Blue, Brown and Green/Yellow Reference standard: TIS 11 Part 4-2553, Table 1

or Brown, Black, Grey and Green/Yellow

APPLICATION

5 Cores : Blue, Brown, Black, Grey and Black For installation exposed, or in raceway, wet or dry or Blue, Brown, Black, Grey and Green/Yellow location.

Inner sheath : Black polyvinyl chloride (PVC)

Outer sheath : Black polyvinyl chloride (PVC/ST4)

4 Cores : Blue, Brown, Black and Grey

3 Cores : Brown, Black and Grey

Number	Nominal	Class of	Insulation	Inner sheath	Outer	Ove	erall	Conductor	Insulation	Continuous	Cable	Standard
of	cross	conductor	thickness	thickness	sheath	dian	neter	resistance	resistance	current rating	weight	length
core	sectional		nominal	nominal	thickness	Minimum	Maximum	at 20°C	at 70°C	in free air	approx.	
	area				nominal	William		maximum	minimum	maximum		
	(mm²)		(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(MΩ-km)	(A)	(kg/km)	(m)
	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
3	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 C : Packing in coil

2 : Strand D : Packing in drum





TIS 11 Part 4-2553

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



CABLE STRUCTURE TECHNICAL DATA

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)

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	Nominal	A.C. Resistance	Inductance	Reactance	Impedance
	cross	74.O. I COIStarioc	madotanoc	rtcaotarioc	Impedance
of					
core	sectional		_	5.71	_
	area	R	L.	XL	Z
	(mm²)	(Ω/km)	(mH/km)	(Ω/km)	(Ω/km)
	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
3	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





TIS 11 Part 4-2553

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



CABLE STRUCTURE TECHNICAL DATA

Conductor : Solid and Stranded annealed copper, Classification : Maximum conductor temperature 70°C

Multi-core :Circuit voltage not exceeding 300/500 Volts

Insulation : Polyvinyl chloride (PVC/C)

300 Volts between Line-to-Earth

Core identification 500 Volts between Line-to-Line 2 Cores : Blue and Brown

3 Cores: Brown, Black and Grey : 2,000 Volts

or Blue, Brown and Green/Yellow Reference standard :TIS 11 Part 4-2553, Table 1

or Brown, Black, Grey and Green/Yellow APPLICATION

5 Cores : Blue, Brown, Black, Grey and Black For installation exposed, or in raceway, wet or dry or Blue, Brown, Black, Grey and Green/Yellow location.

Inner sheath : Black polyvinyl chloride (PVC)

Outer sheath : Black polyvinyl chloride (PVC/ST4)

4 Cores: Blue, Brown, Black and Grey

Number	Nominal	Class of	Insulation	Inner sheath	Outer	Ove	erall	Conductor	Insulation	Continuous	Cable	Standard
of	cross	conductor	thickness	thickness	sheath	dian	neter	resistance	resistance	current rating	weight	length
core	sectional		nominal	nominal	thickness	Minimum	Maximum	at 20°C	at 70°C	in free air	approx.	
	area				nominal	William	IVIGAIIIIGIII	maximum	minimum	maximum		
	(mm²)		(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(MΩ-km)	(A)	(kg/km)	(m)
	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	8.0	0.4	1.4	12.0	15.0	4.61	0.0077	29	340	100/C
4	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 C : Packing in coil D : Packing in drum

THAI-YAZAKI





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



CABLE STRUCTURE TECHNICAL DATA

Conductor : Solid and Stranded annealed copper, Classification : Maximum conductor temperature 70°C

Multi-core : Circuit voltage not exceeding 300/500 Volts : Polyvinyl chloride (PVC/C) : 300 Volts between Line-to-Earth

Core identification

2 Cores: Blue and Brown

500 Volts between Line-to-Line

3 Cores: Brown, Black and Grey : 2,000 Volts

or Blue, Brown and Green/Yellow Reference standard :TIS 11 Part 4-2553, Table 1

or Brown, Black, Grey and Green/Yellow

APPLICATION

Fig. 1. Control of the Contr

5 Cores: Blue, Brown, Black, Grey and Black For installation exposed, or in raceway, wet or dry or Blue, Brown, Black, Grey and Green/Yellow location.

Inner sheath : Black polyvinyl chloride (PVC)

Outer sheath : Black polyvinyl chloride (PVC/ST4)

4 Cores: Blue, Brown, Black and Grey

Insulation

Number	Nominal	A.C. Resistance	Inductance	Reactance	Impedance
of	cross				
core	sectional				
	area	R	L	XL	Z
	(mm²)	(Ω/km)	(mH/km)	(Ω/km)	(Ω/km)
	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	4 (1)	5.51589	0.34413	0.10811	5.51695
4	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





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



CABLE STRUCTURE TECHNICAL DATA

Conductor : Solid and Stranded annealed copper, Classification : Maximum conductor temperature 70°C

Multi-core : Circuit voltage not exceeding 300/500 Volts

Insulation : Polyvinyl chloride (PVC/C)

300 Volts between Line-to-Earth

Core identification 500 Volts between Line-to-Line

3 Cores: Brown, Black and Grey : 2,000 Volts

or Blue, Brown and Green/Yellow Reference standard: TIS 11 Part 4-2553, Table 1
4 Cores: Blue, Brown, Black and Grey

or Brown, Black, Grey and Green/Yellow
5 Cores: Blue, Brown, Black, Grey and Black
For installation exposed, or in raceway, wet or dry

or Blue, Brown, Black, Grey and Green/Yellow location.

Inner sheath : Black polyvinyl chloride (PVC)

Outer sheath : Black polyvinyl chloride (PVC/ST4)

2 Cores: Blue and Brown

Number	Nominal	Class of	Insulation	Inner sheath	Outer	Ove	erall	Conductor	Insulation	Continuous	Cable	Standard
of	cross	conductor	thickness	thickness	sheath	dian	neter	resistance	resistance	current rating	weight	length
core	sectional		nominal	nominal	thickness	Minimum	Maximum	at 20°C	at 70°C	in free air	approx.	
	area				nominal	William	WEATHER	maximum	minimum	maximum		
	(mm²)		(mm)	(mm)	(mm)	(mm)	(mm)	(Ω/km)	(MΩ-km)	(A)	(kg/km)	(m)
	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	8.0	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	8.0	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
5	6	1	8.0	8.0	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 C : Packing in coil D : Packing in drum





TIS 11 Part 4-2553

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



CABLE STRUCTURE TECHNICAL DATA

Conductor : Solid and Stranded annealed copper, Classification : Maximum conductor temperature 70°C

Multi-core : Circuit voltage not exceeding 300/500 Volts

Insulation : Polyvinyl chloride (PVC/C)

Core identification : Polyvinyl chloride (PVC/C)

500 Volts between Line-to-Line

2 Cores : Blue and Brown

3 Cores : Brown, Black and Grey : 2,000 Volts

or Blue, Brown and Green/Yellow Reference standard : TIS 11 Part 4-2553, Table 1
4 Cores : Blue, Brown, Black and Grey

or Brown, Black, Grey and Green/Yellow
5 Cores: Blue, Brown, Black, Grey and Black
For installation exposed, or in raceway, wet or dry

or Blue, Brown, Black, Grey and Green/Yellow location.

Inner sheath : Black polyvinyl chloride (PVC)

Outer sheath : Black polyvinyl chloride (PVC/ST4)

Number	Nominal	A.C. Resistance	Inductance	Reactance	Impedance
of	cross				
core	section				
	area	R	L	XL	Z
	(mm²)	(Ω/km)	(mH/km)	(Ω/km)	(Ω/km)
	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
5	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