

COPPER CONDUCTOR CABLES

◆ HIGH AND MEDIUM VOLTAGE POWER CABLES ◆

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1.8/3KV-CV

TIS 2143-2546, IEC 60502-1

1.8/3(3.6)kV 90°C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE					TECHNICAL DATA					
Conductor : Compact round stranded annealed copper. Single-core : Sizes 10 mm ² up to 400 mm ² Multi-cores : Sizes 10 mm ² up to 400 mm ² Insulation : Cross-Linked polyethylene (XLPE) Core identification Single-core : Natural (Translucent) Shield : Copper tape Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)					Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 3,600 Volts Rated voltage (U_0/U) 1.8/3 kV 1,800 Volts between Line-to-Earth 3,000 Volts between Line-to-Line Testing voltage : 6,500 Volts Reference standard : IEC 60502-1, IEC 60228, IEC 60332-1 TIS 2143-2546					
					APPLICATION					
					For installation exposed, or in raceway, wet or dry location, or direct burial in ground.					

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	10	6	2.0	1.4	12.0	1.83	2,900	100	220	500/D
	16	6	2.0	1.4	13.0	1.15	2,450	132	290	500/D
	25	6	2.0	1.4	14.5	0.727	2,050	173	390	500/D
	35	6	2.0	1.4	15.5	0.524	1,800	211	490	500/D
	50	6	2.0	1.4	16.5	0.387	1,550	255	600	500/D
	70	12	2.0	1.5	18.5	0.268	1,350	321	850	500/D
	95	15	2.0	1.5	21	0.193	1,150	395	1,100	500/D
	120	18	2.0	1.6	22	0.153	1,050	457	1,400	500/D
	150	18	2.0	1.6	24	0.124	950	522	1,600	500/D
	185	30	2.0	1.7	26	0.0991	850	602	2,000	500/D
	240	34	2.0	1.8	28	0.0754	750	716	2,600	500/D
	300	34	2.0	1.8	30	0.0601	700	826	3,200	500/D
	400	53	2.0	2.0	33	0.0470	600	962	4,000	300/D

* Remark : Special protection can be produced

D : Packing in drum

1.8/3KV-CV

TIS 2143-2546, IEC 60502-1

1.8/3(3.6)kV 90°C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Compact round stranded annealed copper. Single-core : Sizes 10 mm ² up to 400 mm ² Multi-cores : Sizes 10 mm ² up to 400 mm ²	Classification	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 3,600 Volts Rated voltage (U_0/U) 1.8/3 kV 1,800 Volts between Line-to-Earth 3,000 Volts between Line-to-Line
Insulation	: Cross-Linked polyethylene (XLPE)	Testing voltage	: 6,500 Volts
Core identification	Single-core : Natural (Translucent) 3 Cores : White, Red and Blue	Reference standard	: IEC 60502-1, IEC 60228, IEC 60332-1 TIS 2143-2546
Shield	: Copper tape	APPLICATION	
Sheath	: Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
3	10	6	2.0	1.8	23	1.83	2,900	72	650	500/D
	16	6	2.0	1.8	25	1.15	2,450	95	850	500/D
	25	6	2.0	1.8	28	0.727	2,050	125	1,200	300/D
	35	6	2.0	1.9	30	0.524	1,800	152	1,500	300/D
	50	6	2.0	2.0	33	0.387	1,550	184	1,900	300/D
	70	12	2.0	2.1	37	0.268	1,350	230	2,600	300/D
	95	15	2.0	2.2	41	0.193	1,150	284	3,500	200/D
	120	18	2.0	2.3	44	0.153	1,050	329	4,300	300/D
	150	18	2.0	2.4	48	0.124	950	373	5,000	300/D
	185	30	2.0	2.5	52	0.0991	850	432	6,500	300/D
	240	34	2.0	2.7	57	0.0754	750	515	8,000	300/D
	300	34	2.0	2.9	62	0.0601	700	586	10,000	300/D
	400	53	2.0	3.1	69	0.0470	600	670	12,500	200/D

* Remark : Special protection can be produced

D : Packing in drum

3.6/6KV-CV

TIS 2143-2546, IEC 60502-2

3.6/6(7.2)kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE	TECHNICAL DATA
Conductor : Compact round stranded annealed copper Single-core : Sizes 10 mm ² up to 1,000 mm ² Multi-cores : Sizes 10 mm ² up to 400 mm ² Insulation : Cross-Linked polyethylene (XLPE) Core identification Single-core : Natural (Translucent) Shield : Copper tape Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 7,200 Volts Rated voltage (U_0/U) 3.6/6 kV 3,600 Volts between Line-to-Earth 6,000 Volts between Line-to-Line Insulation shield layer : Semi-conducting covering remove at splices or terminals Testing voltage : 12,500 Volts Reference standard : IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
	APPLICATION
	For installation exposed, or in raceway, wet or dry location, or direct burial in ground.

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	**10	6	2.5	1.4	14.0	1.83	2,850	101	260	500/D
	**16	6	2.5	1.5	15.5	1.15	2,500	133	350	500/D
	25	6	2.5	1.5	17.5	0.727	2,150	175	480	500/D
	35	6	2.5	1.5	18.5	0.524	1,900	213	600	500/D
	50	6	2.5	1.6	20	0.387	1,700	256	750	500/D
	70	12	2.5	1.6	21	0.268	1,500	321	950	500/D
	95	15	2.5	1.7	24	0.193	1,300	393	1,200	500/D
	120	18	2.5	1.7	25	0.153	1,200	455	1,500	500/D
	150	18	2.5	1.8	27	0.124	1,100	518	1,800	500/D
	185	30	2.5	1.8	28	0.0991	1,000	598	2,200	500/D
	240	34	2.6	1.9	31	0.0754	900	710	2,800	500/D
	300	34	2.8	2.0	34	0.0601	900	817	3,400	500/D
	400	53	3.0	2.1	37	0.0470	850	950	4,300	500/D
	500	53	3.2	2.2	42	0.0366	800	1,110	5,500	500/D
	630	53	3.2	2.4	46	0.0283	700	1,289	7,000	500/D
	800	53	3.2	2.5	50	0.0221	600	1,481	8,500	300/D
	1,000	53	3.2	2.6	55	0.0176	550	1,634	11,000	300/D

* Remark : Special protection can be produced

** Remark : Insulation shield shall be applied semi-conduction tape.

D : Packing in drum

3.6/6KV-CV

TIS 2143-2546, IEC 60502-2

3.6/6(7.2)kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE	TECHNICAL DATA
Conductor : Compact round stranded annealed copper Single-core : Sizes 10 mm ² up to 1,000 mm ² Multi-cores : Sizes 10 mm ² up to 400 mm ² Insulation : Cross-Linked polyethylene (XLPE) Core Identification Single-core : Natural (Translucent) 3 Cores : White, Red and Blue Shield : Copper tape Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 7,200 Volts Rated voltage (U_0/U) 3.6/6 kV 3,600 Volts between Line-to-Earth 6,000 Volts between Line-to-Line Insulation shield layer : Semi-conducting covering remove at splices or terminals Testing voltage : 12,500 Volts Reference standard : IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
APPLICATION For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
3	**10	6	2.5	2.0	28.0	1.83	2,850	80	850	500/D
	**16	6	2.5	2.0	30.0	1.15	2,500	105	1,100	500/D
	25	6	2.5	2.1	35.0	0.727	2,150	140	1,600	500/D
	35	6	2.5	2.2	38.0	0.524	1,900	170	1,900	500/D
	50	6	2.5	2.3	40	0.387	1,700	204	2,400	500/D
	70	12	2.5	2.4	44	0.268	1,500	255	3,100	500/D
	95	15	2.5	2.5	48	0.193	1,300	312	4,000	500/D
	120	18	2.5	2.6	52	0.153	1,200	361	4,900	500/D
	150	18	2.5	2.8	55	0.124	1,100	411	6,000	500/D
	185	30	2.5	2.9	59	0.0991	1,000	474	7,000	500/D
	240	34	2.6	3.1	65	0.0754	900	564	9,000	500/D
	300	34	2.8	3.3	71	0.0601	900	650	11,000	300/D
	400	53	3.0	3.5	79	0.0470	850	757	13,500	300/D

* Remark : Special protection can be produced

D : Packing in drum

** Remark : Insulation shield shall be applied semi-conduction tape.

6/10KV-CV

TIS 2143-2546, IEC 60502-2

6/10(12)KV 90°C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Compact round stranded annealed copper, Single-core : Sizes 16 mm ² up to 1,000 mm ² Multi-cores : Sizes 16 mm ² up to 400 mm ²	Classification	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 12,000 volts Rated voltage (U_0/U) 6/10 kV 6,000 Volts between Line-to-Earth 10,000 Volts between Line-to-Line
Insulation	: Cross-Linked polyethylene (XLPE)	Insulation shield layer	: Semi-conducting covering remove at splices or terminals
Core identification	Single-core : Natural (Translucent)	Testing voltage	: 21,000 Volts
Shield	: Copper Tape or Copper Wire	Reference standard	: IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
Sheath	: Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	APPLICATION	
		For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	16	6	3.4	1.5	18.5	1.15	3,100	134	440	500/D
	25	6	3.4	1.6	20	0.727	2,700	176	550	500/D
	35	6	3.4	1.6	21	0.524	2,450	214	700	500/D
	50	6	3.4	1.7	22	0.387	2,200	258	850	500/D
	70	12	3.4	1.7	24	0.268	1,900	322	1,100	500/D
	95	15	3.4	1.8	26	0.193	1,700	394	1,300	500/D
	120	18	3.4	1.8	27	0.153	1,550	456	1,600	500/D
	150	18	3.4	1.9	29	0.124	1,450	518	1,900	500/D
	185	30	3.4	1.9	31	0.0991	1,300	598	2,300	500/D
	240	34	3.4	2.0	33	0.0754	1,150	710	2,900	500/D
	300	34	3.4	2.1	36	0.0601	1,050	816	3,500	500/D
	400	53	3.4	2.2	39	0.0470	950	949	4,400	500/D
	500	53	3.4	2.3	42	0.0366	850	1,109	5,500	500/D
	630	53	3.4	2.4	46	0.0283	750	1,290	7,000	500/D
	800	53	3.4	2.5	50	0.0221	650	1,482	8,500	500/D
	1,000	53	3.4	2.6	56	0.0176	600	1,631	11,000	500/D

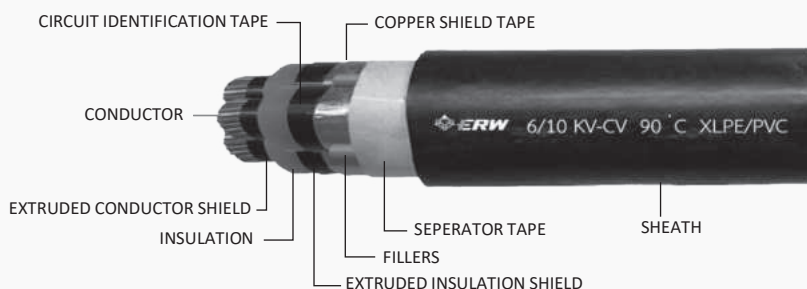
* REMARK : Special protection can be produced

D : Packing in drum

6/10KV-CV

TIS 2143-2546, IEC 60502-2

6/10(12)KV 90°C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE	TECHNICAL DATA
Conductor : Compact round stranded annealed copper, Single-core : Sizes 16 mm ² up to 1,000 mm ² Multi-cores : Sizes 16 mm ² up to 400 mm ² Insulation : Cross-Linked polyethylene (XLPE) Core identification Single-core : Natural (Translucent) 3 Cores : White, Red and Blue Shield : Copper Tape or Copper Wire Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 12,000 volts Rated voltage (U_0/U) 6/10 kV 6,000 Volts between Line-to-Earth 10,000 Volts between Line-to-Line Insulation shield layer : Semi-conducting covering remove at splices or terminals Testing voltage : 21,000 Volts Reference standard : IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
APPLICATION For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
3	16	6	3.4	2.2	37	1.15	3,100	109	1,500	500/D
	25	6	3.4	2.2	40	0.727	2,700	143	1,900	500/D
	35	6	3.4	2.3	42	0.524	2,450	174	2,200	500/D
	50	6	3.4	2.4	45	0.387	2,200	208	2,700	500/D
	70	12	3.4	2.6	49	0.268	1,900	259	3,500	500/D
	95	15	3.4	2.7	53	0.193	1,700	317	4,400	500/D
	120	18	3.4	2.8	57	0.153	1,550	366	5,500	500/D
	150	18	3.4	2.9	60	0.124	1,450	416	6,000	500/D
	185	30	3.4	3.0	64	0.0991	1,300	481	7,500	500/D
	240	34	3.4	3.2	70	0.0754	1,150	569	9,500	300/D
	300	34	3.4	3.3	75	0.0601	1,050	683	11,500	300/D
	400	53	3.4	3.6	81	0.0470	950	789	14,000	300/D

* REMARK : Special protection can be produced

D : Packing in drum

8.7/15KV-CV

TIS 2143-2546, IEC 60502-2

8.7/15(17.5)kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	Compact round stranded annealed copper, Single-core : Sizes 25 mm ² up to 1,000 mm ² Multi-cores : Sizes 25 mm ² up to 400 mm ²	Classification	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 17,500 Volts Rated voltage (U_0/U) 8.7/15 kV 8,700 Volts between Line-to-Earth 15,000 Volts between Line-to-Line
Insulation	Cross-Linked polyethylene (XLPE)	Insulation shield layer	: Semi-conducting covering remove at splices or terminals
Core identification	Single-core : Natural (Translucent)	Testing voltage	: 30,500 Volts
Shield	: Copper Tape or Copper Wire	Reference standard	: IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
Sheath	: Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	APPLICATION	
		For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	25	6	4.5	1.6	22	0.727	3,300	177	650	500/D
	35	6	4.5	1.7	23	0.524	3,000	215	750	500/D
	50	6	4.5	1.7	25	0.387	2,700	258	900	500/D
	70	12	4.5	1.8	26	0.268	2,400	322	1,200	500/D
	95	15	4.5	1.8	28	0.193	2,100	394	1,400	500/D
	120	18	4.5	1.9	30	0.153	1,950	455	1,700	500/D
	150	18	4.5	1.9	31	0.124	1,800	517	2,000	500/D
	185	30	4.5	2.0	33	0.0991	1,650	596	2,400	500/D
	240	34	4.5	2.1	36	0.0754	1,500	706	3,000	500/D
	300	34	4.5	2.1	38	0.0601	1,350	813	3,700	500/D
	400	53	4.5	2.2	41	0.0470	1,200	944	4,500	500/D
	500	53	4.5	2.3	45	0.0366	1,100	1,103	5,500	500/D
	630	53	4.5	2.4	48	0.0283	950	1,283	7,000	500/D
	800	53	4.5	2.6	53	0.0221	850	1,470	8,500	500/D
	1,000	53	4.5	2.7	58	0.0176	750	1,679	11,500	300/D

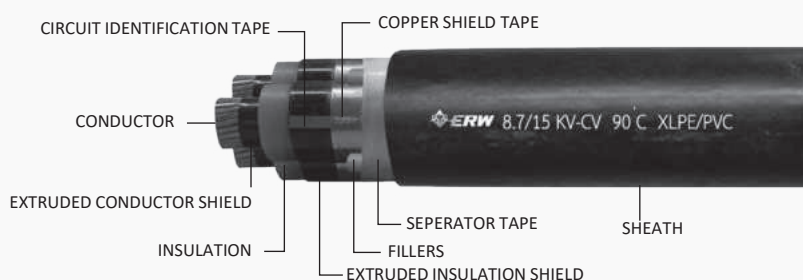
* REMARK : Special protection can be produced

D : Packing in drum

8.7/15KV-CV

TIS 2143-2546, IEC 60502-2

8.7/15(17.5)kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE	TECHNICAL DATA
Conductor Compact round stranded annealed copper, Single-core : Sizes 25 mm ² up to 1,000 mm ² Multi-cores : Sizes 25 mm ² up to 400 mm ² Insulation Cross-Linked polyethylene (XLPE) Core identification Single-core : Natural (Translucent) 3 Cores : White, Red and Blue Shield : Copper Tape or Copper Wire Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 17,500 Volts Rated voltage (U_0/U) 8.7/15 kV 8,700 Volts between Line-to-Earth 15,000 Volts between Line-to-Line Insulation shield layer : Semi-conducting covering remove at splices or terminals Testing voltage : 30,500 Volts Reference standard : IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
APPLICATION For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
3	25	6	4.5	2.4	45	0.727	3,300	146	2,200	500/D
	35	6	4.5	2.5	48	0.524	3,000	176	2,600	500/D
	50	6	4.5	2.6	51	0.387	2,700	211	3,100	500/D
	70	12	4.5	2.7	54	0.268	2,400	263	3,900	500/D
	95	15	4.5	2.8	58	0.193	2,100	321	4,800	500/D
	120	18	4.5	2.9	62	0.153	1,950	370	5,500	500/D
	150	18	4.5	3.1	66	0.124	1,800	420	6,500	500/D
	185	30	4.5	3.2	69	0.0991	1,650	484	8,000	500/D
	240	34	4.5	3.4	75	0.0754	1,500	573	10,000	300/D
	300	34	4.5	3.5	80	0.0601	1,350	659	12,000	300/D
	400	53	4.5	3.7	86	0.0470	1,200	764	15,000	300/D

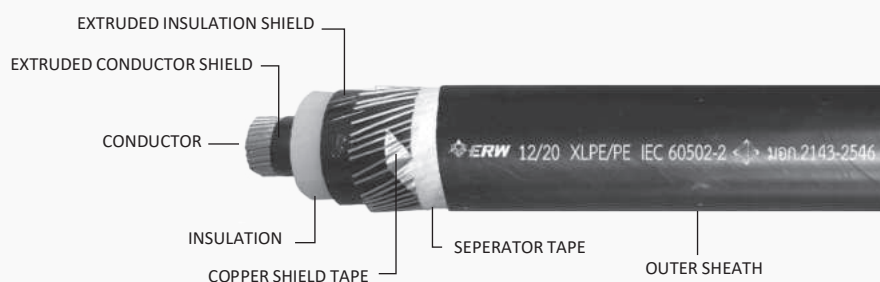
* REMARK : Special protection can be produced

D : Packing in drum

12/20KV-CV

TIS 2143-2546, IEC 60502-2

12/20(24)kV 90°C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE	TECHNICAL DATA
Conductor : Compacted round stranded annealed copper, Single-core : Sizes 35 mm ² up to 1,000 mm ² Multi-cores : Sizes 35 mm ² up to 400 mm ² Insulation : Cross-linked Polyethylene (XLPE) Core identification Single-core : Natural (Translucent) Shield : Copper Tape or Copper Wire Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 24,000 Volts Rated voltage (U_0/U) 12/20 kV 12,000 Volts between Line-to-Earth 20,000 Volts between Line-to-Line Insulation shield layer : Semi-conducting covering remove at splices or terminals Testing voltage : 42,000 Volts Reference standard : IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
	APPLICATION
	For installation exposed, or in raceway, wet or dry location, or direct burial in ground.

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	35	6	5.5	1.8	26	0.524	3,460	214	850	500/D
	50	6	5.5	1.8	27	0.387	3,130	258	1,000	500/D
	70	12	5.5	1.8	28	0.268	2,790	321	1,300	500/D
	95	15	5.5	1.9	30	0.193	2,500	393	1,600	500/D
	120	18	5.5	2.0	32	0.153	2,290	453	1,900	500/D
	150	18	5.5	2.0	34	0.124	2,130	516	2,200	500/D
	185	30	5.5	2.1	35	0.099	1,970	593	2,600	500/D
	240	34	5.5	2.1	38	0.075	1,770	703	3,200	500/D
	300	34	5.5	2.2	40	0.0601	1,620	808	3,800	500/D
	400	53	5.5	2.3	43	0.0470	1,480	938	4,700	500/D
	500	53	5.5	2.4	47	0.0366	1,320	1,091	6,000	500/D
	630	53	5.5	2.5	51	0.0283	1,190	1,269	7,500	500/D
	800	53	5.5	2.6	55	0.0221	1,070	1,456	9,000	500/D
	1,000	53	5.5	2.8	60	0.0176	940	1,660	11,500	300/D

* REMARK : Special protection can be produced

D : Packing in drum

12/20KV-CV

TIS 2143-2546, IEC 60502-2

12/20(24)kV 90°C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE	TECHNICAL DATA
Conductor : Compacted round stranded annealed copper, Single-core : Sizes 35 mm ² up to 1,000 mm ² Multi-cores : Sizes 35 mm ² up to 400 mm ² Insulation : Cross-linked Polyethylene (XLPE) Core identification Single-core : Natural (Translucent) 3 Cores : White, Red, and Blue Shield : Copper Tape or Copper Wire Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 24,000 Volts Rated voltage (U_0/U) 12/20 kV 12,000 Volts between Line-to-Earth 20,000 Volts between Line-to-Line Insulation shield layer : Semi-conducting covering remove at splices or terminals Testing voltage : 42,000 Volts Reference standard : IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
APPLICATION For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
3	35	6	5.5	2.7	53	0.524	3,460	178	3,000	500/D
	50	6	5.5	2.8	55	0.387	3,130	213	3,500	500/D
	70	12	5.5	2.9	59	0.268	2,790	265	4,300	500/D
	95	15	5.5	3.0	63	0.193	2,500	324	5,000	500/D
	120	18	5.5	3.1	67	0.153	2,290	373	6,000	500/D
	150	18	5.5	3.2	70	0.124	2,130	422	7,000	300/D
	185	30	5.5	3.3	74	0.0991	1,970	485	8,500	300/D
	240	34	5.5	3.5	80	0.0754	1,770	571	10,500	300/D
	300	34	5.5	3.7	85	0.0601	1,620	652	12,500	300/D
	400	53	5.5	3.9	91	0.0470	1,480	751	15,500	200/D

* REMARK : Special protection can be produced

D : Packing in drum

18/30KV-CV

TIS 2143-2546, IEC 60502-2

18/30(36)kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Compact round stranded annealed copper, Single-core : Sizes 35 mm ² up to 1,000 mm ² Multi-cores : Sizes 35 mm ² up to 400 mm ²	Classification	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 36,000 Volts Rated voltage (U_0/U) 18/30 kV 18,000 Volts between Line-to-Earth 30,000 Volts between Line-to-Line
Insulation	: Cross-Linked polyethylene (XLPE)	Insulation shield layer	: Semi-conducting covering remove at splices or terminals
Core identification	Single-core : Natural (Translucent)	Testing voltage	: 63,000 Volts
Shield	: Copper Tape or Copper Wire	Reference standard	: IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546
Sheath	: Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)	APPLICATION	
		For installation exposed, or in raceway, wet or dry location, or direct burial in ground.	

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
1	35	6	8.9	2.0	33	0.524	4,680	214	1,200	500/D
	50	6	8.0	2.0	32	0.387	4,010	257	1,300	500/D
	70	12	8.0	2.0	34	0.268	3,620	320	1,500	500/D
	95	15	8.0	2.1	36	0.193	3,260	390	1,900	500/D
	120	18	8.0	2.1	37	0.153	3,020	450	2,200	500/D
	150	18	8.0	2.2	39	0.124	2,820	511	2,500	500/D
	185	30	8.0	2.2	41	0.0991	2,620	587	2,900	500/D
	240	34	8.0	2.3	43	0.0754	2,370	695	3,500	500/D
	300	34	8.0	2.4	46	0.0601	2,190	797	4,200	500/D
	400	53	8.0	2.5	48	0.0470	2,000	925	5,000	500/D
	500	53	8.0	2.6	52	0.0366	1,800	1,078	6,500	500/D
	630	53	8.0	2.7	56	0.0283	1,630	1,252	7,500	500/D
	800	53	8.0	2.8	60	0.0221	1,480	1,437	9,500	300/D
	1,000	53	8.0	3.0	66	0.0176	1,300	1,638	12,000	300/D

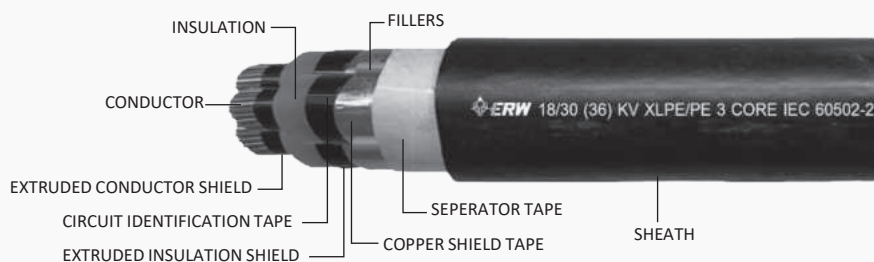
* Remark : Special protection can be produced

D : Packing in drum

18/30KV-CV

TIS 2143-2546, IEC 60502-2

18/30(36)kV 90° C CROSS-LINKED POLYETHYLENE INSULATED AND PVC SHEATHED POWER CABLE



CABLE STRUCTURE						TECHNICAL DATA				
Conductor : Compact round stranded annealed copper, Single-core : Sizes 35 mm ² up to 1,000 mm ² Multi-cores : Sizes 35 mm ² up to 400 mm ² Insulation : Cross-Linked polyethylene (XLPE) Core identification Single-core : Natural (Translucent) 3 Cores : White, Red, and Blue Shield : Copper Tape or Copper Wire Sheath : Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)						Classification : Maximum conductor temperature 90°C : Circuit voltage not exceeding 36,000 Volts Rated voltage (U_0/U) 18/30 kV 18,000 Volts between Line-to-Earth 30,000 Volts between Line-to-Line Insulation shield layer : Semi-conducting covering remove at splices or terminals Testing voltage : 63,000 Volts Reference standard : IEC 60502-2, IEC 60228, IEC 60332-1 TIS 2143-2546				
						APPLICATION				
						For installation exposed, or in raceway, wet or dry location, or direct burial in ground.				

Number of core	Nominal cross sectional area (mm ²)	Number of wires minimum (No.)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20°C maximum (Ω/km)	Insulation resistance at 20°C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Cable weight approx. (kg/km)	Standard length (m)
3	35	6	8.9	3.1	68	0.524	4,680	183	4,300	500/D
	50	6	8.0	3.2	67	0.387	4,010	218	4,500	500/D
	70	12	8.0	3.3	71	0.268	3,620	270	5,500	300/D
	95	15	8.0	3.4	75	0.193	3,260	328	6,500	300/D
	120	18	8.0	3.5	79	0.153	3,020	377	7,500	300/D
	150	18	8.0	3.6	82	0.124	2,820	428	8,500	300/D
	185	30	8.0	3.7	86	0.0991	2,620	491	10,000	300/D
	240	34	8.0	3.9	91	0.0754	2,370	579	12,000	300/D
	300	34	8.0	4.0	97	0.0601	2,190	664	14,000	300/D
	400	53	8.0	4.3	103	0.0470	2,000	767	17,000	200/D

* Remark : Special protection can be produced

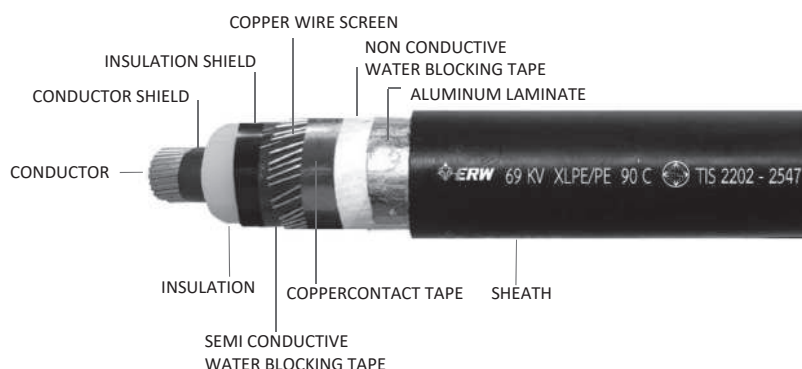
D : Packing in drum

69 kV - CE



TIS 2202-2547, IEC 60840

69 kV 90°C CROSS LINKED POLYETHYLENE INSULATED WITH COPPER WIRE SCREEN AND POLYETHYLENE SHEATH POWER CABLE



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Compacted round stranded annealed copper,	Classification	: Maximum conductor temperature 90°C
Conductor shield	: Semi-Conductive cross-linked polyethylene compound	Maximum circuit voltage	: 72.5 kV
Insulation	: Cross-linked Polyethylene (XLPE)	Testing voltage	: 90,000 Volts
Insulation shield	: Semi-Conductive cross-linked polyethylene compound		
Water blocking tape	: Semi-Conductive water blocking tape		
Metallic screen	: Copper wire screen with copper contact tape		
Synthetic water blocking and cushioning tape	: Copper Tape or Copper Wire	Reference standard	: TIS 2202 -2547, IEC 60840
Radial water barrier	: Aluminium laminate tape		
Sheath	: Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)		
		APPLICATION	
		Preferably laid in substations, factories and urban area . The cable shall be suitable for use in ducts, trays and direct burial in ground , subjected to immerse in water all time	

Number of core	Conductor			Thickness of conductor shield	Thickness of insulation	Thickness of insulation shield	Area of metallic screen	Thickness of outer sheath	Overall diameter	DC Conductor resistance at 20 ° C	Capacitance	Current rating direct burial in ground at 30 ° C	Cable weight	Standard Cable length
	Cross-Sectional Area (mm²)	No of wires (Min.)	Diameter (mm) (Approx.)	(mm) (Nominal)	(mm) (Nominal)	(mm) (Nominal)	(mm²)	(mm) (Nominal)	(mm) (Approx.)	(Ω/km) (Max.)	(μF/km) (Nominal)	(A)	(kg/km) (Approx.)	(m/drum)
1	400	53	23.5	1.5	11.0	1.5	95	3.2	68	0.047	0.222	690	7,000	500/D
	500	53	26.7	1.5	11.0	1.5	95	3.2	70	0.0366	0.246	790	8,000	500/D
	630	53	30.3	1.5	11.0	1.5	120	3.5	75	0.0283	0.269	900	10,000	300/D
	800	53	34.1	1.5	11.0	1.5	120	3.5	79	0.0221	0.292	1010	11,500	300/D
	1200	-	43	1.5	11.0	1.5	120	3.5	90	0.0151	0.351	1300	18,500	300/D

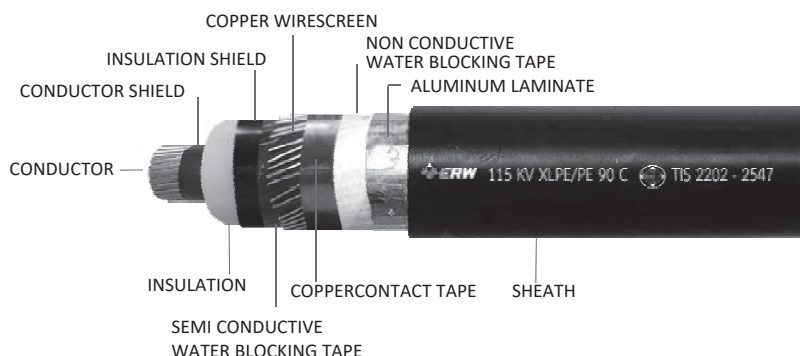
D: Packing in drum

115 kV - CE



TIS 2202-2547, IEC 60840

115kV 90°C CROSS LINKED POLYETHYLENE INSULATED WITH COPPER WIRE SCREEN AND POLYETHYLENE SHEATH POWER CABLE



CABLE STRUCTURE		TECHNICAL DATA	
Conductor	: Compacted round stranded annealed copper,	Classification	: Maximum conductor temperature 90°C
Conductor shield	: Semi-Conductive cross-linked polyethylene compound	Maximum circuit voltage	: 123 kV
Insulation	: Cross-linked Polyethylene (XLPE)	Testing voltage	: 160,000 Volts
Insulation shield	: Semi-Conductive cross-linked polyethylene compound		
Water blocking tape	: Semi-Conductive water blocking tape		
Metallic screen	: Copper wire screen with copper contact tape		
Synthetic water blocking and cushioning tape	: Copper Tape or Copper Wire	Reference standard	: TIS 2202 -2547, IEC 60840
Radial water barrier	: Aluminium laminate tape		
Sheath	: Black polyvinyl chloride (PVC/ST2) or Black polyethylene (PE)		
		APPLICATION	
		Preferably laid in substations, factories and urban area . The cable shall be suitable for use in ducts, trays and direct burial in ground , subjected to immerse in water all time	

Number of core	Conductor			Thickness of conductor shield	Thickness of insulation	Thickness of insulation shield	Area of metallic screen	Thickness of outer sheath	Overall diameter	DC Conductor resistance at 20 ° C	Capacitance	Current rating direct burial in ground at 30 ° C	Cable weight	Standard Cable length
	Cross-Sectional Area (mm ²)	No of wires (Min.)	Diameter (mm) (Approx.)	(mm) (Nominal)	(mm) (Nominal)	(mm) (Nominal)	(mm ²)	(mm) (Nominal)	(mm) (Approx.)	(Ω/km) (Max.)	(μF/km) (Nominal)	(A)	(kg/km) (Approx.)	(m/drum)
1	400	53	23.5	1.5	16.0	1.5	95	3.2	76	0.047	0.170	180	8,000	500/D
	500	53	26.7	1.5	16.0	1.5	95	3.2	37	0.0366	0.187	785	9,000	500/D
	630	53	30.3	1.5	16.0	1.5	120	3.5	84	0.0283	0.203	890	11,000	500/D
	800	53	34.1	1.5	16.0	1.5	120	3.5	89	0.0221	0.219	1010	12,950	500/D

D: Packing in drum