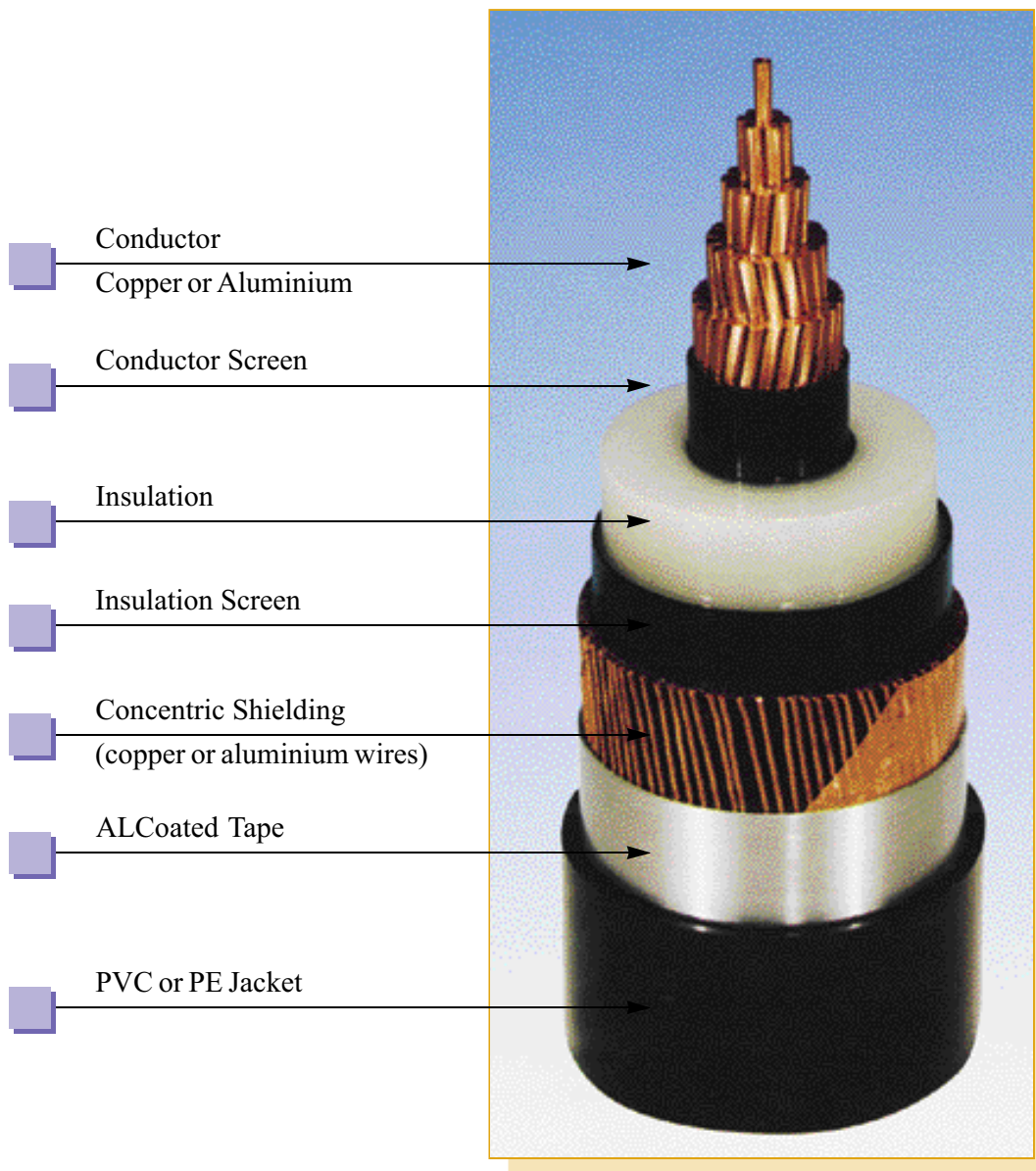


**6 HIGH VOLTAGE CABLES**  
**BETWEEN 38 / 66 ( 72.5 ) KV AND 130 / 225 ( 245 ) KV**

**6.2 - COPPER AND ALUMINIUM CONDUCTOR**  
**WIRE SCREEN ( 66 - 225 KV )**

**COMPACT ROUNDED STRANDED**  
**COPPER OR ALUMINIUM**



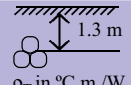

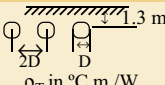
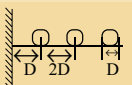
**36 / 63 TO 40 / 69 (72.5) KVXLPE CABLES  
COPPER CONDUCTOR**

**Copperwire screen**

**Constructional data (nominal)**

Conductor			Thickness of Conductor screen	Thickness of insulation	Thickness of insulation screen	Diameter and number of copper wires	Thickness of Alu coated tape	Thickness of Jacket	Outside diameter of cable	Weight of cable	DC conductor resistance at 20°C	Electrostatic capacitance
Nominal sectional area mm <sup>2</sup>	Shape	Diameter mm	Approx. mm	Approx. mm	Approx. mm	mm x N	mm	mm	Approx. mm	Approx. kg/m	Ω/km	μF/km
185 R	R: compact Round stranded	15.9	1.0	10.0	1.0	1.5X80	0.2	2.9	59	5	0.0991	0.18
240 R		18.4	1.0	10.0	1.0	1.5X80	0.2	2.9	60	5	0.0754	0.21
300 R		20.5	1.0	10.0	1.0	1.5X80	0.2	3.0	65	6	0.0601	0.22
400 R		23.2	1.0	10.0	1.0	1.5X80	0.2	3.0	65	7	0.0470	0.25
500 R		26.4	1.0	10.0	1.0	1.5X80	0.2	3.1	71	8	0.0366	0.25
630 R		30.3	1.0	10.0	1.0	1.5X80	0.2	3.3	76	10	0.0283	0.26
800 R		34.7	1.0	10.0	1.0	1.5X80	0.2	3.4	82	12	0.0221	0.28
1000 R		39.1	1.0	10.0	1.0	1.5X80	0.2	3.4	83	14	0.0176	0.35

**Continuous current ratings (load factor= 100%) for one circuit in operation (Amperes)**

Laying conditions: Trefoil formation						Laying conditions: Flat formation					
Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air		Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air	
											
		$\rho_T = 1.0$ T=20°C	$\rho_T = 1.2$ T=30°C	T=30°C	T=50°C			$\rho_T = 1.0$ T=20°C	$\rho_T = 1.2$ T=30°C	T=30°C	T=50°C
with circulating currents	185 R	420	365	510	405	without circulating current	185 R	480	415	605	485
	240 R	475	410	595	470		240 R	555	480	720	575
	300 R	530	455	670	530		300 R	625	540	820	655
	400 R	600	515	755	595		400 R	715	615	955	760
	500 R	660	570	855	675		500 R	815	700	1100	875
without circulating current	630 R	840	725	1085	860	630 R	925	795	1270	1010	
	800 R	920	790	1205	955	800 R	1030	885	1415	1130	
	1000 R	1015	875	1365	1075	1000 R	1155	990	1645	1310	

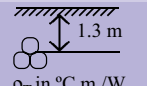

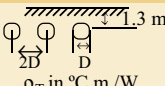
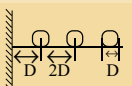
## 64 / 110 (123) KVXLPE CABLES COPPER CONDUCTOR

### Copper wire screen

#### Constructional data (nominal)

Conductor			Thickness of Conductor screen	Thickness of insulation	Thickness of insulation screen	Diameter and number of copper wires	Thickness of Alu coated tape	Thickness of Jacket	Outside diameter of cable	Weight of cable	DC conductor resistance at 20°C	Electrostatic capacitance
Nominal sectional area mm <sup>2</sup>	Shape	Diameter mm	Approx. mm	Approx. mm	Approx. mm	mm x N	mm	mm	Approx. mm	Approx. kg/m	Ω/km	μF/km
240 R	R; compact Round stranded	18.4	1.0	16.0	1.0	1.5X80	0.2	3.2	66	6	0.0754	0.16
300 R		20.5	1.0	16.0	1.0	1.5X80	0.2	3.2	71	7	0.0601	0.16
400 R		23.2	1.0	16.0	1.0	1.5X80	0.2	3.2	72	8	0.0470	0.18
500 R		26.4	1.0	16.0	1.0	1.5X80	0.2	3.3	77	9	0.0366	0.19
630 R		30.3	1.0	16.0	1.0	1.5X80	0.2	3.4	78	11	0.0283	0.23
800 R		34.7	1.0	16.0	1.0	1.5X80	0.2	3.6	86	13	0.0221	0.23
1000 R		39.1	1.0	16.0	1.0	1.5X80	0.2	3.8	91	16	0.0176	0.24

### Continuous current ratings (load factor= 100%) for one circuit in operation (Amperes)

Laying conditions: Trefoil formation						Laying conditions: Flat formation					
Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air		Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air	
											
		$\rho_T = 1.0$ T=20°C	$\rho_T = 1.2$ T=30°C	T=30°C	T=50°C			$\rho_T = 1.0$ T=20°C	$\rho_T = 1.2$ T=30°C	T=30°C	T=50°C
with circulating currents	240 R	485	420	600	475	without circulating current	240 R	550	475	705	565
	300 R	535	465	675	535		300 R	620	540	805	645
	400 R	600	515	765	605		400 R	710	615	935	745
	500 R	665	570	865	685		500 R	810	700	1075	860
without circulating current	630 R	840	720	1085	860	630 R	920	795	1255	1000	
	800 R	930	800	1225	975	800 R	1040	895	1425	1035	
	1000 R	1015	875	1365	1080	1000 R	1150	990	1600	1275	

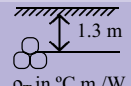
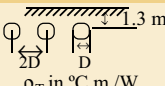
## 76 / 132 (145) KVXLPE CABLES COPPER CONDUCTOR

### Copper wire screen

#### Constructional data (nominal)

Conductor			Thickness of Conductor screen	Thickness of insulation	Thickness of insulation screen	Diameter and number of copper wires	Thickness of Alu coated tape	Thickness of Jacket	Outside diameter of cable	Weight of cable	DC conductor resistance at 20°C	Electrostatic capacitance
Nominal sectional area mm <sup>2</sup>	Shape	Diameter mm	Approx. mm	Approx. mm	Approx. mm	mm x N	mm	mm	Approx. mm	Approx. kg/m	Ω/km	μF/km
240 R	R; compact Round stranded	18.4	1.0	18.0	1.0	1.5X80	0.2	3.4	72	7	0.0754	0.15
300 R		20.5	1.0	18.0	1.0	1.5X80	0.2	3.4	77	8	0.0601	0.15
400 R		23.2	1.0	18.0	1.0	1.5X80	0.2	3.4	78	9	0.0470	0.16
500 R		26.4	1.0	18.0	1.0	1.5X80	0.2	3.5	82	10	0.0366	0.17
630 R		30.3	1.0	18.0	1.0	1.5X80	0.2	3.6	87	12	0.0283	0.19
800 R		34.7	1.0	18.0	1.0	1.5X80	0.2	3.8	92	14	0.0221	0.20
1000 R		39.1	1.0	18.0	1.0	1.5X80	0.2	4.0	95	16	0.0176	0.23

### Continuous current ratings (load factor= 100%) for one circuit in operation (Amperes)

Laying conditions: Trefoil formation						Laying conditions: Flat formation					
Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air		Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air	
		 ρ <sub>T</sub> in °C.m./W						 ρ <sub>T</sub> in °C.m./W			
Induced current in the metallic screen		ρ <sub>T</sub> = 1.0 T=20°C	ρ <sub>T</sub> = 1.2 T=30°C	T=30°C	T=50°C	Induced current in the metallic screen		ρ <sub>T</sub> = 1.0 T=20°C	ρ <sub>T</sub> = 1.2 T=30°C	T=30°C	T=50°C
with circulating currents	240 R	485	420	600	475	without circulating current	240 R	550	475	700	560
	300 R	550	475	690	545		300 R	620	540	795	640
	400 R	595	515	765	605		400 R	710	615	925	740
	500 R	660	570	865	685		500 R	805	700	1065	850
without circulating current	630 R	835	720	1080	860		630 R	920	795	1230	985
	800 R	930	800	1225	975		800 R	1035	895	1310	1125
	1000 R	1015	875	1365	1080		1000 R	1145	990	1585	1270

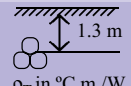

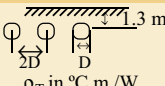
## 87 / 150 (170) KVXLPE CABLES COPPER CONDUCTOR

### Copper wire screen

#### Constructional data (nominal)

Conductor			Thickness of Conductor screen	Thickness of insulation	Thickness of insulation screen	Diameter and number of copper wires	Thickness of Alu coated tape	Thickness of Jacket	Outside diameter of cable	Weight of cable	DC conductor resistance at 20°C	Electrostatic capacitance
Nominal sectional area mm <sup>2</sup>	Shape	Diameter mm	Approx. mm	Approx. mm	Approx. mm	mm x N	mm	mm	Approx. mm	Approx. kg/m	Ω/km	μF/km
240 R	R; compact Round stranded	18.4	1.0	20.0	1.0	1.5X80	0.2	3.4	77	8	0.0754	0.13
300 R		20.5	1.0	20.0	1.0	1.5X80	0.2	3.5	82	9	0.0601	0.14
400 R		23.2	1.0	20.0	1.0	1.5X80	0.2	3.5	82	9	0.0470	0.15
500 R		26.4	1.0	20.0	1.0	1.5X80	0.2	3.6	86	11	0.0366	0.16
630 R		30.3	1.0	20.0	1.0	1.5X80	0.2	3.8	91	13	0.0283	0.17
800 R		34.7	1.0	20.0	1.0	1.5X80	0.2	4.0	95	15	0.0221	0.19
1000 R		39.1	1.0	20.0	1.0	1.5X80	0.2	4.0	99	17	0.0176	0.21

### Continuous current ratings (load factor= 100%) for one circuit in operation (Amperes)

Laying conditions: Trefoil formation						Laying conditions: Flat formation						
Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air		Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air		
		 1.3 m ρ <sub>T</sub> in °C.m./W										 1.3 m ρ <sub>T</sub> in °C.m./W
Induced current in the metallic screen		ρ <sub>T</sub> = 1.0 T=20°C	ρ <sub>T</sub> = 1.2 T=30°C	T=30°C	T=50°C	Induced current in the metallic screen		ρ <sub>T</sub> = 1.0 T=20°C	ρ <sub>T</sub> = 1.2 T=30°C	T=30°C	T=50°C	
with circulating currents	240 R	480	420	600	475	without circulating current	240 R	550	475	695	555	
	300 R	535	465	675	540		300 R	620	535	790	635	
	400 R	595	515	765	610		400 R	705	610	915	735	
	500 R	660	575	865	690		500 R	805	695	1055	845	
without circulating current	630 R	835	720	1080	860	630 R	920	795	1220	975		
	800 R	930	800	1225	975	800 R	1035	895	1400	1120		
	1000 R	1015	875	1360	1080	1000 R	1145	985	1575	1335		

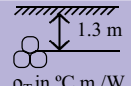

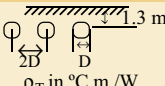
**130 / 225 (245) KVXLPE CABLES  
COPPER CONDUCTOR**

**Copper wire screen**

**Constructional data (nominal)**

Conductor			Thickness of Conductor screen	Thickness of insulation	Thickness of insulation screen	Diameter and number of copper wires	Thickness of Alu coated tape	Thickness of Jacket	Outside diameter of cable	Weight of cable	DC conductor resistance at 20°C	Electrostatic capacitance
Nominal sectional area mm <sup>2</sup>	Shape	Diameter mm	Approx. mm	Approx. mm	Approx. mm	mm x N	mm	mm	Approx. mm	Approx. kg/m	Ω/km	μF/km
400 R	R: compact Round stranded	23.2	1.0	23.0	1.0	1.5X80	0.2	3.8	91	11	0.0470	0.14
500 R		26.4	1.0	23.0	1.0	1.5X80	0.2	3.8	91	12	0.0366	0.15
630 R		30.3	1.0	23.0	1.0	1.5X80	0.2	4.0	99	14	0.0283	0.16
800 R		34.7	1.0	23.0	1.0	1.5X80	0.2	4.0	99	15	0.0221	0.18
1000 R		39.1	1.0	23.0	1.0	1.5X80	0.2	4.2	108	19	0.0176	0.18

**Continuous current ratings (load factor= 100%) for one circuit in operation (Amperes)**

Laying conditions: Trefoil formation						Laying conditions: Flat formation					
Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air		Earthing conditions	Nominal sectional area mm <sup>2</sup>	Direct burial		In air	
		 1.3 m ρ <sub>T</sub> in °C.m./W								 1.3 m ρ <sub>T</sub> in °C.m./W	
Induced current in the metallic screen		ρ <sub>T</sub> = 1.0 T=20°C	ρ <sub>T</sub> = 1.2 T=30°C	T=30°C	T=50°C	Induced current in the metallic screen		ρ <sub>T</sub> = 1.0 T=20°C	ρ <sub>T</sub> = 1.2 T=30°C	T=30°C	T=50°C
with circulating currents	400 R 500 R	595 660	515 570	770 870	610 690	without circulating current	400 R 500 R	705 805	610 695	905 1050	725 840
without circulating current	630 R 800 R 1000 R	880 925 1015	720 800 875	1075 1220 1355	855 970 1080		630 R 800 R 1000 R	915 1035 1145	795 890 990	1205 1390 1550	965 1110 1240