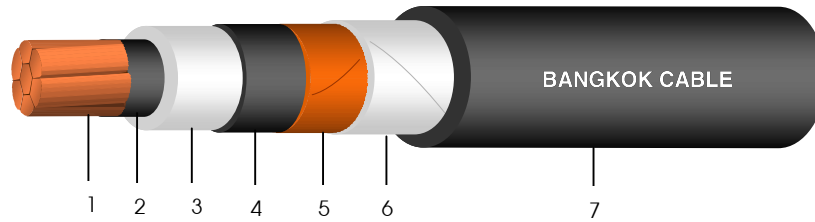


# 35 kV CV (CE optional)\*

1 CORE - CROSSLINKED POLYETHYLENE POWER CABLE (133% INSULATION LEVELS)



## Construction

1. Conductor : Circular compact stranded annealed copper
2. Conductor screen : Semi-conductive cross-linked polyethylene compound
3. Insulation : Cross-linked polyethylene (XLPE) compound
4. Insulation screen : Semi-conductive cross-linked polyethylene compound
5. Metallic screen : Copper tape (or copper wires)
6. Binding tape : Polyester tape
7. Sheath : Black Polyvinyl chloride (PVC), (Optional : PE)\*

## Reference Standard

ICEA S-93-639

## Classification

- Maximum conductor temperature : 90°C  
 Maximum circuit voltage : 35 kV  
 AC test voltage : 84 kV

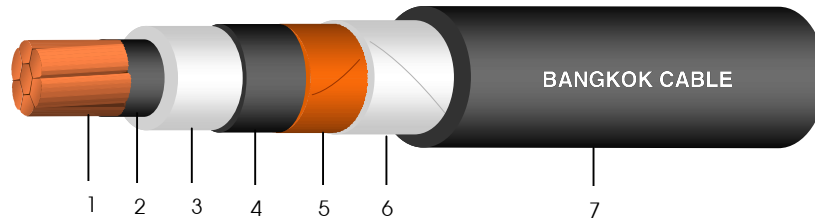
## Application

For general purpose power distribution in dry or wet location.  
 Exposed in aerial, direct burial, conduit, open tray and underground duct installation.

Conductor			Thickness of insulation	Diameter over insulation	Thickness of sheath	Overall diameter	DC. Conductor resistance at 20°C	Insulation resistance at 15.6°C	Current rating		Cable weight	Standard length
Cross-sectional area	No. of wires	Diameter							in free air	direct burial in ground		
mm <sup>2</sup>	(Min.)	(Approx.)	(Nominal)	(Approx.)	(Min.)	(Approx.)	Ω/km (Max.)	MΩ.km (Min.)	A	A	kg/km (Approx.)	m/drum
50	6	8.33	10.67	31.7	1.78	39	0.387	3,184	255	215	1,640	500
70	12	9.73	10.67	33.1	1.78	40	0.268	2,935	315	260	1,890	500
95	15	11.43	10.67	34.8	1.78	42	0.193	2,685	380	310	2,220	500
120	18	12.95	10.67	36.3	1.78	44	0.153	2,497	440	360	2,510	500
150	18	14.27	10.67	37.6	2.54	47	0.124	2,356	500	400	3,000	500
185	30	15.98	10.67	39.3	2.54	49	0.0991	2,196	570	450	3,420	500
240	34	18.47	10.67	41.8	2.54	51	0.0754	2,000	680	530	4,080	500
300	34	20.68	10.67	44.0	2.54	53	0.0601	1,854	780	600	4,740	500
400	53	23.39	10.67	46.7	2.54	56	0.0470	1,703	900	680	5,650	300
500	53	26.67	10.67	50.6	2.54	60	0.0366	1,528	1,050	780	6,860	300
630	53	30.22	10.67	54.1	2.54	64	0.0283	1,395	1,220	890	8,370	300
800	53	34.00	10.67	57.9	2.54	68	0.0221	1,278	1,400	1,000	10,200	200

# 35 kV CV (CE optional)\*

1 CORE - CROSSLINKED POLYETHYLENE POWER CABLE (133% INSULATION LEVELS)



## Construction

- 1. Conductor : Circular compact stranded annealed copper
- 2. Conductor screen : Semi-conductive cross-linked polyethylene compound
- 3. Insulation : Cross-linked polyethylene (XLPE) compound
- 4. Insulation screen : Semi-conductive cross-linked polyethylene compound
- 5. Metallic screen : Copper tape (or copper wires)
- 6. Binding tape : Polyester tape
- 7. Sheath : Black Polyvinyl chloride (PVC), (Optional : PE)\*

## Reference Standard

ICEA S-93-639

## Classification

- Maximum conductor temperature : 90°C
- Maximum circuit voltage : 35 kV
- AC test voltage : 84 kV

## Application

For general purpose power distribution in dry or wet location. Exposed in aerial, direct burial, conduit, open tray and underground duct installation.

Conductor cross-sectional area mm <sup>2</sup>	AC Resistance of conductor at 90 °C Ω/km (Approx.)	Inductance mH/km (Approx.)	Reactance Ω/km (Approx.)	Impedance Ω/km (Approx.)
50	0.494	0.682	0.214	0.538
70	0.342	0.656	0.206	0.399
95	0.246	0.634	0.199	0.317
120	0.196	0.618	0.194	0.276
150	0.159	0.612	0.192	0.249
185	0.127	0.598	0.188	0.227
240	0.0971	0.577	0.181	0.206
300	0.0779	0.562	0.176	0.193
400	0.0615	0.548	0.172	0.183
500	0.0487	0.536	0.168	0.175
630	0.0387	0.524	0.164	0.169
800	0.0314	0.512	0.161	0.164