CABLE TYPE : CTW - CV THREE CORES CU/XLPE/PVC 1.8/3 (3.6) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITHOUT ARMOUR

CONSTRUCTION	
Conductor	Compact round stranded annealed copper.
Conductor Screen	Semi-conducting cross-linked polyethylene.
Insulation	Cross-linked polyethylene. (XLPE)
Insulation Screen	Semi-conducting cross-linked polyethylene.
Metallic Shield	Annealed copper tape.
Filler	Polypropylene (Nonhygroscopic material)
Wrapping Tape	Polyester and/or Spunbond tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Option : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposted in aerial, direct burial, conduit, open tray and underground duct installation.

CLASSIFICATION

Maximum Conductor Temperature 90 °C (Normal Operation)

Maximum Conductor Temperature 250 °C (Short-circuit at 5s maximum duration)

REFERENCE

IEC 60228 & IEC 60502-1

** AC Test Voltage : 6.5 kV

NOTE

A special FR-PVC or Low Smoke Halogen Free (LSHF) Flame retardant sheath can be supplied in accordance with IEC 60332-3.

Product code	Conductor			Thickness of insulation	Diameter over insulation (Approx.)	Thickness of outer sheath	Overall diameter (Approx.)	Cable weight (Approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Ampacities direct burial in ground at 30°C	Allowable ampacities in free air at 40°C (ambient)	Standard length
	Nominal cross-sectional area core x mm²	Minimum number of wire No./mm	Diameter (Approx.) mm	mm	mm	mm	mm	kg/km	Ω/km	MΩ-km	A	A	m/R
K4A123010	3 x 10	6	3.72	2.0	9.0	1.8	27	900	1.83	2,700	85	80	1,000
K4A123016	3 x 16	6	4.69	2.0	10.0	1.9	30	1,150	1.15	2,400	105	105	1,000
K4A123025	3 x 25	6	5.90	2.0	11.5	2.0	33	1,510	0.727	2,100	135	140	1,000
K4A123035	3 x 35	6	6.95	2.0	12.5	2.1	36	1,880	0.524	1,800	165	170	1,000
K4A123050	3 x 50	6	8.33	2.0	13.5	2.2	39	2,430	0.387	1,600	195	205	1,000
K4A123070	3 x 70	12	9.73	2.0	15.5	2.3	43	3,120	0.268	1,400	235	250	500
K4A123095	3 x 95	15	11.45	2.0	17.0	2.4	47	3,990	0.193	1,200	280	305	500
K4A123120	3 x 120	18	12.95	2.0	18.5	2.5	50	4,840	0.153	1,100	315	345	500
K4A123150	3 x 150	18	14.27	2.0	20.0	2.6	53	5,820	0.124	1,100	350	390	250
K4A123185	3 x 185	30	15.98	2.0	21.5	2.7	57	6,980	0.0991	900	395	445	250
K4A123240	3 x 240	34	18.47	2.0	24.0	2.9	63	8,800	0.0754	800	450	520	250
K4A123300	3 x 300	34	20.68	2.0	26.5	3.1	68	10,790	0.0601	700	495	580	250
K4A123400	3 x 400	53	23.39	2.0	29.5	3.3	75	14,000	0.0470	700	545	655	200

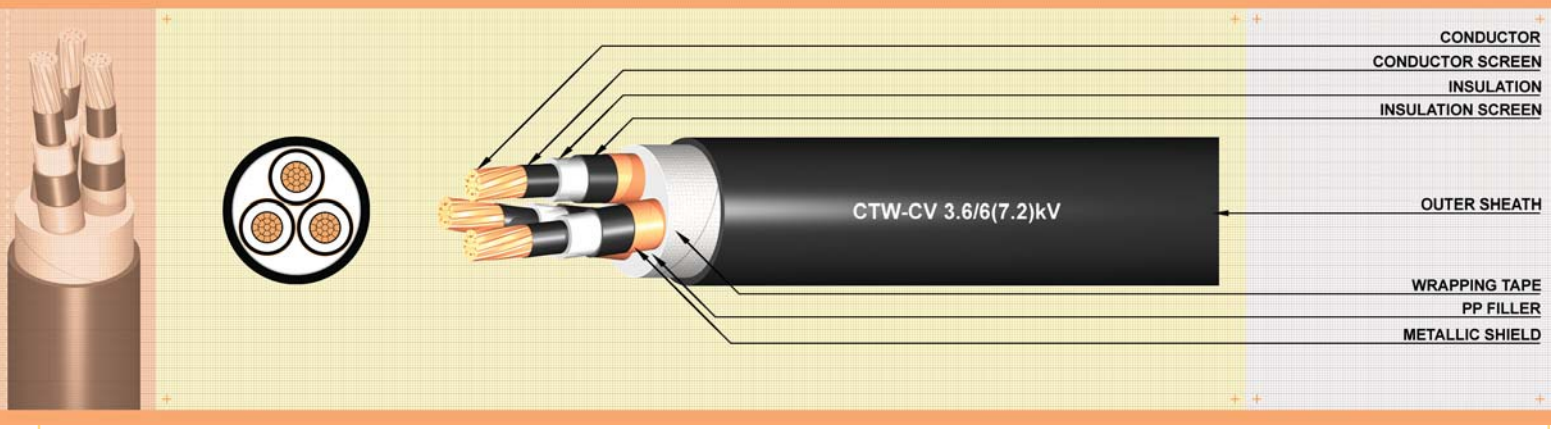
** Depth of laying in ground = 1 m, Rho = 1.2 °C m/watt

R = Packing in reel

CHAROONG THAI WIRE & CABLE PUBLIC COMPANY LIMITED

CABLE TYPE : CTW - CV THREE CORES CU/XLPE/PVC 3.6/6 (7.2) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITHOUT ARMOUR



CONSTRUCTION

Conductor	Compact round stranded annealed copper.
Conductor Screen	Semi-conducting cross-linked polyethylene.
Insulation	Cross-linked polyethylene. (XLPE)
Insulation Screen	Semi-conducting cross-linked polyethylene.
Metallic Shield	Annealed copper tape.
Filler	Polypropylene (Nonhygroscopic material)
Wrapping Tape	Polyester and/or Spunbond tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Option : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposted in aerial, direct burial, conduit, open tray and underground duct installation.

CLASSIFICATION

Maximum Conductor Temperature 90 °C (Normal Operation)

Maximum Conductor Temperature 250 °C (Short-circuit at 5s maximum duration)

REFERENCE

IEC 60228 & IEC 60502-2

** AC Test Voltage : 12.5 kV

NOTE

A special FR-PVC or Low Smoke Halogen Free (LSHF) Flame retardant sheath can be supplied in accordance with IEC 60332-3.

Product code	Conductor			Thickness of insulation	Diameter over insulation (Approx.)	Thickness of outer sheath	Overall diameter (Approx.)	Cable weight (Approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Ampacities direct burial in ground at 30°C	Allowable ampacities in free air at 40°C (ambient)	Standard length
	Nominal cross-sectional area core x mm^2	Minimum number of wire No./mm	Diameter (Approx.) mm	mm	mm	mm	mm	kg/km	Ω/km	MΩ-km	A	A	m/R
K4B123010	3 x 10	6	3.72	2.5	10.0	2.0	32	1,010	1.83	3,100	85	80	1,000
K4B123016	3 x 16	6	4.69	2.5	11.0	2.0	33	1,270	1.15	2,800	105	105	1,000
K4B123025	3 x 25	6	5.90	2.5	12.5	2.1	36	1,640	0.727	2,400	135	140	1,000
K4B123035	3 x 35	6	6.95	2.5	13.5	2.1	38	2,000	0.524	2,100	165	170	1,000
K4B123050	3 x 50	6	8.33	2.5	14.5	2.2	42	2,560	0.387	1,900	195	205	1,000
K4B123070	3 x 70	12	9.73	2.5	16.5	2.3	45	3,260	0.268	1,700	235	250	500
K4B123095	3 x 95	15	11.45	2.5	18.0	2.5	49	4,160	0.193	1,500	280	305	500
K4B123120	3 x 120	18	12.95	2.5	19.5	2.6	52	5,020	0.153	1,300	315	345	500
K4B123150	3 x 150	18	14.27	2.5	21.0	2.7	56	6,010	0.124	1,200	350	390	250
K4B123185	3 x 185	30	15.98	2.5	22.5	2.8	59	7,180	0.0991	1,100	395	445	250
K4B123240	3 x 240	34	18.47	2.6	25.5	3.0	66	9,100	0.0754	1,000	450	520	250
K4B123300	3 x 300	34	20.68	2.8	28.0	3.2	72	11,160	0.0601	1,000	495	580	250
K4B123400	3 x 400	53	23.39	3.0	31.5	3.4	85	14,000	0.0470	900	545	655	200

** Depth of laying in ground = 1 m, Rho = 1.2 °C m/watt

R = Packing in reel

CABLE TYPE : CTW - CV THREE CORES CU/XLPE/PVC 6/10 (12) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITHOUT ARMOUR

CONSTRUCTION	
Conductor	Compact round stranded annealed copper.
Conductor Screen	Semi-conducting cross-linked polyethylene.
Insulation	Cross-linked polyethylene. (XLPE)
Insulation Screen	Semi-conducting cross-linked polyethylene.
Metallic Shield	Annealed copper tape.
Filler	Polypropylene (Nonhygroscopic material)
Wrapping Tape	Polyester and/or Spunbond tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Option : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposted in aerial, direct burial, conduit, open tray and underground duct installation.

CLASSIFICATION

Maximum Conductor Temperature 90 °C (Normal Operation)

Maximum Conductor Temperature 250 °C (Short-circuit at 5s maximum duration)

REFERENCE

IEC 60228 & IEC 60502-2

** AC Test Voltage : 21 kV

NOTE

A special FR-PVC or Low Smoke Halogen Free (LSHF) Flame retardant sheath can be supplied in accordance with IEC 60332-3.

Product code	Conductor			Thickness of insulation	Diameter over insulation (Approx.)	Thickness of outer sheath	Overall diameter (Approx.)	Cable weight (Approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Ampacities direct burial in ground at 30°C	Allowable ampacities in free air at 40°C (ambient)	Standard length
	Nominal cross-sectional area core x mm²	Minimum number of wire No./mm	Diameter (Approx.) mm	mm	mm	mm	mm	kg/km	Ω/km	MΩ-km	A	A	m/R
K4E123016	3 x 16	6	4.69	3.4	13.0	2.1	38	1,490	1.15	3,000	105	105	1,000
K4E123025	3 x 25	6	5.90	3.4	14.0	2.2	40	1,870	0.727	2,700	135	140	1,000
K4E123035	3 x 35	6	6.95	3.4	15.0	2.3	43	2,270	0.524	2,400	165	170	1,000
K4E123050	3 x 50	6	8.33	3.4	16.5	2.4	46	2,850	0.387	2,200	195	210	1,000
K4E123070	3 x 70	12	9.73	3.4	18.0	2.5	49	3,570	0.268	1,900	235	255	500
K4E123095	3 x 95	15	11.45	3.4	19.5	2.6	53	4,470	0.193	1,700	280	310	500
K4E123120	3 x 120	18	12.95	3.4	21.0	2.7	57	5,360	0.153	1,600	315	350	500
K4E123150	3 x 150	18	14.27	3.4	22.5	2.8	60	6,360	0.124	1,500	350	395	250
K4E123185	3 x 185	30	15.98	3.4	24.5	3.0	64	7,590	0.0991	1,400	395	450	250
K4E123240	3 x 240	34	18.47	3.4	27.0	3.2	70	9,480	0.0754	1,200	450	525	250
K4E123300	3 x 300	34	20.68	3.4	29.0	3.3	75	11,450	0.0601	1,100	495	585	250
K4E123400	3 x 400	53	23.39	3.4	32.0	3.6	82	14,760	0.0470	1,000	545	660	200

** Depth of laying in ground = 1 m, Rho = 1.2 °C m/watt

R = Packing in reel

CHAROONG THAI WIRE & CABLE PUBLIC COMPANY LIMITED

CABLE TYPE : **CTW - CV THREE CORES CU/XLPE/PVC 8.7/15 (17.5) kV**

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITHOUT ARMOUR

CONSTRUCTION	
Conductor	Compact round stranded annealed copper.
Conductor Screen	Semi-conducting cross-linked polyethylene.
Insulation	Cross-linked polyethylene. (XLPE)
Insulation Screen	Semi-conducting cross-linked polyethylene.
Metallic Shield	Annealed copper tape.
Filler	Polypropylene (Nonhygroscopic material)
Wrapping Tape	Polyester and/or Spunbond tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Option : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposted in aerial, direct burial, conduit, open tray and underground duct installation.

CLASSIFICATION

Maximum Conductor Temperature 90 °C (Normal Operation)

Maximum Conductor Temperature 250 °C (Short-circuit at 5s maximum duration)

REFERENCE

IEC 60228 & IEC 60502-2

** AC Test Voltage : 30.5 kV

NOTE

A special FR-PVC or Low Smoke Halogen Free (LSHF) Flame retardant sheath can be supplied in accordance with IEC 60332-3.

Product code	Conductor			Thickness of insulation	Diameter over insulation (Approx.)	Thickness of outer sheath	Overall diameter (Approx.)	Cable weight (Approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Ampacities direct burial in ground at 30°C	Allowable ampacities in free air at 40°C (ambient)	Standard length
	Nominal cross-sectional area core x mm²	Minimum number of wire No./mm	Diameter (Approx.) mm	mm	mm	mm	mm	kg/km	Ω/km	MΩ-km	A	A	m/R
K4F123025	3 x 25	6	5.90	4.5	16.0	2.4	46	2,210	0.727	3,200	135	140	1,000
K4F123035	3 x 35	6	6.95	4.5	17.0	2.5	48	2,630	0.524	2,900	165	170	1,000
K4F123050	3 x 50	6	8.33	4.5	18.5	2.6	52	3,230	0.387	2,700	195	210	500
K4F123070	3 x 70	12	9.73	4.5	20.0	2.7	55	3,980	0.268	2,400	235	255	500
K4F123095	3 x 95	15	11.45	4.5	22.0	2.8	59	4,900	0.193	2,200	280	310	500
K4F123120	3 x 120	18	12.95	4.5	23.5	2.9	62	5,810	0.153	2,000	315	350	250
K4F123150	3 x 150	18	14.27	4.5	25.0	3.0	65	6,840	0.124	1,800	350	395	250
K4F123185	3 x 185	30	15.98	4.5	26.5	3.1	70	8,070	0.0991	1,700	390	450	500
K4F123240	3 x 240	34	18.47	4.5	29.0	3.3	76	10,000	0.0754	1,500	445	525	250
K4F123300	3 x 300	34	20.68	4.5	31.5	3.5	81	12,040	0.0601	1,400	490	585	200
K4F123400	3 x 400	53	23.39	4.5	34.5	3.7	88	15,370	0.0470	1,300	540	660	200

** Depth of laying in ground = 1 m, Rho = 1.2 °C m/watt

R = Packing in reel

CABLE TYPE : CTW - CV THREE CORES CU/XLPE/PVC 12/20 (24) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITHOUT ARMOUR

CONSTRUCTION

Conductor	Compact round stranded annealed copper.
Conductor Screen	Semi-conducting cross-linked polyethylene.
Insulation	Cross-linked polyethylene. (XLPE)
Insulation Screen	Semi-conducting cross-linked polyethylene.
Metallic Shield	Annealed copper tape.
Filler	Polypropylene (Nonhygroscopic material)
Wrapping Tape	Polyester and/or Spunbond tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Option : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposted in aerial, direct burial, conduit, open tray and underground duct installation.

CLASSIFICATION

Maximum Conductor Temperature 90 °C (Normal Operation)

Maximum Conductor Temperature 250 °C (Short-circuit at 5s maximum duration)

REFERENCE

IEC 60228 & IEC 60502-2

** AC Test Voltage : 42 kV

NOTE

A special FR-PVC or Low Smoke Halogen Free (LSHF) Flame retardant sheath can be supplied in accordance with IEC 60332-3.

Product code	Conductor			Thickness of insulation	Diameter over insulation (Approx.)	Thickness of outer sheath	Overall diameter (Approx.)	Cable weight (Approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Ampacities direct burial in ground at 30°C	Allowable ampacities in free air at 40°C (ambient)	Standard length
	Nominal cross-sectional area core x mm^2	Minimum number of wire No./mm	Diameter (Approx.) mm	mm	mm	mm	mm	kg/km	Ω/km	MΩ-km	A	A	m/R
K4G123035	3 x 35	6	6.95	5.5	19.5	2.6	53	2,970	0.524	3,300	165	175	500
K4G123050	3 x 50	6	8.33	5.5	21.0	2.7	56	3,590	0.387	3,100	195	215	500
K4G123070	3 x 70	12	9.73	5.5	22.5	2.8	60	4,350	0.268	2,800	235	260	500
K4G123095	3 x 95	15	11.45	5.5	24.0	3.0	64	5,340	0.193	2,500	280	315	500
K4G123120	3 x 120	18	12.95	5.5	25.5	3.1	67	6,270	0.153	2,300	315	355	250
K4G123150	3 x 150	18	14.27	5.5	27.0	3.2	71	7,320	0.124	2,200	350	400	250
K4G123185	3 x 185	30	15.98	5.5	28.5	3.3	75	8,570	0.0991	2,000	390	455	250
K4G123240	3 x 240	34	18.47	5.5	31.0	3.5	81	10,540	0.0754	1,800	445	525	250
K4G123300	3 x 300	34	20.68	5.5	33.5	3.7	86	12,620	0.0601	1,600	490	585	200
K4G123400	3 x 400	53	23.39	5.5	36.5	3.9	93	15,990	0.0470	1,500	540	660	200

** Depth of laying in ground = 1 m, Rho = 1.2 °C m/watt

R = Packing in reel

CHAROONG THAI WIRE & CABLE PUBLIC COMPANY LIMITED

CABLE TYPE : CTW - CV THREE CORES CU/XLPE/PVC 18/30 (36) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITHOUT ARMOUR

CONSTRUCTION

Conductor	Compact round stranded annealed copper.
Conductor Screen	Semi-conducting cross-linked polyethylene.
Insulation	Cross-linked polyethylene. (XLPE)
Insulation Screen	Semi-conducting cross-linked polyethylene.
Metallic Shield	Annealed copper tape.
Filler	Polypropylene (Nonhygroscopic material)
Wrapping Tape	Polyester and/or Spunbond tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Option : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposted in aerial, direct burial, conduit, open tray and underground duct installation.

CLASSIFICATION

Maximum Conductor Temperature 90 °C (Normal Operation)

Maximum Conductor Temperature 250 °C (Short-circuit at 5s maximum duration)

REFERENCE

IEC 60228 & IEC 60502-2

** AC Test Voltage : 63 kV

NOTE

A special FR-PVC or Low Smoke Halogen Free (LSHF) Flame retardant sheath can be supplied in accordance with IEC 60332-3.

Product code	Conductor			Thickness of insulation	Diameter over insulation (Approx.)	Thickness of outer sheath	Overall diameter (Approx.)	Cable weight (Approx.)	Maximum conductor resistance at 20°C	Minimum insulation resistance at 20°C	Ampacities direct burial in ground at 30°C	Allowable ampacities in free air at 40°C (ambient)	Standard length
	Nominal cross-sectional area core x mm²	Minimum number of wire No./mm	Diameter (Approx.) mm	mm	mm	mm	mm	kg/km	Ω/km	MΩ-km	A	A	m/R
K4I123050	3 x 50	6	8.33	8.0	26.0	3.1	68	4,660	0.387	4,000	195	215	250
K4I123070	3 x 70	12	9.73	8.0	27.5	3.2	72	5,470	0.268	3,600	235	260	250
K4I123095	3 x 95	15	11.45	8.0	29.0	3.4	77	6,530	0.193	3,300	275	315	250
K4I123120	3 x 120	18	12.95	8.0	30.5	3.5	80	7,520	0.153	3,000	310	355	250
K4I123150	3 x 150	18	14.27	8.0	32.0	3.6	83	8,620	0.124	2,800	345	400	250
K4I123185	3 x 185	30	15.98	8.0	34.0	3.7	87	9,930	0.0991	2,700	390	455	250
K4I123240	3 x 240	34	18.47	8.0	36.5	3.9	93	11,990	0.0754	2,400	445	525	250
K4I123300	3 x 300	34	20.68	8.0	38.5	4.1	98	14,160	0.0601	2,200	490	585	200
K4I123400	3 x 400	53	23.39	8.0	41.5	4.3	105	17,640	0.0470	2,000	540	660	200

** Depth of laying in ground = 1 m, Rho = 1.2 °C m/watt

R = Packing in reel