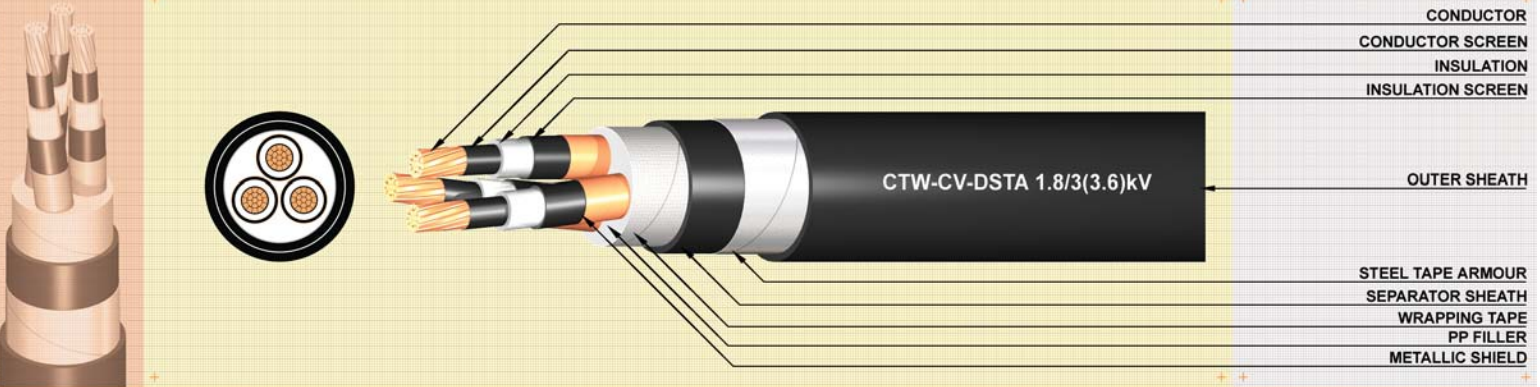




CHAROONG THAI WIRE & CABLE PUBLIC COMPANY LIMITED

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

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITH DOUBLE STEEL TAPE 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.
Separator Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)
Armour	Double steel tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposed 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 mm	Diameter over insulation (Approx.) mm	Thickness of armour tape mm	Diameter over armour (Approx.) mm	Thickness of outer sheath mm	Overall diameter (Approx.) mm	Cable weight (Approx.) kg/km	Maximum conductor resistance at 20°C Ω/km	Minimum insulation resistance at 20°C MΩ-km	Ampacities direct burial in ground at 30°C A	Allowable ampacities in free air at 40°C (ambient) A	Standard length m/R
	Nominal cross-sectional area core x mm ²	Minimum number of wire No./mm	Diameter (Approx.) mm												
K4A323010	3 x 10	6	3.72	2.0	9.0	2 x 0.2	26.5	1.9	32	1,250	1.83	2,700	85	80	1,000
K4A323016	3 x 16	6	4.69	2.0	10.0	2 x 0.2	29.0	2.0	34	1,540	1.15	2,400	105	105	1,000
K4A323025	3 x 25	6	5.90	2.0	11.5	2 x 0.5	32.5	2.1	38	2,280	0.727	2,100	135	140	1,000
K4A323035	3 x 35	6	6.95	2.0	12.5	2 x 0.5	35.0	2.2	40	2,710	0.524	1,800	165	170	500
K4A323050	3 x 50	6	8.33	2.0	13.5	2 x 0.5	38.0	2.3	44	3,350	0.387	1,600	195	205	500
K4A323070	3 x 70	12	9.73	2.0	15.5	2 x 0.5	41.0	2.4	47	4,120	0.268	1,400	235	250	500
K4A323095	3 x 95	15	11.45	2.0	17.0	2 x 0.5	45.0	2.6	52	5,120	0.193	1,200	280	305	500
K4A323120	3 x 120	18	12.95	2.0	18.5	2 x 0.5	48.5	2.7	55	6,080	0.153	1,100	315	345	250
K4A323150	3 x 150	18	14.27	2.0	20.0	2 x 0.5	51.5	2.8	58	7,140	0.124	1,100	350	390	250
K4A323185	3 x 185	30	15.98	2.0	21.5	2 x 0.5	55.5	2.9	63	8,430	0.0991	900	395	445	250
K4A323240	3 x 240	34	18.47	2.0	24.0	2 x 0.5	61.0	3.1	69	10,430	0.0754	800	450	520	250
K4A323300	3 x 300	34	20.68	2.0	26.5	2 x 0.5	66.0	3.3	75	12,550	0.0601	700	495	580	200
K4A323400	3 x 400	53	23.39	2.0	29.5	2 x 0.8	74.0	3.6	83	16,800	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-DSTA THREE CORES CU/XLPE/DSTA/PVC 3.6/6 (7.2) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITH DOUBLE STEEL TAPE 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.
Separator Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)
Armour	Double steel tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposed 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 mm	Diameter over insulation (Approx.) mm	Thickness of armour tape mm	Diameter over armour (Approx.) mm	Thickness of outer sheath mm	Overall diameter (Approx.) mm	Cable weight (Approx.) kg/km	Maximum conductor resistance at 20°C Ω/km	Minimum insulation resistance at 20°C MΩ-km	Ampacities direct burial in ground at 30°C A	Allowable ampacities in free air at 40°C (ambient) A	Standard length m/R
	Nominal cross-sectional area core x mm²	Minimum number of wire No./mm	Diameter (Approx.) mm												
K4B323010	3 x 10	6	3.72	2.5	10.0	2 x 0.2	29.0	2.0	34	1,400	1.83	3,100	85	80	1,000
K4B323016	3 x 16	6	4.69	2.5	11.0	2 x 0.2	31.0	2.1	37	1,690	1.15	2,800	105	105	1,000
K4B323025	3 x 25	6	5.90	2.5	12.5	2 x 0.5	35.0	2.2	41	2,460	0.727	2,400	135	140	1,000
K4B323035	3 x 35	6	6.95	2.5	13.5	2 x 0.5	37.5	2.3	43	2,920	0.524	2,100	165	170	500
K4B323050	3 x 50	6	8.33	2.5	14.5	2 x 0.5	40.5	2.4	47	3,550	0.387	1,900	195	205	500
K4B323070	3 x 70	12	9.73	2.5	16.5	2 x 0.5	43.5	2.5	50	4,360	0.268	1,700	235	250	500
K4B323095	3 x 95	15	11.45	2.5	18.0	2 x 0.5	47.5	2.7	54	5,350	0.193	1,500	280	305	500
K4B323120	3 x 120	18	12.95	2.5	19.5	2 x 0.5	51.0	2.8	58	6,330	0.153	1,300	315	345	250
K4B323150	3 x 150	18	14.27	2.5	21.0	2 x 0.5	54.0	2.9	61	7,420	0.124	1,200	350	390	250
K4B323185	3 x 185	30	15.98	2.5	22.5	2 x 0.5	57.5	3.0	66	8,690	0.0991	1,100	395	445	250
K4B323240	3 x 240	34	18.47	2.6	25.5	2 x 0.5	64.0	3.2	72	10,800	0.0754	1,000	450	520	250
K4B323300	3 x 300	34	20.68	2.8	28.0	2 x 0.5	71.0	3.4	79	13,060	0.0601	1,000	495	580	200
K4B323400	3 x 400	53	23.39	3.0	31.5	2 x 0.8	79.0	3.7	88	17,520	0.0470	900	545	655	200

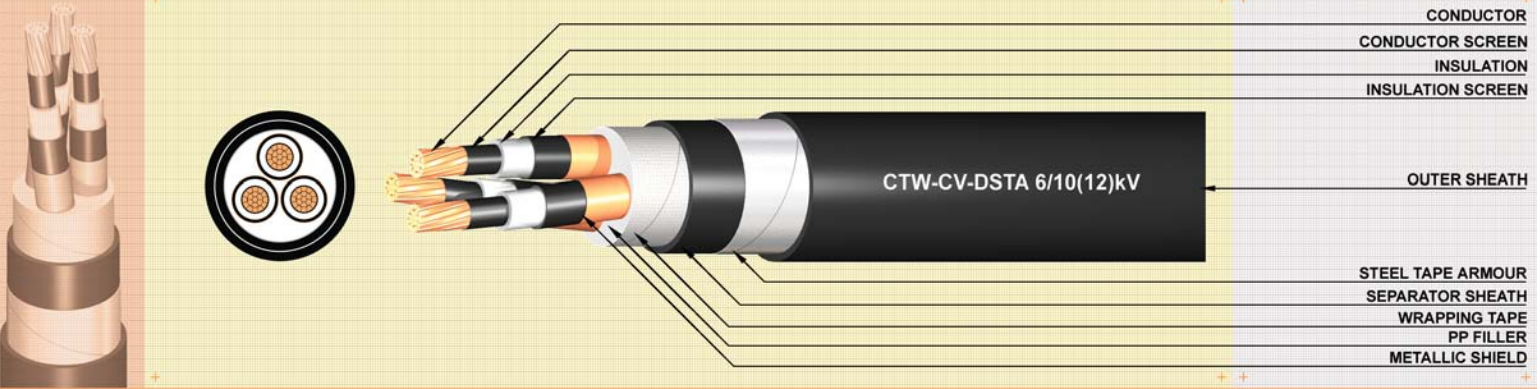
** Depth of laying in ground = 1 m, Rho = 1.2 °C m/watt



CHAROONG THAI WIRE & CABLE PUBLIC COMPANY LIMITED

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

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITH DOUBLE STEEL TAPE 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.
Separator Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)
Armour	Double steel tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposed 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 (mm)	Diameter over insulation (Approx.) (mm)	Thickness of armour tape (mm)	Diameter over armour (Approx.) (mm)	Thickness of outer sheath (mm)	Overall diameter (Approx.) (mm)	Cable weight (Approx.) (kg/km)	Maximum conductor resistance at 20°C (Ω/km)	Minimum insulation resistance at 20°C (MΩ-km)	Ampacities direct burial in ground at 30°C (A)	Allowable ampacities in free air at 40°C (ambient) (A)	Standard length (m/R)
	Nominal cross-sectional area core x mm ²	Minimum number of wire No./mm	Diameter (Approx.) (mm)												
K4E323016	3 x 16	6	4.69	3.4	13.0	2 x 0.5	36.50	2.3	42	2,360	1.15	3,000	105	105	1,000
K4E323025	3 x 25	6	5.90	3.4	14.0	2 x 0.5	39.00	2.4	45	2,840	0.727	2,700	135	140	500
K4E323035	3 x 35	6	6.95	3.4	15.0	2 x 0.5	41.50	2.4	48	3,270	0.524	2,400	165	170	500
K4E323050	3 x 50	6	8.33	3.4	16.5	2 x 0.5	44.50	2.6	51	3,970	0.387	2,200	195	210	500
K4E323070	3 x 70	12	9.73	3.4	18.0	2 x 0.5	48.00	2.7	55	4,790	0.268	1,900	235	255	500
K4E323095	3 x 95	15	11.45	3.4	19.5	2 x 0.5	51.50	2.8	59	5,790	0.193	1,700	280	310	250
K4E323120	3 x 120	18	12.95	3.4	21.0	2 x 0.5	55.00	2.9	62	6,790	0.153	1,600	315	350	250
K4E323150	3 x 150	18	14.27	3.4	22.5	2 x 0.5	58.00	3.0	66	7,870	0.124	1,500	350	395	250
K4E323185	3 x 185	30	15.98	3.4	24.5	2 x 0.5	62.00	3.2	71	9,230	0.0991	1,400	395	450	250
K4E323240	3 x 240	34	18.47	3.4	27.0	2 x 0.5	68.00	3.4	77	11,290	0.0754	1,200	450	525	250
K4E323300	3 x 300	34	20.68	3.4	29.0	2 x 0.8	74.00	3.6	83	14,260	0.0601	1,100	495	585	200
K4E323400	3 x 400	53	23.39	3.4	32.0	2 x 0.8	81.00	3.8	91	17,870	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-DSTA THREE CORES CU/XLPE/DSTA/PVC 8.7/15 (17.5) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITH DOUBLE STEEL TAPE 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.
Separator Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)
Armour	Double steel tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposed 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 (mm)	Diameter over insulation (Approx.) (mm)	Thickness of armour tape (mm)	Diameter over armour (Approx.) (mm)	Thickness of outer sheath (mm)	Overall diameter (Approx.) (mm)	Cable weight (Approx.) (kg/km)	Maximum conductor resistance at 20°C (Ω/km)	Minimum insulation resistance at 20°C (MΩ-km)	Ampacities direct burial in ground at 30°C (A)	Allowable ampacities in free air at 40°C (ambient) (A)	Standard length (m/R)
	Nominal cross-sectional area core x mm ²	Minimum number of wire No./mm	Diameter (Approx.) (mm)												
K4F323025	3 x 25	6	5.90	4.5	16.0	2 x 0.5	44.5	2.5	51	3,300	0.727	3,200	135	140	500
K4F323035	3 x 35	6	6.95	4.5	17.0	2 x 0.5	46.5	2.6	53	3,780	0.524	2,900	165	170	500
K4F323050	3 x 50	6	8.33	4.5	18.5	2 x 0.5	49.5	2.7	57	4,480	0.387	2,700	195	210	500
K4F323070	3 x 70	12	9.73	4.5	20.0	2 x 0.5	53.0	2.9	60	5,360	0.268	2,400	235	255	500
K4F323095	3 x 95	15	11.45	4.5	22.0	2 x 0.5	56.5	3.0	64	6,380	0.193	2,200	280	310	250
K4F323120	3 x 120	18	12.95	4.5	23.5	2 x 0.5	60.5	3.1	68	7,410	0.153	2,000	315	350	250
K4F323150	3 x 150	18	14.27	4.5	25.0	2 x 0.5	63.0	3.2	71	8,520	0.124	1,800	350	395	250
K4F323185	3 x 185	30	15.98	4.5	26.5	2 x 0.5	67.0	3.3	76	9,880	0.0991	1,700	390	450	250
K4F323240	3 x 240	34	18.47	4.5	29.0	2 x 0.8	74.0	3.6	84	12,810	0.0754	1,500	445	525	200
K4F323300	3 x 300	34	20.68	4.5	31.5	2 x 0.8	79.0	3.8	89	15,090	0.0601	1,400	490	585	200
K4F323400	3 x 400	53	23.39	4.5	34.5	2 x 0.8	86.0	4.0	97	18,760	0.0470	1,300	540	660	200

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



CHAROONG THAI WIRE & CABLE PUBLIC COMPANY LIMITED

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

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITH DOUBLE STEEL TAPE 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.
Separator Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)
Armour	Double steel tape.
Outer Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)

APPLICATION

Preferably used for urban networks. Exposed 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 mm	Diameter over insulation (Approx.) mm	Thickness of armour tape mm	Diameter over armour (Approx.) mm	Thickness of outer sheath mm	Overall diameter (Approx.) mm	Cable weight (Approx.) kg/km	Maximum conductor resistance at 20°C Ω/km	Minimum insulation resistance at 20°C MΩ-km	Ampacities direct burial in ground at 30°C A	Allowable ampacities in free air at 40°C (ambient) A	Standard length m/R
	Nominal cross-sectional area core x mm ²	Minimum number of wire No./mm	Diameter (Approx.) mm												
K4G323035	3 x 35	6	6.95	5.5	19.5	2 x 0.5	51.00	2.8	58	4,280	0.524	3,300	165	175	500
K4G323050	3 x 50	6	8.33	5.5	21.0	2 x 0.5	54.00	2.9	62	5,010	0.387	3,100	195	215	500
K4G323070	3 x 70	12	9.73	5.5	22.5	2 x 0.5	57.50	3.0	65	5,850	0.268	2,800	235	260	250
K4G323095	3 x 95	15	11.45	5.5	24.0	2 x 0.5	61.00	3.2	68	6,970	0.193	2,500	280	315	250
K4G323120	3 x 120	18	12.95	5.5	25.5	2 x 0.5	65.00	3.3	74	8,020	0.153	2,300	315	355	250
K4G323150	3 x 150	18	14.27	5.5	27.0	2 x 0.5	68.00	3.4	77	9,150	0.124	2,200	350	400	250
K4G323185	3 x 185	30	15.98	5.5	28.5	2 x 0.5	72.00	3.5	81	10,540	0.0991	2,000	390	455	250
K4G323240	3 x 240	34	18.47	5.5	31.0	2 x 0.8	78.50	3.7	88	13,540	0.0754	1,800	445	525	200
K4G323300	3 x 300	34	20.68	5.5	33.5	2 x 0.8	83.50	3.9	94	15,850	0.0601	1,600	490	585	200
K4G323400	3 x 400	53	23.39	5.5	36.5	2 x 0.8	90.50	4.2	101	19,560	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-DSTA THREE CORES CU/XLPE/DSTA/PVC 18/30 (36) kV

MEDIUM VOLTAGE CROSS-LINKED POLYETHYLENE INSULATED, COPPER CONDUCTOR WITH DOUBLE STEEL TAPE ARMOUR



CONSTRUCTION		APPLICATION	CLASSIFICATION
Conductor	Compact round stranded annealed copper.	Preferably used for urban networks. Exposed in aerial, direct burial, conduit, open tray and underground duct installation.	Maximum Conductor Temperature 90 °C (Normal Operation)
Conductor Screen	Semi-conducting cross-linked polyethylene.		Maximum Conductor Temperature 250 °C (Short-circuit at 5s maximum duration)
Insulation	Cross-linked polyethylene. (XLPE)	IEC 60228 & IEC 60502-2	A special FR-PVC or Low Smoke Halogen Free (LSHF) Flame retardant sheath can be supplied in accordance with IEC 60332-3.
Insulation Screen	Semi-conducting cross-linked polyethylene.		
Metallic Shield	Annealed copper tape.	** AC Test Voltage : 63 kV	NOTE
Filler	Polypropylene (Nonhygroscopic material)		
Wrapping Tape	Polyester and/or Spunbond tape.		
Separator Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)		
Armour	Double steel tape.		
Outer Sheath	Black Polyvinyl chloride (ST2) ; Optional : Polyethylene (ST7)		

Product code	Conductor			Thickness of insulation (mm)	Diameter over insulation (Approx.) (mm)	Thickness of armour tape (mm)	Diameter over armour (Approx.) (mm)	Thickness of outer sheath (mm)	Overall diameter (Approx.) (mm)	Cable weight (Approx.) (kg/km)	Maximum conductor resistance at 20°C (Ω/km)	Minimum insulation resistance at 20°C (MΩ-km)	Ampacities direct burial in ground at 30°C (A)	Allowable ampacities in free air at 40°C (ambient) (A)	Standard length (m/R)
	Nominal cross-sectional area core x mm²	Minimum number of wire No./mm	Diameter (Approx.) (mm)												
K41323050	3 x 50	6	8.33	8.0	26.0	2 x 0.5	65.5	3.3	75	6,440	0.387	4,000	195	215	250
K41323070	3 x 70	12	9.73	8.0	27.5	2 x 0.5	69.5	3.4	79	7,380	0.268	3,600	235	260	250
K41323095	3 x 95	15	11.45	8.0	29.0	2 x 0.8	74.0	3.6	84	9,330	0.193	3,300	275	315	250
K41323120	3 x 120	18	12.95	8.0	30.5	2 x 0.8	78.0	3.7	88	10,490	0.153	3,000	310	355	250
K41323150	3 x 150	18	14.27	8.0	32.0	2 x 0.8	81.0	3.8	91	11,740	0.124	2,800	345	400	200
K41323185	3 x 185	30	15.98	8.0	34.0	2 x 0.8	85.0	4.0	95	13,240	0.0991	2,700	390	455	200
K41323240	3 x 240	34	18.47	8.0	36.5	2 x 0.8	90.5	4.2	101	15,560	0.0754	2,400	445	525	200
K41323300	3 x 300	34	20.68	8.0	38.5	2 x 0.8	95.5	4.3	106	17,930	0.0601	2,200	490	585	200
K41323400	3 x 400	53	23.39	8.0	41.5	2 x 0.8	102.0	4.6	114	21,820	0.0470	2,000	540	660	200

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