KEI
Wires and Cables

MEDIUM VOLTAGE CABLES

AS/NZS 1429.1

CABLEGRID®

KEI

Wires and Cables

CABLEGRID®

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ECO FRIENDLY & COST EFFECTIVE CABLES

POWER BEHIND THE POWER

Established in 1968, KEI Industries Ltd. is ranked amongst the top cable manufacturing companies of the world. Through its customer focus approach and continuous quest for world class quality, KEI has emerged as an industry leader over a period of five decades. KEI is acclaimed for its strong customer support and an efficient marketing and distribution network. It has an expanding international footprint with clients spread across 35 countries to date.

KEI offers MV cables with range of insulation materials which are virtually discharge free ensuring a long and trouble-free service life. The insulation is triple extruded and dry cured in CCV line to meet the requirements of the standards and/or customer specification. KEI is known for its premium product for power applications. KEI wires and cables are designed and manufactured to ensure maximum safety for personals and equipment. The Company also confirms to occupational health and safety management system standards of OHSAS.

KEI has three manufacturing facilities in India to manufacture cables from 225V up to 420kV.

KEI has successfully completed and obtained Type Test and PQ test approval for 420kV cables from Europe. KEI is proudly accredited by NABL, which forms a part of the NATA (Australia) Mutual Recognition Accreditation Agreement for testing cables. KEI first entered the Australian market in year 2008 and presently is approved supplier to largest global mining Australian companies and utilities. It has been part of countless successful projects ranging from 225V to 420kV.

ISO 9001, 14001, 18001 certifications from DNV of the Netherlands are a testament to stringent quality control measures maintained by the Company. Surveillance by a competent team of technocrats and quality enablers, allows KEI to ensure compliance with globally accepted quality standards. Continuous product innovation and cutting-edge R&D at its in-house labs, contributes towards constant evolution in products and services.

It has the world-class quality, skilled man-power and most importantly, the technology to ace any new challenge that can come during transmission, distribution and supply of electrical power.

SINGLE CORE

3.8/6.6 kV to 19/33 kV,
AS/NZS 1429.1

UPON REQUEST INCORPORATING OPTIONAL BELOW MATERIAL FOR CONSTRUCTIONS CAN BE OFFERED.

1. Conductor - Water block as per AS/NZS 1125 : 2001
2. Insulation - EPR/TR - XLPE as per AS/NZS 3808
3. Metallic Screen Bedding - Semi conductive water blocking tape
4. Barrier Tapes - Moisture Barrier Aluminium Polylaminated tape below composite sheath
5. Metal Sheath - Lead Alloy E to AS/NZS 2893 & CAL, CCU & CSS as per AS/NZS 1429.1
6. Insect Protection - Polyamide (Nylon-12)/Double Brass tape/Chemical protection (Cypermethrin 0.25% in oversheath) as per AS/NZS 1429.1
7. Overall Sheath - Polyolefin or Materials for Reduced fire hazard cables or Cross-linked Elastomeric Compounds
8. Composite sheath consisting of combination of an inner layer of 5V-90, LLDPE, MDPE or HFS and an outer layer of HDPE as per 1429.1 or as required by customer.
9. Armour - Single core shall be non-magnetic Aluminium Wire Armoured (AWA), SSWA for Special purpose. For DC application SWA shall be provided.
10. Cables with Fibre Optic Component as per customer requirement.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 3.8/6.6 kV, COPPER

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI6.6CU1C35UA	1C x 35	7.0	2.5	24	1.8	21.8	5 / 3	982	0.524	0.668	0.683	0.1420	0.276
KEI6.6CU1C50UA	1C x 50	8.1	2.5	24	1.8	22.9	7.2 / 3	1140	0.387	0.494	0.512	0.1350	0.308
KEI6.6CU1C70UA	1C x 70	9.7	2.5	79	1.8	26.9	10 / 10	1886	0.268	0.342	0.366	0.1300	0.352
KEI6.6CU1C95UA	1C x 95	11.4	2.5	79	1.8	28.2	13.6 / 10	2145	0.193	0.247	0.274	0.1200	0.404
KEI6.6CU1C120UA	1C x 120	12.8	2.5	79	1.8	29.6	17.2 / 10	2397	0.153	0.196	0.225	0.1130	0.447
KEI6.6CU1C150UA	1C x 150	14.2	2.5	79	1.8	31.0	21.5 / 10	2701	0.124	0.160	0.193	0.1100	0.486
KEI6.6CU1C185UA	1C x 185	16.1	2.5	79	1.9	32.5	26.5 / 10	3045	0.0991	0.1280	0.166	0.1070	0.530
KEI6.6CU1C240UA	1C x 240	18.5	2.6	79	2.0	35.1	34.3 / 10	3611	0.0754	0.0982	0.141	0.1030	0.576
KEI6.6CU1C300UA	1C x 300	20.6	2.8	79	2.1	37.6	42.9 / 10	4246	0.0601	0.0792	0.128	0.1020	0.597
KEI6.6CU1C400UA	1C x 400	23.6	3.0	79	2.2	41.2	57.2 / 10	5246	0.0470	0.0632	0.115	0.0982	0.627
KEI6.6CU1C500UA	1C x 500	26.6	3.2	79	2.3	44.8	71.5 / 10	6254	0.0366	0.0509	0.110	0.0970	0.650
KEI6.6CU1C630UA	1C x 630	30.2	3.2	79	2.4	48.6	90.1 / 10	7521	0.0283	0.0413	0.102	0.0933	0.730
KEI6.6CU1C800UA	1C x 800	34.5	3.2	79	2.5	53.1	114.4 / 10	9163	0.0221	0.0347	0.096	0.0900	0.820
KEI6.6CU1C1000UA	1C x 1000	39.8	3.2	79	2.7	58.8	143 / 10	11131	0.0176	0.0246	0.092	0.0890	0.980

Continuous current-carrying capacity, Amps - Copper, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	181	212	168	178	129	174	180	174	163	167	159	143
50	218	253	202	215	159	204	211	205	185	189	185	173
70	271	311	253	269	194	248	253	249	225	228	225	210
95	326	372	306	326	231	293	298	296	264	264	265	249
120	369	418	347	370	260	329	332	333	294	291	296	280
150	415	467	393	419	301	366	367	371	324	318	328	319
185	471	525	449	480	338	409	406	417	352	343	359	358
240	546	600	525	561	389	466	458	478	395	379	406	411
300	614	667	597	638	449	517	503	533	433	411	449	467
400	700	748	687	734	506	577	556	599	479	451	500	525
500	787	831	784	839	583	639	609	668	525	487	553	596
630	880	920	889	953	649	703	663	740	573	523	610	660
800	977	1009	999	1071	748	763	705	810	616	558	659	744
1000	1071	1096	1108	1190	811	818	758	874	664	595	718	802

Continuous current-carrying capacity, Amps - Copper, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	183	215	168	178	129	175	183	174	167	173	161	144
50	222	260	204	216	160	207	217	206	190	197	189	174
70	280	328	256	272	197	254	266	253	236	246	236	213
95	341	401	312	332	235	303	318	302	282	294	281	255
120	389	459	355	378	266	343	360	342	318	332	317	287
150	442	522	404	430	310	384	404	383	356	371	355	329
185	510	602	465	496	351	434	457	432	405	424	404	372
240	600	710	546	583	406	501	530	499	468	489	466	429
300	689	815	627	669	473	564	599	562	526	551	525	493
400	800	948	727	777	539	640	684	637	617	649	615	559
500	924	1100	840	897	628	723	779	720	700	738	697	643
630	1065	1280	966	1033	709	812	887	809	791	838	789	722
800	1211	1478	1097	1175	828	901	999	898	913	973	910	824
1000	1362	1685	1231	1319	908	983	1111	980	1004	1078	1001	899

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 3.8/6.6 kV, ALUMINIUM

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI6.6AL1C35UA	1C x 35	8.0	2.5	24	1.8	22.7	3.3 / 3	813	0.868	1.110	1.119	0.1380	0.276
KEI6.6AL1C50UA	1C x 50	8.1	2.5	24	1.8	22.9	4.7 / 3	833	0.641	0.821	0.833	0.1350	0.308
KEI6.6AL1C70UA	1C x 70	9.7	2.5	24	1.8	24.5	6.6 / 3	924	0.443	0.568	0.583	0.1300	0.352
KEI6.6AL1C95UA	1C x 95	11.4	2.5	24	1.8	26.2	8.9 / 3	1031	0.320	0.410	0.427	0.1200	0.404
KEI6.6AL1C120UA	1C x 120	12.8	2.5	79	1.8	29.6	11.3 / 10	1662	0.253	0.325	0.343	0.1130	0.447
KEI6.6AL1C150UA	1C x 150	14.2	2.5	79	1.8	31.0	14.1 / 10	1781	0.206	0.265	0.286	0.1100	0.486
KEI6.6AL1C185UA	1C x 185	16.1	2.5	79	1.9	32.5	17.4 / 10	1911	0.164	0.2110	0.236	0.1070	0.530
KEI6.6AL1C240UA	1C x 240	18.5	2.6	79	2.0	35.1	22.6 / 10	2140	0.125	0.1610	0.191	0.1030	0.576
KEI6.6AL1C300UA	1C x 300	20.6	2.8	79	2.1	37.6	28.2 / 10	2407	0.100	0.1300	0.164	0.1020	0.597
KEI6.6AL1C400UA	1C x 400	23.6	3.0	79	2.2	41.2	37.6 / 10	2794	0.0778	0.1020	0.140	0.0982	0.627
KEI6.6AL1C500UA	1C x 500	26.6	3.2	79	2.3	44.8	47 / 10	3189	0.0605	0.0805	0.127	0.1000	0.650
KEI6.6AL1C630UA	1C x 630	30.2	3.2	79	2.4	48.6	59.2 / 10	3659	0.0469	0.0635	0.113	0.0933	0.730
KEI6.6AL1C800UA	1C x 800	34.5	3.2	79	2.5	53.1	75.2 / 10	4259	0.0367	0.0519	0.104	0.0900	0.820
KEI6.6AL1C1000UA	1C x 1000	39.8	3.2	79	2.7	58.8	94 / 10	5001	0.0291	0.0395	0.097	0.0890	0.980

Continuous current-carrying capacity, Amps - Aluminium, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	143	169	132	140	101	136	142	136	125	129	127	112
50	168	197	155	165	123	159	165	159	145	149	145	134
70	210	245	194	206	150	194	200	194	178	183	178	163
95	255	295	237	252	180	230	237	231	210	214	210	194
120	292	336	272	290	203	260	266	261	236	238	236	220
150	330	377	308	328	236	289	295	291	261	262	262	250
185	378	429	354	378	267	326	330	329	290	288	291	283
240	441	495	415	444	308	374	375	379	328	323	332	326
300	500	556	475	508	358	417	416	425	363	354	369	373
400	578	633	553	591	409	472	467	483	410	396	419	424
500	662	715	641	685	478	532	519	547	455	434	470	488
630	755	806	741	793	541	596	575	618	504	473	525	551
800	857	900	850	911	638	661	631	691	553	514	580	634
1000	961	996	965	1036	708	725	686	763	605	554	640	700

Continuous current-carrying capacity, Amps - Aluminium, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	144	170	132	140	101	137	143	136	126	130	128	112
50	170	200	156	165	123	160	167	159	147	152	146	134
70	213	251	195	207	151	196	205	195	183	190	182	164
95	261	308	239	254	182	234	246	233	218	227	217	196
120	302	356	276	294	207	266	279	265	247	257	246	223
150	343	405	313	334	240	298	313	297	276	288	275	255
185	397	468	362	386	273	338	355	336	315	329	314	289
240	468	552	426	455	317	391	412	389	364	380	363	335
300	539	634	490	523	370	441	466	439	409	428	408	385
400	631	742	574	613	425	505	535	503	483	507	481	441
500	738	867	670	716	502	577	614	575	551	580	549	513
630	863	1017	783	837	574	659	705	656	628	663	626	585
800	1002	1188	908	972	685	746	804	743	732	776	730	682
1000	1154	1378	1044	1118	769	834	909	830	821	873	818	762

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 6.35/11 kV, COPPER

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI11CU1C35UA	1C x 35	7.0	3.4	24	1.8	23.6	5 / 3	1044	0.524	0.668	0.684	0.1470	0.219
KEI11CU1C50UA	1C x 50	8.1	3.4	24	1.8	24.7	7.2 / 3	1205	0.387	0.494	0.513	0.1400	0.242
KEI11CU1C70UA	1C x 70	9.7	3.4	79	1.8	28.4	10 / 10	1955	0.268	0.342	0.367	0.1350	0.275
KEI11CU1C95UA	1C x 95	11.4	3.4	79	1.8	30.1	13.6 / 10	2219	0.193	0.247	0.275	0.1220	0.314
KEI11CU1C120UA	1C x 120	12.8	3.4	79	1.9	31.4	17.2 / 10	2480	0.153	0.196	0.227	0.1170	0.346
KEI11CU1C150UA	1C x 150	14.2	3.4	79	1.9	32.8	21.5 / 10	2794	0.124	0.160	0.195	0.1140	0.374
KEI11CU1C185UA	1C x 185	16.1	3.4	79	2.0	34.3	26.5 / 10	3146	0.0991	0.1280	0.168	0.1110	0.407
KEI11CU1C240UA	1C x 240	18.5	3.4	79	2.0	36.5	34.3 / 10	3698	0.0754	0.0980	0.143	0.1060	0.456
KEI11CU1C300UA	1C x 300	20.6	3.4	79	2.1	38.6	42.9 / 10	4307	0.0601	0.0791	0.129	0.1040	0.503
KEI11CU1C400UA	1C x 400	23.6	3.4	79	2.2	42.0	57.2 / 10	5295	0.0470	0.0631	0.116	0.0988	0.561
KEI11CU1C500UA	1C x 500	26.6	3.4	79	2.3	45.2	71.5 / 10	6280	0.0366	0.0508	0.108	0.0970	0.620
KEI11CU1C630UA	1C x 630	30.2	3.4	79	2.4	49.0	90.1 / 10	7550	0.0283	0.0412	0.102	0.0953	0.694
KEI11CU1C800UA	1C x 800	34.5	3.4	79	2.5	53.5	114.4 / 10	9195	0.0221	0.0347	0.095	0.0906	0.816
KEI11CU1C1000UA	1C x 1000	39.8	3.4	79	2.7	59.2	143 / 10	11166	0.0176	0.0246	0.092	0.0897	0.926
KEI11CU1C1200UA	1C x 1200*	44.3	3.4	79	2.8	65.7	171.6 / 10	13299	0.0151	0.0209	0.091	0.0887	0.998

Continuous current-carrying capacity, Amps - Copper, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	183	212	170	180	130	174	180	174	159	163	159	144
50	218	251	203	215	152	204	210	204	185	189	185	169
70	273	311	255	271	194	248	253	249	225	228	226	210
95	329	372	309	328	247	293	298	296	263	264	264	260
120	372	418	351	373	278	329	332	333	292	290	294	292
150	418	467	396	422	311	366	367	371	321	316	325	326
185	474	524	451	480	349	409	407	417	354	345	361	366
240	549	602	529	564	402	467	460	478	400	387	410	420
300	616	669	599	639	450	518	505	533	437	417	451	468
400	702	750	689	736	507	578	557	599	481	453	502	526
500	789	832	785	840	584	640	609	668	523	489	549	596
630	883	920	891	954	681	703	663	741	569	524	604	681
800	977	1010	1000	1072	749	763	713	811	617	559	660	744
1000	1074	1097	1110	1191	812	818	758	875	666	596	719	802
1200	1232	1201	1309	1405	958	926	815	1007	705	631	763	935

Continuous current-carrying capacity, Amps - Copper, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	185	215	170	180	130	175	182	174	161	167	160	144
50	222	258	204	216	153	206	216	206	189	196	189	170
70	281	327	259	274	197	253	266	253	236	245	235	214
95	343	400	315	334	252	303	318	302	284	296	283	265
120	391	457	358	381	285	342	360	341	321	334	320	299
150	445	520	407	433	320	384	404	382	359	374	358	336
185	509	596	465	495	361	433	456	431	404	422	403	378
240	602	707	550	586	420	501	530	499	482	505	480	438
300	689	810	627	669	473	563	598	561	542	569	541	493
400	801	946	729	778	539	640	683	638	617	649	615	559
500	924	1099	840	898	628	723	779	720	719	760	716	643
630	1065	1279	966	1033	743	812	887	809	815	864	812	744
800	1213	1476	1098	1176	828	901	999	898	912	972	909	825
1000	1361	1683	1232	1320	908	984	1111	981	1003	1077	1000	899
1200	1651	1953	1495	1601	1105	1170	1272	1165	1195	1276	1189	1082

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.
3. *1200mm² Milliken Conductor.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 6.35/11 kV, ALUMINIUM

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI11AL1C35UA	1C x 35	8.0	3.4	24	1.8	24.5	3.3 / 3	878	0.868	1.110	1.119	0.1440	0.220
KEI11AL1C50UA	1C x 50	8.1	3.4	24	1.8	24.7	4.7 / 3	898	0.641	0.821	0.834	0.1400	0.242
KEI11AL1C70UA	1C x 70	9.7	3.4	24	1.8	26.3	6.6 / 3	993	0.443	0.568	0.584	0.1350	0.275
KEI11AL1C95UA	1C x 95	11.4	3.4	24	1.8	28.0	8.9 / 3	1104	0.320	0.410	0.428	0.1220	0.314
KEI11AL1C120UA	1C x 120	12.8	3.4	79	1.9	31.4	11.3 / 10	1745	0.253	0.325	0.345	0.1170	0.346
KEI11AL1C150UA	1C x 150	14.2	3.4	79	1.9	32.8	14.1 / 10	1874	0.206	0.265	0.288	0.1140	0.374
KEI11AL1C185UA	1C x 185	16.1	3.4	79	2.0	34.3	17.4 / 10	2012	0.164	0.2110	0.238	0.1110	0.407
KEI11AL1C240UA	1C x 240	18.5	3.4	79	2.0	36.5	22.6 / 10	2227	0.125	0.1610	0.192	0.1060	0.456
KEI11AL1C300UA	1C x 300	20.6	3.4	79	2.1	38.6	28.2 / 10	2468	0.100	0.1300	0.165	0.1040	0.503
KEI11AL1C400UA	1C x 400	23.6	3.4	79	2.2	42.0	37.6 / 10	2843	0.0778	0.1020	0.140	0.0988	0.561
KEI11AL1C500UA	1C x 500	26.6	3.4	79	2.3	45.2	47 / 10	3215	0.0605	0.0803	0.124	0.0970	0.620
KEI11AL1C630UA	1C x 630	30.2	3.4	79	2.4	49.0	59.2 / 10	3688	0.0469	0.0636	0.113	0.0953	0.694
KEI11AL1C800UA	1C x 800	34.5	3.4	79	2.5	53.5	75.2 / 10	4291	0.0367	0.0516	0.102	0.0906	0.816
KEI11AL1C1000UA	1C x 1000	39.8	3.4	79	2.7	59.2	94 / 10	5036	0.0291	0.0399	0.097	0.0897	0.926
KEI11AL1C1200UA	1C x 1200	41.6	3.4	79	2.8	63.0	112.8 / 10	5851	0.0247	0.0328	0.094	0.0887	0.998

Continuous current-carrying capacity, Amps - Aluminium, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	145	169	134	142	101	136	142	136	125	129	125	112
50	169	196	156	166	118	159	165	158	145	149	145	131
70	211	244	195	207	151	193	200	193	178	183	178	163
95	257	295	239	254	192	230	237	231	210	214	210	202
120	295	336	275	292	218	260	266	261	235	238	236	229
150	332	377	311	330	244	289	295	291	260	262	261	256
185	378	427	355	378	275	325	330	328	290	289	292	288
240	443	496	418	446	319	374	376	379	334	331	337	333
300	501	556	476	508	358	418	417	425	368	361	374	373
400	579	634	555	593	409	473	467	483	411	398	420	424
500	663	715	641	686	478	532	519	547	457	438	470	488
630	757	806	741	794	568	596	575	618	504	476	524	568
800	856	900	850	911	638	662	631	691	554	515	581	634
1000	963	996	966	1037	708	726	686	764	606	555	641	700
1200	1023	1052	1038	1113	770	767	720	812	629	579	666	754

Continuous current-carrying capacity, Amps - Aluminium, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	145	170	134	142	101	137	143	136	125	130	125	112
50	170	199	157	166	118	159	167	159	146	152	146	131
70	214	249	196	208	151	195	204	195	182	189	182	164
95	263	307	241	256	194	234	245	233	219	229	219	204
120	304	355	278	296	221	266	279	265	249	259	248	232
150	345	403	316	336	248	297	313	297	278	290	277	260
185	396	463	362	385	281	337	354	335	314	328	313	294
240	470	550	428	457	327	390	412	389	375	393	373	341
300	538	630	490	523	370	440	465	439	422	442	420	385
400	632	740	575	614	425	505	535	503	482	507	481	441
500	738	866	671	716	502	577	614	575	566	596	563	513
630	863	1016	783	837	602	659	704	656	646	682	643	603
800	1003	1186	908	972	685	745	804	743	723	775	729	682
1000	1153	1375	1044	1118	769	834	909	830	820	873	817	762
1200	1247	1488	1130	1209	844	894	981	891	926	989	921	828

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 12.7/22 kV, COPPER

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI22CU1C35UA	1C x 35	7.0	5.5	24	1.8	27.5	5 / 3	1200	0.524	0.668	0.687	0.1590	0.156
KEI22CU1C50UA	1C x 50	8.1	5.5	24	1.8	28.6	7.2 / 3	1367	0.387	0.494	0.517	0.1510	0.171
KEI22CU1C70UA	1C x 70	9.7	5.5	79	1.9	32.1	10 / 10	2130	0.268	0.342	0.370	0.1430	0.192
KEI22CU1C95UA	1C x 95	11.4	5.5	79	2.0	33.8	13.6 / 10	2421	0.193	0.247	0.279	0.1320	0.216
KEI22CU1C120UA	1C x 120	12.8	5.5	79	2.0	35.2	17.2 / 10	2687	0.153	0.196	0.233	0.1270	0.236
KEI22CU1C150UA	1C x 150	14.2	5.5	79	2.1	36.6	21.5 / 10	3018	0.124	0.159	0.200	0.1230	0.254
KEI22CU1C185UA	1C x 185	16.1	5.5	79	2.1	38.3	26.5 / 10	3395	0.0991	0.1280	0.174	0.1190	0.274
KEI22CU1C240UA	1C x 240	18.5	5.5	79	2.2	40.9	34.3 / 10	3979	0.0754	0.0978	0.150	0.1150	0.305
KEI22CU1C300UA	1C x 300	20.6	5.5	79	2.3	43.2	42.9 / 10	4599	0.0601	0.0788	0.136	0.1120	0.334
KEI22CU1C400UA	1C x 400	23.6	5.5	79	2.4	46.6	57.2 / 10	5613	0.047	0.0628	0.123	0.1070	0.371
KEI22CU1C500UA	1C x 500	26.6	5.5	79	2.5	49.8	71.5 / 10	6621	0.0366	0.0503	0.114	0.1040	0.407
KEI22CU1C630UA	1C x 630	30.2	5.5	79	2.6	53.6	90.1 / 10	7918	0.0283	0.0407	0.107	0.1010	0.453
KEI22CU1C800UA	1C x 800	34.5	5.5	79	2.7	58.1	114.4 / 10	9596	0.0221	0.0341	0.100	0.0960	0.528
KEI22CU1C1000UA	1C x 1000	39.8	5.5	79	2.8	63.6	143 / 10	11579	0.0176	0.0246	0.095	0.0926	0.600
KEI22CU1C1200UA	1C x 1200*	44.3	5.5	79	2.9	70.1	171.6 / 10	13756	0.0151	0.0208	0.102	0.0998	0.640

Continuous current-carrying capacity, Amps - Copper, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	187	212	174	183	136	174	180	174	158	163	158	148
50	222	251	207	218	160	204	210	204	185	189	185	174
70	274	308	258	272	195	247	253	248	225	228	226	211
95	331	369	312	330	247	293	298	295	264	265	265	260
120	376	418	355	376	279	329	333	333	294	293	296	293
150	422	467	401	425	312	366	368	371	324	319	328	327
185	480	526	457	485	351	410	409	417	359	350	365	367
240	556	604	536	569	405	468	462	479	407	393	416	422
300	626	671	608	647	453	520	508	535	445	424	459	470
400	711	755	699	744	510	581	560	602	491	461	511	528
500	800	838	796	849	588	644	614	672	535	498	560	600
630	895	929	904	965	655	709	668	746	582	535	617	665
800	994	1020	1015	1085	756	771	719	818	631	571	676	751
1000	1090	1112	1127	1206	821	828	766	885	682	609	736	811
1200	1244	1215	1321	1414	963	933	823	1013	722	644	781	939

Continuous current-carrying capacity, Amps - Copper, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	188	215	174	184	136	175	182	174	160	166	160	148
50	225	257	208	219	161	206	215	205	188	195	188	175
70	282	323	260	275	197	252	264	251	234	243	234	214
95	343	393	317	335	252	301	316	300	282	293	281	265
120	393	451	362	383	285	341	358	340	318	332	318	300
150	446	513	410	435	320	382	402	381	356	372	355	336
185	512	589	470	498	362	432	455	430	402	419	401	379
240	605	698	555	589	421	500	529	499	479	502	478	439
300	693	801	635	674	475	564	598	562	540	566	538	494
400	805	934	736	783	541	641	683	638	613	645	611	561
500	929	1084	849	903	631	725	778	722	715	755	712	645
630	1070	1261	976	1040	713	816	887	813	810	859	807	726
800	1218	1454	1110	1183	834	908	1000	904	907	966	904	831
1000	1370	1658	1245	1329	916	993	1113	989	998	1071	994	907
1200	1646	1920	1497	1598	1106	1172	1271	1167	1188	1268	1182	1082

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.
3. *1200mm² Milliken Conductor.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 12.7/22 kV, ALUMINIUM

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI22AL1C35UA	1C x 35	8.0	5.5	24	1.8	28.4	3.3 / 3	1041	0.868	1.110	1.121	0.1560	0.157
KEI22AL1C50UA	1C x 50	8.1	5.5	24	1.8	28.6	4.7 / 3	1061	0.641	0.821	0.835	0.1510	0.172
KEI22AL1C70UA	1C x 70	9.7	5.5	24	1.9	30.4	6.6 / 3	1260	0.443	0.568	0.586	0.1430	0.192
KEI22AL1C95UA	1C x 95	11.4	5.5	24	1.9	32.4	8.9 / 3	1383	0.320	0.410	0.431	0.1320	0.216
KEI22AL1C120UA	1C x 120	12.8	5.5	79	2.0	35.2	11.3 / 10	1952	0.253	0.325	0.348	0.1270	0.236
KEI22AL1C150UA	1C x 150	14.2	5.5	79	2.1	36.6	14.1 / 10	2099	0.206	0.265	0.291	0.1230	0.254
KEI22AL1C185UA	1C x 185	16.1	5.5	79	2.1	38.3	17.4 / 10	2261	0.164	0.2110	0.242	0.1190	0.274
KEI22AL1C240UA	1C x 240	18.5	5.5	79	2.2	40.9	22.6 / 10	2508	0.125	0.1610	0.197	0.1150	0.305
KEI22AL1C300UA	1C x 300	20.6	5.5	79	2.3	43.2	28.2 / 10	2760	0.100	0.1290	0.170	0.1120	0.334
KEI22AL1C400UA	1C x 400	23.6	5.5	79	2.4	46.6	37.6 / 10	3161	0.0778	0.1020	0.146	0.1070	0.371
KEI22AL1C500UA	1C x 500	26.6	5.5	79	2.5	49.8	47 / 10	3556	0.0605	0.0800	0.130	0.1040	0.407
KEI22AL1C630UA	1C x 630	30.2	5.5	79	2.6	53.6	59.2 / 10	4056	0.0469	0.0632	0.118	0.1010	0.453
KEI22AL1C800UA	1C x 800	34.5	5.5	79	2.7	58.1	75.2 / 10	4692	0.0367	0.0511	0.107	0.0960	0.528
KEI22AL1C1000UA	1C x 1000	39.8	5.5	79	2.8	63.6	94 / 10	5449	0.0291	0.0391	0.100	0.0926	0.600
KEI22AL1C1200UA	1C x 1200	41.6	5.5	79	2.9	67.4	112.8 / 10	6290	0.0247	0.0328	0.105	0.0998	0.640

Continuous current-carrying capacity, Amps - Aluminium, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	148	169	137	145	107	136	142	136	125	129	124	116
50	172	196	159	168	124	158	165	158	144	149	144	135
70	214	243	199	210	151	193	200	193	178	183	178	164
95	259	293	242	256	193	229	236	230	210	214	210	203
120	297	334	278	294	219	259	266	261	236	239	236	230
150	334	375	314	333	244	289	295	291	261	263	262	256
185	382	426	359	381	277	325	331	328	292	292	293	289
240	447	494	423	449	320	374	377	379	337	334	340	333
300	507	555	482	513	360	418	418	425	372	365	378	374
400	584	634	561	597	410	474	469	484	416	403	425	425
500	669	716	648	690	479	533	522	548	464	444	477	490
630	763	808	748	798	543	598	578	619	512	484	532	552
800	865	903	858	916	641	665	635	693	564	524	590	637
1000	971	1003	975	1042	712	730	691	768	617	565	652	703
1200	1034	1058	1047	1119	774	773	726	817	641	590	678	758

Continuous current-carrying capacity, Amps - Aluminium, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
35	148	170	137	145	107	137	143	136	125	130	125	116
50	172	198	160	168	124	159	166	158	145	151	145	135
70	216	248	199	211	152	195	204	194	181	188	181	165
95	264	303	244	258	194	233	244	232	218	227	217	205
120	305	350	281	297	221	265	278	264	247	258	247	233
150	346	397	318	337	248	296	311	295	276	288	275	260
185	398	458	365	388	282	336	353	335	312	326	311	295
240	471	542	432	459	328	390	411	388	372	390	371	342
300	540	623	495	526	371	440	465	438	419	440	418	386
400	634	730	580	616	426	504	534	503	480	504	478	442
500	739	854	675	719	502	577	613	575	562	593	560	513
630	863	1000	787	839	575	659	704	657	642	678	640	586
800	1001	1167	912	973	686	747	803	744	728	771	725	683
1000	1153	1353	1048	1119	771	836	909	833	816	868	813	763
1200	1245	1464	1134	1209	846	898	981	894	921	983	916	830

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 19/33 kV, COPPER

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI33CU1C70UA	1C x 70	9.7	8.0	79	2.1	37.4	10 / 10	2492	0.268	0.342	0.375	0.1540	0.148
KEI33CU1C95UA	1C x 95	11.4	8.0	79	2.1	39.3	13.6 / 10	2736	0.193	0.247	0.285	0.1430	0.165
KEI33CU1C120UA	1C x 120	12.8	8.0	79	2.2	40.6	17.2 / 10	3034	0.153	0.195	0.238	0.1370	0.179
KEI33CU1C150UA	1C x 150	14.2	8.0	79	2.2	42.0	21.5 / 10	3357	0.124	0.159	0.207	0.1330	0.191
KEI33CU1C185UA	1C x 185	16.1	8.0	79	2.3	44.1	26.5 / 10	3766	0.0991	0.1270	0.181	0.1290	0.205
KEI33CU1C240UA	1C x 240	18.5	8.0	79	2.4	46.7	34.3 / 10	4374	0.0754	0.0976	0.157	0.1240	0.227
KEI33CU1C300UA	1C x 300	20.6	8.0	79	2.4	48.8	42.9 / 10	4992	0.0601	0.0786	0.142	0.1200	0.247
KEI33CU1C400UA	1C x 400	23.6	8.0	79	2.5	52.2	57.2 / 10	6036	0.047	0.0625	0.130	0.1150	0.272
KEI33CU1C500UA	1C x 500	26.6	8.0	79	2.6	55.4	71.5 / 10	7072	0.0366	0.0499	0.120	0.1110	0.297
KEI33CU1C630UA	1C x 630	30.2	8.0	79	2.7	59.2	90.1 / 10	8402	0.0283	0.0403	0.114	0.1080	0.329
KEI33CU1C800UA	1C x 800	34.5	8.0	79	2.9	63.9	114.4 / 10	10149	0.0221	0.0336	0.106	0.1020	0.381
KEI33CU1C1000UA	1C x 1000	39.8	8.0	79	3.0	69.4	143 / 10	12182	0.0176	0.0245	0.103	0.1000	0.427
KEI33CU1C1200UA	1C x 1200*	44.3	8.0	79	3.1	75.5	171.6 / 10	14367	0.0151	0.0207	0.102	0.0998	0.462
KEI33CU1C1600UA	1C x 1600*	52.5	8.0	79	3.3	84.8	228.8/ 10	18462	0.0113	0.0174	0.0926	0.0910	0.751

Continuous current-carrying capacity, Amps - Copper, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
70	277	306	260	274	208	246	253	247	225	229	226	219
95	333	368	315	332	248	292	298	294	270	272	271	261
120	380	417	360	380	281	330	334	333	302	301	303	295
150	428	467	407	430	314	367	370	372	332	329	335	329
185	486	527	464	491	363	411	411	418	368	360	373	375
240	563	605	543	575	418	470	464	480	414	400	422	431
300	634	676	617	653	468	522	511	537	454	433	467	481
400	722	760	708	751	553	584	565	604	501	474	519	557
500	811	846	807	857	621	649	620	676	548	511	574	622
630	911	938	917	976	693	716	676	752	598	549	633	692
800	1009	1029	1030	1097	764	779	727	826	649	586	694	758
1000	1108	1123	1144	1220	864	838	775	895	685	620	733	841
1200	1260	1228	1330	1420	1004	940	831	1019	741	659	802	967
1600	1419	1362	1527	1632	1140	1032	898	1132	818	713	898	1083

Continuous current-carrying capacity, Amps - Copper, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
70	283	318	263	277	210	251	263	250	234	244	234	222
95	344	387	319	336	252	300	315	299	288	300	287	265
120	395	446	366	386	286	340	357	339	326	340	325	301
150	448	507	415	438	321	382	401	380	365	381	364	337
185	515	583	476	502	373	431	454	430	412	431	410	386
240	607	689	561	593	433	500	528	498	476	499	475	447
300	695	791	641	678	489	564	597	562	537	563	535	504
400	807	921	743	787	584	642	683	639	626	659	624	589
500	931	1068	856	907	663	727	779	724	711	750	708	667
630	1072	1241	984	1044	751	820	887	817	805	853	802	752
800	1222	1429	1120	1189	839	914	1001	911	901	960	898	836
1000	1375	1629	1257	1336	960	1002	1114	999	1046	1120	1041	939
1200	1637	1883	1497	1592	1146	1174	1271	1169	1180	1259	1174	1110
1600	1918	2224	1752	1863	1329	1335	1464	1329	1342	1439	1335	1272

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.
3. *1200mm² & 1600mm² Milliken Conductor.

CABLEGRID®

SINGLE CORE, SCREENED & PVC SHEATHED 19/33 kV, ALUMINIUM

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI33AL1C70UA	1C x 70	9.7	8.0	24	2.0	36.0	6.6 / 3	1476	0.443	0.568	0.588	0.1510	0.148
KEI33AL1C95UA	1C x 95	11.4	8.0	24	2.1	38.0	8.9 / 3	1627	0.320	0.410	0.434	0.1430	0.165
KEI33AL1C120UA	1C x 120	12.8	8.0	79	2.2	40.6	11.3 / 10	2299	0.253	0.325	0.352	0.1370	0.179
KEI33AL1C150UA	1C x 150	14.2	8.0	79	2.2	42.0	14.1 / 10	2438	0.206	0.264	0.296	0.1330	0.191
KEI33AL1C185UA	1C x 185	16.1	8.0	79	2.3	44.1	17.4 / 10	2632	0.164	0.2110	0.247	0.1290	0.205
KEI33AL1C240UA	1C x 240	18.5	8.0	79	2.4	46.7	22.6 / 10	2903	0.125	0.1610	0.203	0.1240	0.227
KEI33AL1C300UA	1C x 300	20.6	8.0	79	2.4	48.8	28.2 / 10	3153	0.100	0.1290	0.176	0.1200	0.247
KEI33AL1C400UA	1C x 400	23.6	8.0	79	2.5	52.2	37.6 / 10	3584	0.0778	0.1010	0.152	0.1150	0.272
KEI33AL1C500UA	1C x 500	26.6	8.0	79	2.6	55.4	47 / 10	4007	0.0605	0.0797	0.135	0.1110	0.297
KEI33AL1C630UA	1C x 630	30.2	8.0	79	2.7	59.2	59.2 / 10	4540	0.0469	0.0629	0.124	0.1080	0.329
KEI33AL1C800UA	1C x 800	34.5	8.0	79	2.9	64.0	75.2 / 10	5245	0.0367	0.0507	0.112	0.1020	0.381
KEI33AL1C1000UA	1C x 1000	39.8	8.0	79	3.0	69.4	94 / 10	6052	0.0291	0.0390	0.107	0.1000	0.427
KEI33AL1C1200UA	1C x 1200	41.6	8.0	79	3.1	72.8	112.8 / 10	6879	0.0247	0.0327	0.105	0.0998	0.462
KEI33AL1C1600UA	1C x 1600*	52.5	8.0	79	3.3	84.8	151.2/ 10	8654	0.0186	0.0242	0.0941	0.0910	0.751

Continuous current-carrying capacity, Amps - Aluminium, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
70	217	242	203	213	162	193	200	193	178	183	178	171
95	262	291	245	259	193	229	236	230	215	220	215	204
120	299	332	281	297	219	259	266	260	241	245	241	231
150	338	373	318	335	245	289	295	291	267	271	268	257
185	386	425	364	385	285	326	331	328	299	300	300	295
240	451	493	428	453	330	374	378	379	341	337	343	340
300	511	555	488	517	371	419	420	426	377	370	381	382
400	590	634	567	601	443	475	471	485	425	413	433	447
500	674	718	654	694	504	535	525	550	472	452	484	506
630	771	810	755	802	572	601	583	622	522	493	541	572
800	872	906	864	920	643	668	640	696	575	535	601	639
1000	979	1007	982	1047	744	735	697	772	623	577	654	726
1200	1041	1063	1055	1123	806	778	732	821	655	601	692	781
1600	1288	1259	1342	1433	1006	930	834	1001	761	678	819	957

Continuous current-carrying capacity, Amps - Aluminium, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
70	219	246	203	214	163	194	203	194	182	189	181	172
95	266	300	247	260	195	232	244	232	223	232	222	205
120	307	346	284	300	222	264	277	263	253	264	252	233
150	347	392	322	339	249	296	311	295	283	295	282	261
185	400	452	370	391	290	335	353	334	320	334	319	300
240	473	535	436	461	337	389	410	388	370	388	369	348
300	542	615	500	529	381	440	464	438	417	437	416	393
400	634	720	584	618	459	504	534	502	490	515	488	463
500	739	840	679	720	526	577	613	575	559	589	557	529
630	862	984	791	839	604	659	703	657	638	674	636	604
800	999	1145	916	972	686	748	803	745	723	765	720	684
1000	1149	1327	1051	1117	803	839	908	835	850	906	846	785
1200	1242	1438	1137	1208	877	901	981	897	915	976	910	853
1600	1628	1848	1488	1582	1129	1135	1217	1129	1116	1190	1110	1079

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.
3. *1600mm² Milliken Conductor.

CABLEGRID®

SINGLE CORE,SCREENDED,SSWA & COMPOSITE OVERSHEATH OF (PVC+NYLON +HDPE) SHEATHED 19/33kV, COPPER

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Outer Sheath (Inner Layer)	Nominal Thickness of HDPE Outer Sheath (Outer Layer)	Overall Cable Diameter (+/- 3.0)	Short Circuit rating of conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance Conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	mm	kA for 1Sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI33CU1C70SSWA	1C x 70	9.7	8.0	72	1.2	1.0	1.3	47.4	10/10	4090	0.268	0.3420	0.377	0.1594	0.155
KEI33CU1C95SSWA	1C x 95	11.4	8.0	72	1.2	1.0	1.4	49.3	13.6/10	4490	0.193	0.2470	0.290	0.1518	0.170
KEI33CU1C120SSWA	1C x 120	12.8	8.0	72	1.3	1.0	1.4	51.7	17.2/10	5210	0.153	0.1950	0.245	0.1475	0.183
KEI33CU1C150SSWA	1C x 150	14.2	8.0	72	1.3	1.0	1.5	53.3	21.5/10	5650	0.124	0.1590	0.214	0.1429	0.195
KEI33CU1C185SSWA	1C x 185	16.1	8.0	72	1.3	1.0	1.6	55.4	26.5/10	6150	0.0991	0.1270	0.187	0.1374	0.212
KEI33CU1C240SSWA	1C x 240	18.5	8.0	72	1.4	1.0	1.6	58.4	34.3/10	6910	0.0754	0.0976	0.164	0.1320	0.233
KEI33CU1C300SSWA	1C x 300	20.6	8.0	72	1.4	1.0	1.7	60.7	42.9/10	7690	0.0601	0.0786	0.150	0.1277	0.251
KEI33CU1C400SSWA	1C x 400	23.6	8.0	72	1.5	1.0	1.8	64.3	57.2/10	8920	0.047	0.0625	0.138	0.1227	0.279
KEI33CU1C500SSWA	1C x 500	26.6	8.0	72	1.5	1.0	1.9	67.5	71.5/10	10110	0.0366	0.0499	0.128	0.1183	0.305
KEI33CU1C630SSWA	1C x 630	30.2	8.0	72	1.6	1.1	1.9	71.5	90.1/10	11680	0.0283	0.0403	0.121	0.1139	0.336
KEI33CU1C800SSWA	1C x 800	34.5	8.0	72	1.7	1.1	2.1	76.5	114.4/10	13690	0.0221	0.0336	0.115	0.1097	0.373

Continuous current-carrying capacity, Amps - Copper, Solid Bond

Area	In Air					In Ground			In underground ducts			
mm²												
70	281	305	267	280	215	247	253	248	230	234	230	224
95	338	365	322	338	256	292	298	295	270	272	270	266
120	386	414	370	388	293	330	334	333	303	302	304	303
150	433	462	417	438	330	366	368	371	333	329	336	339
185	490	519	474	498	371	410	408	416	370	363	375	380
240	565	592	551	581	431	467	460	477	415	401	424	438
300	632	657	623	657	486	517	504	532	454	435	467	490
400	714	732	712	752	553	577	556	597	499	471	519	553
500	798	810	808	854	624	639	604	666	544	507	570	620
630	889	890	914	967	707	703	652	739	591	543	626	695
800	981	969	1022	1083	784	764	698	810	634	576	679	765

Continuous current-carrying capacity, Amps - Copper, Single Bond

Area	In Air					In Ground			In underground ducts			
mm²												
70	289	319	271	283	218	252	264	252	241	251	240	228
95	351	388	328	344	261	302	317	301	287	299	286	272
120	405	448	378	397	301	343	361	342	326	340	325	311
150	459	508	428	449	341	385	405	384	365	381	363	351
185	526	584	490	515	387	435	459	434	417	436	415	396
240	619	688	576	606	453	505	533	503	482	505	480	462
300	708	788	658	692	517	569	603	567	549	577	547	523
400	820	915	761	802	596	648	685	646	624	657	622	599
500	946	1061	877	924	685	736	786	733	717	757	714	683
630	1090	1229	1009	1064	790	833	896	829	812	861	809	781
800	1241	1413	1148	1212	894	931	1012	928	921	980	917	877

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

CABLEGRID®

THREE CORE

3.8/6.6 kV to 19/33 kV, AS/NZS 1429.1

UPON REQUEST INCORPORATING OPTIONAL BELOW MATERIAL FOR CONSTRUCTIONS CAN BE OFFERED.

1. Conductor - Water block as per AS/NZS 1125 : 2001
2. Insulation - EPR/TR - XLPE as per AS/NZS 3808
3. Metallic Screen Bedding - Semi conductive water blocking tape
4. Barrier Tapes - Moisture Barrier Aluminium Polylaminated tape below composite sheath
5. Metal Sheath - Lead Alloy E to AS/NZS 2893 & CAL, CCU & CSS as per AS/NZS 1429.1
6. Insect Protection - Polyamide (Nylon-12)/Double Brass tape/Chemical protection (Cypermethrin 0.25% in oversheath) as per AS/NZS 1429.1
7. Overall Sheath - Polyolefin Material or Materials for Reduced fire hazard cables or Cross-linked Elastomeric Compounds
8. Composite sheath consisting of combination of an inner layer of 5V-90,LLDPE,MDPE or HFS and an outer layer of HDPE as per 1429.1 or as required by customer.
9. Cables with fibre optic Component as per Customer requirement.

CABLEGRID®

THREE CORE, SCREENED & PVC SHEATHED 3.8/6.6 kV, COPPER

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI6.6CU3C35UA	3C x 35	7.0	2.5	8	2.2	42.7	5 / 3	2434	0.524	0.668	0.679	0.1200	0.276
KEI6.6CU3C50UA	3C x 50	8.1	2.5	8	2.3	45.3	7.2 / 3	2956	0.387	0.494	0.507	0.1150	0.308
KEI6.6CU3C70UA	3C x 70	9.7	2.5	26	2.5	49.7	10 / 10	4222	0.268	0.342	0.359	0.1090	0.352
KEI6.6CU3C95UA	3C x 95	11.4	2.5	26	2.6	53.0	13.6 / 10	5060	0.193	0.247	0.266	0.1010	0.404
KEI6.6CU3C120UA	3C x 120	12.8	2.5	26	2.7	56.2	17.2 / 10	5885	0.153	0.196	0.218	0.0969	0.447
KEI6.6CU3C150UA	3C x 150	14.2	2.5	26	2.8	59.4	21.5 / 10	6858	0.124	0.160	0.184	0.0942	0.486
KEI6.6CU3C185UA	3C x 185	16.1	2.5	26	2.9	63.7	26.5 / 10	8026	0.0991	0.1280	0.156	0.0917	0.530
KEI6.6CU3C240UA	3C x 240	18.5	2.6	26	3.1	69.8	34.3 / 10	9865	0.0754	0.0986	0.131	0.0890	0.576
KEI6.6CU3C300UA	3C x 300	20.6	2.8	26	3.3	75.6	42.9 / 10	11867	0.0601	0.0754	0.117	0.0879	0.597
KEI6.6CU3C400UA	3C x 400	23.6	3.0	26	3.5	83.8	57.2 / 10	15111	0.0470	0.0601	0.104	0.0852	0.627
KEI6.6CU3C500UA	3C x 500	26.6	3.2	26	3.8	91.8	71.5 / 10	18411	0.0373	0.0470	0.093	0.0800	0.654

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm²					
35	149	158	119	162	129
50	177	188	147	191	157
70	220	234	179	234	191
95	267	284	222	279	233
120	306	326	252	317	264
150	346	369	285	355	296
185	396	423	320	401	334
240	465	497	390	463	399
300	529	566	439	520	448
400	610	653	500	589	507
500	695	746	576	662	578

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED & PVC SHEATHED 3.8/6.6 kV ALUMINIUM

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI6.6AL3C35UA	3C x 35	8.0	2.5	8	2.3	45.1	3.3 / 3	2016	0.868	1.110	1.116	0.1200	0.276
KEI6.6AL3C50UA	3C x 50	8.1	2.5	8	2.3	45.3	4.7 / 3	2036	0.641	0.822	0.830	0.1150	0.308
KEI6.6AL3C70UA	3C x 70	9.7	2.5	8	2.4	48.9	6.6 / 3	2376	0.443	0.569	0.578	0.1090	0.352
KEI6.6AL3C95UA	3C x 95	11.4	2.5	8	2.5	52.8	8.9 / 3	2774	0.320	0.410	0.423	0.1010	0.404
KEI6.6AL3C120UA	3C x 120	12.8	2.5	26	2.7	56.2	11.3 / 10	3678	0.253	0.325	0.339	0.0969	0.447
KEI6.6AL3C150UA	3C x 150	14.2	2.5	26	2.8	59.4	14.1 / 10	4099	0.206	0.265	0.280	0.0942	0.486
KEI6.6AL3C185UA	3C x 185	16.1	2.5	26	2.9	63.7	17.4 / 10	4624	0.164	0.2110	0.229	0.0917	0.530
KEI6.6AL3C240UA	3C x 240	18.5	2.6	26	3.1	69.8	22.6 / 10	5451	0.125	0.1620	0.183	0.0890	0.576
KEI6.6AL3C300UA	3C x 300	20.6	2.8	26	3.3	75.6	28.2 / 10	6350	0.100	0.1300	0.155	0.0879	0.597
KEI6.6AL3C400UA	3C x 400	23.6	3.0	26	3.5	83.8	37.6 / 10	7755	0.0778	0.1020	0.131	0.0852	0.627
KEI6.6AL3C500UA	3C x 500	26.6	3.2	26	3.8	91.8	47 / 10	9216	0.0617	0.0803	0.113	0.0800	0.654

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm^2					
35	118	125	94	128	102
50	138	146	114	148	121
70	166	175	136	176	146
95	207	220	172	217	181
120	238	254	196	246	205
150	269	287	220	276	230
185	310	331	250	313	261
240	364	390	305	363	313
300	416	445	346	409	353
400	485	520	398	469	404
500	561	602	465	535	468

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED & PVC SHEATHED 6.35/11 kV, COPPER

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI11CU3C35UA	3C x 35	7.0	3.4	8	2.3	46.8	5 / 3	2687	0.524	0.668	0.683	0.1270	0.219
KEI11CU3C50UA	3C x 50	8.1	3.4	8	2.4	49.4	7.2 / 3	3224	0.387	0.494	0.510	0.1210	0.242
KEI11CU3C70UA	3C x 70	9.7	3.4	26	2.6	53.2	10 / 10	4481	0.268	0.342	0.362	0.1150	0.275
KEI11CU3C95UA	3C x 95	11.4	3.4	26	2.7	57.1	13.6 / 10	5362	0.193	0.247	0.269	0.1060	0.314
KEI11CU3C120UA	3C x 120	12.8	3.4	26	2.8	60.3	17.2 / 10	6215	0.153	0.196	0.221	0.1020	0.346
KEI11CU3C150UA	3C x 150	14.2	3.4	26	2.9	63.5	21.5 / 10	7207	0.124	0.160	0.187	0.0990	0.374
KEI11CU3C185UA	3C x 185	16.1	3.4	26	3.0	67.8	26.5 / 10	8399	0.0991	0.1280	0.159	0.0961	0.407
KEI11CU3C240UA	3C x 240	18.5	3.4	26	3.2	73.4	34.3 / 10	10230	0.0754	0.0985	0.134	0.0926	0.456
KEI11CU3C300UA	3C x 300	20.6	3.4	26	3.4	78.4	42.9 / 10	12170	0.0601	0.0796	0.119	0.0904	0.503
KEI11CU3C400UA	3C x 400	23.6	3.4	26	3.6	85.7	57.2 / 10	15347	0.0470	0.0638	0.106	0.0870	0.561
KEI11CU3C500UA	3C x 500	26.6	3.4	26	3.8	92.6	71.5 / 10	18517	0.0373	0.0525	0.097	0.0847	0.620

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm2					
35	152	160	125	163	134
50	180	191	148	192	157
70	223	237	186	234	196
95	270	287	223	280	234
120	309	329	253	318	265
150	350	373	284	356	297
185	400	427	338	402	347
240	469	501	391	464	400
300	532	570	441	521	450
400	611	654	501	589	508
500	696	746	576	662	579

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED & PVC SHEATHED 6.35/11 kV, ALUMINIUM

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI11AL3C35UA	3C x 35	8.0	3.4	8	2.4	49.1	3.3 / 3	2293	0.868	1.110	1.117	0.1270	0.220
KEI11AL3C50UA	3C x 50	8.1	3.4	8	2.4	49.4	4.7 / 3	2304	0.641	0.821	0.831	0.1210	0.242
KEI11AL3C70UA	3C x 70	9.7	3.4	8	2.6	53.2	6.6 / 3	2690	0.443	0.569	0.579	0.1150	0.275
KEI11AL3C95UA	3C x 95	11.4	3.4	8	2.7	57.1	8.9 / 3	3111	0.320	0.410	0.424	0.1060	0.314
KEI11AL3C120UA	3C x 120	12.8	3.4	26	2.8	60.3	11.3 / 10	4009	0.253	0.325	0.340	0.1020	0.346
KEI11AL3C150UA	3C x 150	14.2	3.4	26	2.9	63.5	14.1 / 10	4448	0.206	0.265	0.282	0.0990	0.374
KEI11AL3C185UA	3C x 185	16.1	3.4	26	3.0	67.8	17.4 / 10	4997	0.164	0.2110	0.231	0.0961	0.407
KEI11AL3C240UA	3C x 240	18.5	3.4	26	3.2	73.4	22.6 / 10	5816	0.125	0.1610	0.185	0.0926	0.456
KEI11AL3C300UA	3C x 300	20.6	3.4	26	3.4	78.4	28.2 / 10	6653	0.100	0.1300	0.157	0.0904	0.503
KEI11AL3C400UA	3C x 400	23.6	3.4	26	3.6	85.7	37.6 / 10	7991	0.0778	0.1020	0.133	0.0870	0.561
KEI11AL3C500UA	3C x 500	26.6	3.4	26	3.8	92.6	47 / 10	9322	0.0617	0.0823	0.116	0.0847	0.620

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
35	120	127	99	128	105
50	140	148	115	149	122
70	173	184	145	182	152
95	210	223	173	217	182
120	241	256	197	247	206
150	272	290	221	276	231
185	312	333	264	314	271
240	367	392	307	363	314
300	419	448	347	410	354
400	486	521	398	469	404
500	562	603	465	535	467

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED & PVC SHEATHED 12.7/22 kV, COPPER

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI22CU3C35UA	3C x 35	7.0	5.5	8	2.7	56.6	5 / 3	3412	0.524	0.668	0.683	0.1410	0.156
KEI22CU3C50UA	3C x 50	8.1	5.5	8	2.8	59.2	7.2 / 3	3985	0.387	0.494	0.512	0.1340	0.171
KEI22CU3C70UA	3C x 70	9.7	5.5	26	2.9	62.9	10 / 10	5268	0.2680	0.342	0.365	0.1270	0.192
KEI22CU3C95UA	3C x 95	11.4	5.5	26	3.0	66.8	13.6 / 10	6202	0.1930	0.247	0.272	0.1170	0.216
KEI22CU3C120UA	3C x 120	12.8	5.5	26	3.1	70.0	17.2 / 10	7099	0.1530	0.196	0.225	0.1120	0.236
KEI22CU3C150UA	3C x 150	14.2	5.5	26	3.2	73.2	21.5 / 10	8133	0.1240	0.160	0.192	0.1090	0.254
KEI22CU3C185UA	3C x 185	16.1	5.5	26	3.4	77.7	26.5 / 10	9420	0.0991	0.1280	0.164	0.1050	0.274
KEI22CU3C240UA	3C x 240	18.5	5.5	26	3.5	83.1	34.3 / 10	11291	0.0754	0.0981	0.139	0.1010	0.305
KEI22CU3C300UA	3C x 300	20.6	5.5	26	3.7	88.0	42.9 / 10	13299	0.0601	0.0792	0.125	0.0988	0.330
KEI22CU3C400UA	3C x 400	23.6	5.5	26	3.9	95.4	57.2 / 10	16575	0.0470	0.0633	0.112	0.0944	0.371
KEI22CU3C500UA	3C x 500	26.6	5.5	26	4.1	102.3	71.5 / 10	19838	0.0373	0.0518	0.103	0.0915	0.407

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm2					
35	156	165	131	164	138
50	185	196	154	193	163
70	228	242	188	235	198
95	276	293	236	281	244
120	315	335	268	319	277
150	356	379	301	357	310
185	407	433	341	403	349
240	476	507	395	466	403
300	539	576	445	523	452
400	619	663	537	593	519
500	705	755	582	667	584

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED & PVC SHEATHED 12.7/22 kV, ALUMINIUM

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI22AL3C35UA	3C x 35	8.0	5.5	8	2.8	59.0	3.3 / 3	3046	0.868	1.110	1.119	0.1400	0.157
KEI22AL3C50UA	3C x 50	8.1	5.5	8	2.8	59.2	4.7 / 3	3066	0.641	0.821	0.832	0.1340	0.172
KEI22AL3C70UA	3C x 70	9.7	5.5	8	2.9	62.9	6.6 / 3	3477	0.4430	0.568	0.582	0.1270	0.192
KEI22AL3C95UA	3C x 95	11.4	5.5	8	3.0	66.8	8.9 / 3	3951	0.3200	0.410	0.427	0.1170	0.216
KEI22AL3C120UA	3C x 120	12.8	5.5	26	3.1	70.0	11.3 / 10	4892	0.2530	0.325	0.343	0.1120	0.236
KEI22AL3C150UA	3C x 150	14.2	5.5	26	3.2	73.2	14.1 / 10	5375	0.2060	0.265	0.286	0.1090	0.254
KEI22AL3C185UA	3C x 185	16.1	5.5	26	3.4	77.7	17.4 / 10	6018	0.1640	0.2110	0.235	0.1050	0.274
KEI22AL3C240UA	3C x 240	18.5	5.5	26	3.5	83.1	22.6 / 10	6877	0.1250	0.1610	0.189	0.1010	0.305
KEI22AL3C300UA	3C x 300	20.6	5.5	26	3.7	88.0	28.2 / 10	7782	0.1000	0.1300	0.162	0.0988	0.330
KEI22AL3C400UA	3C x 400	23.6	5.5	26	3.9	95.4	37.6 / 10	9219	0.0778	0.1020	0.138	0.0944	0.371
KEI22AL3C500UA	3C x 500	26.6	5.5	26	4.1	102.3	47 / 10	10643	0.0617	0.0819	0.121	0.0915	0.407

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
35	123	131	103	129	108
50	143	152	120	150	126
70	177	188	147	183	154
95	214	227	183	218	189
120	245	261	209	248	215
150	277	295	234	277	241
185	317	338	266	314	273
240	372	397	309	364	315
300	423	452	349	411	355
400	491	526	409	470	412
500	567	607	468	536	469

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED & PVC SHEATHED 19/33 kV, COPPER

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI33CU3C70UA	3C x 70	9.7	8.0	26	3.3	75.3	10 / 10	6483	0.268	0.342	0.369	0.1390	0.148
KEI33CU3C95UA	3C x 95	11.4	8.0	26	3.4	79.2	13.6 / 10	7484	0.1930	0.247	0.277	0.1280	0.165
KEI33CU3C120UA	3C x 120	12.8	8.0	26	3.5	82.4	17.2 / 10	8438	0.1530	0.196	0.231	0.1230	0.179
KEI33CU3C150UA	3C x 150	14.2	8.0	26	3.6	85.7	21.5 / 10	9530	0.1240	0.160	0.198	0.1200	0.191
KEI33CU3C185UA	3C x 185	16.1	8.0	26	3.7	90.0	26.5 / 10	10856	0.0991	0.1280	0.172	0.1160	0.205
KEI33CU3C240UA	3C x 240	18.5	8.0	26	3.9	95.6	34.3 / 10	12862	0.0754	0.0978	0.147	0.1110	0.227
KEI33CU3C300UA	3C x 300	20.6	8.0	26	4.1	100.5	42.9 / 10	14959	0.0601	0.0788	0.132	0.1070	0.247
KEI33CU3C400UA	3C x 400	23.6	8.0	26	4.3	107.9	57.2 / 10	18365	0.0470	0.0628	0.126	0.1102	0.272
KEI33CU3C500UA	3C x 500	26.6	8.0	26	4.5	114.8	71.5 / 10	21750	0.0373	0.0513	0.110	0.0990	0.297
KEI33CU3C630UA	3C x 630	30.2	8.0	26	4.7	122.9	90.1 / 10	26088	0.0283	0.0396	0.104	0.0980	0.310

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm2					
70	233	247	199	236	206
95	281	298	239	282	246
120	321	341	271	320	279
150	362	384	304	358	312
185	413	439	344	404	352
240	482	513	405	467	411
300	547	583	457	526	462
400	627	669	555	596	536
500	714	763	628	672	603
630	810	868	682	754	676

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED & PVC SHEATHED 19/33 kV, ALUMINIUM

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor/ CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	kA for 1sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI33AL3C70UA	3C x 70	9.7	8.0	8	3.2	75.1	6.6 / 3	4657	0.443	0.568	0.584	0.1360	0.148
KEI33AL3C95UA	3C x 95	11.4	8.0	8	3.4	79.2	8.9 / 3	5234	0.3200	0.410	0.430	0.1280	0.165
KEI33AL3C120UA	3C x 120	12.8	8.0	26	3.5	82.4	11.3 / 10	6232	0.2530	0.325	0.347	0.1230	0.179
KEI33AL3C150UA	3C x 150	14.2	8.0	26	3.6	85.7	14.1 / 10	6772	0.2060	0.264	0.290	0.1200	0.191
KEI33AL3C185UA	3C x 185	16.1	8.0	26	3.7	90.0	17.4 / 10	7454	0.1640	0.2110	0.240	0.1160	0.205
KEI33AL3C240UA	3C x 240	18.5	8.0	26	3.9	95.6	22.6 / 10	8449	0.1250	0.1610	0.195	0.1110	0.227
KEI33AL3C300UA	3C x 300	20.6	8.0	26	4.1	100.5	28.2 / 10	9442	0.1000	0.1300	0.167	0.1070	0.247
KEI33AL3C400UA	3C x 400	23.6	8.0	26	4.3	107.9	37.6 / 10	11009	0.0778	0.1020	0.149	0.1102	0.272
KEI33AL3C500UA	3C x 500	26.6	8.0	26	4.5	114.8	47 / 10	12555	0.0617	0.0815	0.127	0.0990	0.297
KEI33AL3C630UA	3C x 630	30.2	8.0	26	4.7	122.9	59.2 / 10	14502	0.0469	0.0656	0.115	0.0980	0.310

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
70	181	192	155	184	160
95	218	231	185	219	191
120	250	265	211	249	217
150	281	298	236	278	242
185	322	342	268	315	274
240	376	401	317	365	322
300	429	457	358	412	362
400	496	529	424	471	424
500	571	611	485	538	483
630	659	705	554	613	549

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

SINGLE CORE, TRIPLEX

3.8/6.6 kV to 19/33 kV, AS/NZS 1429.1

UPON REQUEST INCORPORATING OPTIONAL BELOW MATERIAL FOR CONSTRUCTIONS CAN BE OFFERED.

1. Conductor - Water block as per AS/NZS 1125 : 2001
2. Insulation - EPR/TR - XLPE as per AS/NZS 3808
3. Metallic Screen Bedding - Semi conductive water blocking tape
4. Barrier Tapes - Moisture Barrier Aluminium Polylaminated tape below composite sheath
5. Metal Sheath - Lead Alloy E to AS/NZS 2893 & CAL, CCU & CSS as per AS/NZS 1429.1
6. Insect Protection - Polyamide (Nylon-12)/Double Brass tape/Chemical protection (Cypermethrin 0.25% in oversheath) as per AS/NZS 1429.1
7. Overall Sheath - Polyolefin or Materials for Reduced fire hazard cables or Cross-linked Elastomeric Compounds
8. Composite sheath consisting of combination of an inner layer of 5V-90, LLDPE, MDPE or HFS and an outer layer of HDPE as per 1429.1 or as required by customer.

CABLEGRID®™

3.8/6.6kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, COPPER

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI6.6CU35TX	35	7.0	2.5	24	1.8	21.8	47.1	5 / 3	2543	0.524	0.668	0.683	0.1420	0.276
KEI6.6CU50TX	50	8.1	2.5	24	1.8	22.9	49.5	7.2 / 3	3005	0.387	0.494	0.512	0.1350	0.308
KEI6.6CU70TX	70	9.7	2.5	79	1.8	26.9	58.1	10/10	5201	0.268	0.342	0.366	0.1300	0.352
KEI6.6CU95TX	95	11.4	2.5	79	1.8	28.2	60.9	13.6/10	5965	0.193	0.247	0.275	0.1200	0.404
KEI6.6CU120TX	120	12.8	2.5	79	1.8	29.6	63.9	17.2/10	6709	0.153	0.196	0.226	0.1130	0.447
KEI6.6CU150TX	150	14.2	2.5	79	1.8	31.0	66.9	21.5/10	7605	0.124	0.160	0.194	0.1100	0.486
KEI6.6CU185TX	185	16.1	2.5	79	1.9	32.5	70.2	26.5/10	8608	0.0991	0.128	0.167	0.1070	0.530
KEI6.6CU240TX	240	18.5	2.6	79	2.0	35.1	75.7	34.3/10	10262	0.0754	0.0982	0.142	0.1030	0.576
KEI6.6CU300TX	300	20.6	2.8	79	2.1	37.6	81.2	42.9/10	12121	0.0601	0.0792	0.129	0.1020	0.597
KEI6.6CU400TX	400	23.6	3.0	79	2.2	41.2	89.1	57.2/10	15058	0.047	0.0632	0.117	0.0982	0.627
KEI6.6CU500TX	500	26.6	3.2	79	2.3	44.8	96.9	71.5/10	18016	0.0366	0.0509	0.110	0.0970	0.650
KEI6.6CU630TX	630	30.2	3.2	79	2.4	48.6	105.1	90.1/10	21746	0.0283	0.0413	0.102	0.0933	0.730

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm²					
35	168	178	129	174	143
50	202	215	159	205	173
70	253	269	194	249	210
95	306	326	231	296	249
120	347	370	260	333	280
150	393	419	301	371	319
185	449	480	338	417	358
240	525	561	389	478	411
300	597	638	449	533	467
400	687	734	506	599	525
500	784	839	583	668	596
630	889	953	649	740	660

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Single Bond					
Area	In Air			In Ground	
mm²					
35	168	178	129	174	144
50	204	216	160	206	174
70	256	272	197	253	213
95	312	332	235	302	255
120	355	378	266	342	287
150	404	430	310	383	329
185	465	496	351	432	372
240	546	583	406	499	429
300	627	669	473	562	493
400	727	777	539	637	559
500	840	897	628	720	643
630	966	1033	709	809	722

3.8/6.6kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, ALUMINIUM

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI6.6AL35TX	35	8.0	2.5	24	1.8	22.7	49.3	3.3/3	2065	0.868	1.110	1.119	0.1380	0.276
KEI6.6AL50TX	50	8.1	2.5	24	1.8	22.9	49.5	4.7/3	2085	0.641	0.821	0.832	0.1350	0.308
KEI6.6AL70TX	70	9.7	2.5	24	1.8	24.5	52.9	6.6/3	2341	0.443	0.568	0.583	0.1300	0.352
KEI6.6AL95TX	95	11.4	2.5	24	1.8	26.2	56.6	8.9/3	2644	0.320	0.410	0.427	0.1200	0.404
KEI6.6AL120TX	120	12.8	2.5	79	1.8	29.6	63.9	11.3/102	4502	0.253	0.325	0.344	0.1130	0.447
KEI6.6AL150TX	150	14.2	2.5	79	1.8	31.0	66.9	14.1/10	4847	0.206	0.265	0.287	0.1100	0.486
KEI6.6AL185TX	185	16.1	2.5	79	1.9	32.5	70.2	17.4/10	5206	0.164	0.211	0.237	0.1070	0.530
KEI6.6AL240TX	240	18.5	2.6	79	2.0	35.1	75.7	22.6/10	5848	0.125	0.161	0.191	0.1030	0.576
KEI6.6AL300TX	300	20.6	2.8	79	2.1	37.6	81.2	28.2/10	6604	0.100	0.130	0.165	0.1020	0.597
KEI6.6AL400TX	400	23.6	3.0	79	2.2	41.2	89.1	37.6/10	7702	0.0778	0.102	0.142	0.0982	0.627
KEI6.6AL500TX	500	26.6	3.2	79	2.3	44.8	96.9	47 /10	8821	0.0605	0.0805	0.126	0.0970	0.650
KEI6.6AL630TX	630	30.2	3.2	79	2.4	48.6	105.1	59.2/10	10160	0.047	0.0636	0.226	0.0933	0.730

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm²					
35	132	140	101	136	112
50	155	165	123	159	134
70	194	206	150	194	163
95	237	252	180	231	194
120	272	290	203	261	220
150	308	328	236	291	250
185	354	378	267	329	283
240	415	444	308	379	326
300	475	508	358	425	373
400	553	591	409	483	424
500	641	685	478	547	488
630	741	793	541	618	551

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Single Bond					
Area	In Air			In Ground	
mm²					
35	132	140	101	136	112
50	156	165	123	159	134
70	195	207	151	195	164
95	239	254	182	233	196
120	276	294	207	265	223
150	313	334	240	297	255
185	362	386	273	336	289
240	426	455	317	389	335
300	490	523	370	439	385
400	574	613	425	503	441
500	670	716	502	575	513
630	783	837	574	656	585

6.35/11kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, COPPER

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI11CU35TX	35	7.0	3.4	24	1.8	23.6	51.0	5 / 3	2710	0.524	0.668	0.684	0.1470	0.219
KEI11CU50TX	50	8.1	3.4	24	1.8	24.7	53.4	7.2 / 3	3181	0.387	0.494	0.513	0.1400	0.242
KEI11CU70TX	70	9.7	3.4	79	1.8	28.4	61.3	10/10	5393	0.268	0.342	0.368	0.1350	0.275
KEI11CU95TX	95	11.4	3.4	79	1.8	30.1	64.9	13.6/10	6169	0.193	0.247	0.275	0.1220	0.314
KEI11CU120TX	120	12.8	3.4	79	1.9	31.4	67.9	17.2/10	6924	0.153	0.196	0.228	0.1170	0.346
KEI11CU150TX	150	14.2	3.4	79	1.9	32.8	70.8	21.5/10	7850	0.124	0.160	0.196	0.1140	0.374
KEI11CU185TX	185	16.1	3.4	79	2.0	34.3	74.0	26.5/10	8875	0.0991	0.128	0.169	0.1110	0.407
KEI11CU240TX	240	18.5	3.4	79	2.0	36.5	78.8	34.3/10	10506	0.0754	0.0980	0.144	0.1060	0.456
KEI11CU300TX	300	20.6	3.4	79	2.1	38.6	83.4	42.9/10	12291	0.0601	0.0791	0.131	0.1040	0.503
KEI11CU400TX	400	23.6	3.4	79	2.2	42.0	90.8	57.2/10	15196	0.047	0.0631	0.117	0.0988	0.561
KEI11CU500TX	500	26.6	3.4	79	2.3	45.2	97.7	71.5/10	18091	0.0366	0.0508	0.109	0.0970	0.620
KEI11CU630TX	630	30.2	3.4	79	2.4	49.0	105.9	90.1/10	21827	0.0283	0.0412	0.104	0.0953	0.694

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm²					
35	170	180	130	174	144
50	203	215	152	204	169
70	255	271	194	249	210
95	309	328	247	296	260
120	351	373	278	333	292
150	396	422	311	371	326
185	451	480	349	417	366
240	529	564	402	478	420
300	599	639	450	533	468
400	689	736	507	599	526
500	785	840	584	668	596
630	891	954	681	741	681

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Single Bond					
Area	In Air			In Ground	
mm²					
35	170	180	130	174	144
50	204	216	153	206	170
70	259	274	197	253	214
95	315	334	252	302	265
120	358	381	285	341	299
150	407	433	320	382	336
185	465	495	361	431	378
240	550	586	420	499	438
300	627	669	473	561	493
400	729	778	539	638	559
500	840	898	628	720	643
630	966	1033	743	809	744

6.35/11kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, ALUMINIUM

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11AL35TX	35	8.0	3.4	24	1.8	24.5	53.2	3.3/3	2241	0.868	1.110	1.119	0.1440	0.220
KEI11AL50TX	50	8.1	3.4	24	1.8	24.7	53.4	4.7/3	2261	0.641	0.821	0.833	0.1400	0.242
KEI11AL70TX	70	9.7	3.4	24	1.8	26.3	56.8	6.6/3	2530	0.443	0.568	0.584	0.1350	0.275
KEI11AL95TX	95	11.4	3.4	24	1.8	28.0	60.5	8.9/3	2846	0.32	0.410	0.428	0.1220	0.314
KEI11AL120TX	120	12.8	3.4	79	1.9	31.4	67.9	11.3/10	4717	0.253	0.325	0.345	0.1170	0.346
KEI11AL150TX	150	14.2	3.4	79	1.9	32.8	70.8	14.1/10	5092	0.206	0.265	0.288	0.1140	0.374
KEI11AL185TX	185	16.1	3.4	79	2.0	34.3	74.0	17.4/10	5473	0.164	0.211	0.238	0.1110	0.407
KEI11AL240TX	240	18.5	3.4	79	2.0	36.5	78.8	22.6/10	6093	0.125	0.161	0.193	0.1060	0.456
KEI11AL300TX	300	20.6	3.4	79	2.1	38.6	83.4	28.2/10	6774	0.100	0.130	0.166	0.1040	0.503
KEI11AL400TX	400	23.6	3.4	79	2.2	42.0	90.8	37.6/10	7840	0.0778	0.102	0.142	0.0988	0.561
KEI11AL500TX	500	26.6	3.4	79	2.3	45.2	97.7	47 /10	8896	0.0605	0.0803	0.126	0.0970	0.620
KEI11AL630TX	630	30.2	3.4	79	2.4	49.0	105.9	59.2/10	10242	0.0469	0.0636	0.115	0.0953	0.694

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm²					
35	134	142	101	136	112
50	156	166	118	158	131
70	195	207	151	193	163
95	239	254	192	231	202
120	275	292	218	261	229
150	311	330	244	291	256
185	355	378	275	328	288
240	418	446	319	379	333
300	476	508	358	425	373
400	555	593	409	483	424
500	641	686	478	547	488
630	741	794	568	618	568

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Single Bond					
Area	In Air			In Ground	
mm²					
35	134	142	101	136	112
50	157	166	118	159	131
70	196	208	151	195	164
95	241	256	194	233	204
120	278	296	221	265	232
150	316	336	248	297	260
185	362	385	281	335	294
240	428	457	327	389	341
300	490	523	370	439	385
400	575	614	425	503	441
500	671	716	502	575	513
630	783	837	602	656	603

12.7/22kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, COPPER

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22CU35TX	35	7.0	5.5	24	1.8	27.6	59.6	5 / 3	2518	0.524	0.668	0.687	0.1590	0.156
KEI22CU50TX	50	8.1	5.5	24	1.8	28.7	62.0	7.2 / 3	3625	0.387	0.494	0.517	0.1510	0.171
KEI22CU70TX	70	9.7	5.5	79	1.9	32.1	69.3	10/10	5872	0.268	0.342	0.371	0.1430	0.192
KEI22CU95TX	95	11.4	5.5	79	2.0	33.8	73.1	13.6/10	6716	0.193	0.247	0.280	0.1320	0.216
KEI22CU120TX	120	12.8	5.5	79	2.0	35.2	75.9	17.2/10	7489	0.153	0.196	0.234	0.1270	0.236
KEI22CU150TX	150	14.2	5.5	79	2.1	36.6	79.1	21.5/10	8449	0.124	0.160	0.202	0.1230	0.254
KEI22CU185TX	185	16.1	5.5	79	2.1	38.3	82.7	26.5/10	9561	0.0991	0.128	0.175	0.1190	0.274
KEI22CU240TX	240	18.5	5.5	79	2.2	40.9	88.3	34.3/10	11263	0.0754	0.0978	0.151	0.1150	0.305
KEI22CU300TX	300	20.6	5.5	79	2.3	43.2	93.3	42.9/10	13075	0.0601	0.0788	0.137	0.1120	0.334
KEI22CU400TX	400	23.6	5.5	79	2.4	46.6	100.7	57.2/10	16049	0.047	0.0628	0.124	0.1070	0.371
KEI22CU500TX	500	26.6	5.5	79	2.5	49.8	107.7	71.5/10	19008	0.0366	0.0503	0.116	0.1040	0.407
KEI22CU630TX	630	30.2	5.5	79	2.6	53.6	115.9	90.1/10	22821	0.0283	0.0407	0.109	0.1010	0.453

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm²					
35	174	183	136	174	148
50	207	218	160	204	174
70	258	272	195	248	211
95	312	330	247	295	260
120	355	376	279	333	293
150	401	425	312	371	327
185	457	485	351	417	367
240	536	569	405	479	422
300	608	647	453	535	470
400	699	744	510	602	528
500	796	849	588	672	600
630	904	965	655	746	665

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Single Bond					
Area	In Air			In Ground	
mm²					
35	174	184	136	174	148
50	208	219	161	205	175
70	260	275	197	251	214
95	317	335	252	300	265
120	362	383	285	340	300
150	410	435	320	381	336
185	470	498	362	430	379
240	555	589	421	499	439
300	635	674	475	562	494
400	736	783	541	638	561
500	849	903	631	722	645
630	976	1040	713	813	726

12.7/22kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, ALUMINIUM

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI22AL35TX	35	8.0	5.5	24	1.8	28.5	60.0	3.3/3	2685	0.868	1.110	1.121	0.1560	0.157
KEI22AL50TX	50	8.1	5.5	24	1.8	28.7	62.0	4.7/3	2705	0.641	0.821	0.835	0.1510	0.172
KEI22AL70TX	70	9.7	5.5	24	1.9	30.4	65.8	6.6/3	3024	0.443	0.568	0.586	0.1430	0.192
KEI22AL95TX	95	11.4	5.5	24	1.9	32.4	70.0	8.9/3	3390	0.32	0.410	0.431	0.1320	0.216
KEI22AL120TX	120	12.8	5.5	79	2.0	35.2	75.9	11.3/10	5283	0.253	0.325	0.349	0.1270	0.236
KEI22AL150TX	150	14.2	5.5	79	2.1	36.6	79.1	14.1/10	5690	0.206	0.265	0.292	0.1230	0.254
KEI22AL185TX	185	16.1	5.5	79	2.1	38.3	82.7	17.4/10	6159	0.164	0.211	0.242	0.1190	0.274
KEI22AL240TX	240	18.5	5.5	79	2.2	40.9	88.3	22.6/10	6850	0.125	0.1610	0.198	0.1150	0.305
KEI22AL300TX	300	20.6	5.5	79	2.3	43.2	93.3	28.2/10	7558	0.100	0.129	0.171	0.1120	0.334
KEI22AL400TX	400	23.6	5.5	79	2.4	46.6	100.7	37.6/10	8693	0.0778	0.1020	0.148	0.1070	0.371
KEI22AL500TX	500	26.6	5.5	79	2.5	49.8	107.7	47 /10	9813	0.0605	0.0800	0.131	0.1040	0.407
KEI22AL630TX	630	30.2	5.5	79	2.6	53.6	115.9	59.2/10	11236	0.0469	0.0632	0.119	0.1010	0.453

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm²					
35	137	145	107	136	116
50	159	168	124	158	135
70	199	210	151	193	164
95	242	256	193	230	203
120	278	294	219	261	230
150	314	333	244	291	256
185	359	381	277	328	289
240	423	449	320	379	333
300	482	513	360	425	374
400	561	597	410	484	425
500	648	690	479	548	490
630	748	798	543	619	552

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Single Bond					
Area	In Air			In Ground	
mm²					
35	137	145	107	136	116
50	160	168	124	158	135
70	199	211	152	194	165
95	244	258	194	232	205
120	281	297	221	264	233
150	318	337	248	295	260
185	365	388	282	335	295
240	432	459	328	388	342
300	495	526	371	438	386
400	580	616	426	503	442
500	675	719	502	575	513
630	787	839	575	657	586

CABLEGRID®

19/33kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, COPPER

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI33CU70TX	70	9.7	8.0	79	2.1	37.4	80.8	10/10	6711	0.268	0.342	0.374	0.1510	0.148
KEI33CU95TX	95	11.4	8.0	79	2.1	39.3	84.9	13.6/10	7572	0.193	0.247	0.285	0.1430	0.165
KEI33CU120TX	120	12.8	8.0	79	2.2	40.6	87.7	17.2/10	8432	0.153	0.195	0.239	0.1370	0.179
KEI33CU150TX	150	14.2	8.0	79	2.2	42.0	90.7	21.5/10	9384	0.124	0.160	0.208	0.1330	0.191
KEI33CU185TX	185	16.1	8.0	79	2.3	44.1	95.3	26.5/10	10563	0.0991	0.127	0.182	0.1290	0.205
KEI33CU240TX	240	18.5	8.0	79	2.4	46.7	100.9	34.3/10	12332	0.0754	0.0976	0.158	0.1240	0.227
KEI33CU300TX	300	20.6	8.0	79	2.4	48.8	105.4	42.9/10	14159	0.0601	0.0786	0.144	0.1200	0.247
KEI33CU400TX	400	23.6	8.0	79	2.5	52.2	112.8	57.2/10	17218	0.047	0.0625	0.131	0.1150	0.272
KEI33CU500TX	500	26.6	8.0	79	2.6	55.4	119.8	71.5/10	20258	0.0366	0.0499	0.122	0.1110	0.297
KEI33CU630TX	630	30.2	8.0	79	2.7	59.2	128.0	90.1/10	24165	0.0283	0.0403	0.116	0.1080	0.329

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm²					
70	260	274	208	247	219
95	315	332	248	294	261
120	360	380	281	333	295
150	407	430	314	372	329
185	464	491	363	418	375
240	543	575	418	480	431
300	617	653	468	537	481
400	708	751	553	604	557
500	807	857	621	676	622
630	917	976	693	752	692

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Single Bond					
Area	In Air			In Ground	
mm²					
70	263	277	210	250	222
95	319	336	252	299	265
120	366	386	286	339	301
150	415	438	321	380	337
185	476	502	373	430	386
240	561	593	433	498	447
300	641	678	489	562	504
400	743	787	584	639	589
500	856	907	663	724	667
630	984	1044	751	817	752

19/33kV TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, HDPE SHEATHED, ALUMINIUM

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of HDPE Sheath	Diameter of each phase Cable (+/-3.0)	Overall Diameter of Triplex Cable (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI33AL70TX	70	9.7	8.0	24	2.0	36.0	77.8	6.6/3	3846	0.443	0.568	0.588	0.1510	0.148
KEI33AL95TX	95	11.4	8.0	24	2.1	37.9	82.0	8.9/3	4260	0.320	0.410	0.434	0.1430	0.165
KEI33AL120TX	120	12.8	8.0	79	2.2	40.6	87.7	11.3/10	6225	0.253	0.325	0.353	0.1370	0.179
KEI33AL150TX	150	14.2	8.0	79	2.2	42.0	90.7	14.1/10	6625	0.206	0.265	0.297	0.1330	0.191
KEI33AL185TX	185	16.1	8.0	79	2.3	44.1	95.3	17.4/10	7161	0.164	0.211	0.247	0.1290	0.205
KEI33AL240TX	240	18.5	8.0	79	2.4	46.7	100.9	22.6/10	7919	0.125	0.161	0.203	0.1240	0.227
KEI33AL300TX	300	20.6	8.0	79	2.4	48.8	105.4	28.2/10	8642	0.100	0.129	0.176	0.1200	0.247
KEI33AL400TX	400	23.6	8.0	79	2.5	52.2	112.8	37.6/10	9862	0.0778	0.101	0.153	0.1150	0.272
KEI33AL500TX	500	26.6	8.0	79	2.6	55.4	119.8	47 /10	11063	0.0605	0.0797	0.137	0.1110	0.297
KEI33AL630TX	630	30.2	8.0	79	2.7	59.2	128.0	59.2/10	12580	0.0469	0.0629	0.125	0.1080	0.329

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm²					
70	203	213	162	193	171
95	245	259	193	230	204
120	281	297	219	260	231
150	318	335	245	291	257
185	364	385	285	328	295
240	428	453	330	379	340
300	488	517	371	426	382
400	567	601	443	485	447
500	654	694	504	550	506
630	755	802	572	622	572

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Single Bond					
Area	In Air			In Ground	
mm²					
70	203	214	163	194	172
95	247	260	195	232	205
120	284	300	222	263	233
150	322	339	249	295	261
185	370	391	290	334	300
240	436	461	337	388	348
300	500	529	381	438	393
400	584	618	459	502	463
500	679	720	526	575	529
630	791	839	604	657	604

THREE CORE URD

6.35/11 kV to 12.7/22 kV, AS/NZS 1429.1 & AS/NZS 4026

UPON REQUEST INCORPORATING OPTIONAL BELOW MATERIAL FOR CONSTRUCTIONS CAN BE OFFERED.

1. Conductor - Water block as per AS/NZS 1125 : 2001
2. Insulation - EPR/TR - XLPE as per AS/NZS 3808
3. Metallic Screen Bedding - Semi conductive water blocking tape
4. Barrier Tapes - Moisture Barrier Aluminium Polylaminated tape below composite sheath
5. Insect Protection - Polyamide (Nylon-12)/Double Brass tape/Chemical protection (Cypermethrin 0.25% in oversheath) as per AS/NZS 1429.1

THREE CORE ALUMINIUM – 6.35/11 kV URD SCREENED, PVC-HDPE SHEATHED

Screen Fault Rating – up to 3 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11AL3C95URD	3C x 95	11.4	3.4	8.0	1.3	1.4	58.3	8.9 / 3	3062	0.320	0.410	0.424	0.1060	0.314
KEI11AL3C185URD	3C x 185	16.1	3.4	8.0	1.5	1.5	69.0	17.4 / 3	4480	0.164	0.2110	0.231	0.0961	0.407
KEI11AL3C240URD	3C x 240	18.5	3.4	8.0	1.6	1.6	74.6	22.6 / 3	5294	0.125	0.1610	0.185	0.0926	0.456
KEI11AL3C300URD	3C x 300	20.6	3.4	8.0	1.6	1.7	79.3	28.2 / 3	6088	0.100	0.1300	0.157	0.0904	0.503

Screen Fault Rating – 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Thickness of PVC layer of Nominal	Thickness of HDPE layer of Nominal	Diameter (+/- 3.0) Overall Cable	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Maximum)	µf/km
KEI11AL3C185URD	3C x 185	16.1	3.4	26.3	1.5	1.5	69.0	17.4 / 10	4909	0.164	0.2110	0.231	0.0961	0.407
KEI11AL3C240URD	3C x 240	18.5	3.4	26.3	1.6	1.6	74.6	22.6 / 10	5707	0.125	0.1610	0.185	0.0926	0.456
KEI11AL3C300URD	3C x 300	20.6	3.4	26.3	1.6	1.7	79.3	28.2 / 10	6485	0.100	0.1300	0.157	0.0904	0.503

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
95	210	223	173	217	182
185	312	333	264	314	271
240	367	392	307	363	314
300	419	448	347	410	354

Note :
1. URD Cables with Screen Fault Rating 13.1 kA /sec will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE ALUMINIUM – 12.7/22 kV URD SCREENED, PVC-HDPE SHEATHED

Screen Fault Rating – 3 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Thickness of PVC layer of Sheath	Thickness of HDPE layer of Sheath	Diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22AL3C95URD	3C x 95	11.4	5.5	8.0	1.5	1.5	67.9	8.9 / 3	3923	0.320	0.410	0.424	0.1170	0.216
KEI22AL3C185URD	3C x 185	16.1	5.5	8.0	1.6	1.7	78.7	17.4 / 3	5455	0.164	0.2110	0.231	0.1050	0.274
KEI22AL3C240URD	3C x 240	18.5	5.5	8.0	1.7	1.8	84.3	22.6 / 3	6357	0.125	0.161	0.185	0.1010	0.305

Screen Fault Rating – 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22AL3C185URD	3C x 185	16.1	5.5	26.3	1.6	1.7	78.7	17.4 / 10	5852	0.164	0.2110	0.231	0.1050	0.274
KEI22AL3C240URD	3C x 240	18.5	5.5	26.3	1.7	1.8	84.3	22.6 / 10	6722	0.125	0.161	0.185	0.1010	0.305

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
95	214	227	183	218	189
185	317	338	266	314	273
240	372	397	309	364	315

Note :
1. URD Cables with Screen Fault Rating 13.1 kA /sec will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

SINGLE CORE, URD TRIPLEX

6.35/11 kV to 12.7/22 kV, AS/NZS 1429.1 & AS/NZS 4026

UPON REQUEST INCORPORATING OPTIONAL BELOW MATERIAL FOR CONSTRUCTIONS CAN BE OFFERED.

1. Conductor - Water block as per AS/NZS 1125 : 2001
2. Insulation - EPR/TR - XLPE as per AS/NZS 3808
3. Barrier Tapes - Moisture Barrier Aluminium Polylaminated tape below composite sheath
4. Insect Protection - Polyamide (Nylon-12)/Double Brass tape/Chemical protection (Cypermethrin 0.25% in oversheath) as per AS/NZS 1429.1
5. Single overall sheath : HDPE

CABLEGRID®

6.35/11kV URD TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, WBT & PVC-HDPE SHEATHED, ALUMINIUM

Screen Fault Rating - 3 kA for 1 sec

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Diameter of each phase Cable (+/- 3.0)	Overall Diameter of Triplex (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactanceat 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11AL1C95URDTX	95	11.4	3.4	24	1.0	1.8	31.7	68.5	8.9 / 3	3551	0.320	0.410	0.424	0.1220	0.314
KEI11AL1C185URDTX	185	16.1	3.4	24	1.0	1.8	36.4	78.6	17.4 / 3	4670	0.164	0.2110	0.231	0.1110	0.407
KEI11AL1C240URDTX	240	18.5	3.4	24	1.0	1.8	38.8	83.8	22.6 / 3	5314	0.125	0.1610	0.185	0.1060	0.456
KEI11AL1C300URDTX	300	20.6	3.4	24	1.0	1.8	40.9	88.3	28.2 / 3	5973	0.100	0.1300	0.157	0.1040	0.503

Screen Fault Rating - 10 kA for 1 sec

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Diameter of each phase Cable (+/- 3.0)	Overall Diameter of Triplex (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactanceat 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11AL1C185URDTX	185	16.1	3.4	79	1.0	1.8	38.1	82.4	17.4 / 10	6280	0.164	0.2110	0.231	0.1110	0.407
KEI11AL1C240URDTX	240	18.5	3.4	79	1.0	1.8	40.5	87.6	22.6 / 10	6924	0.125	0.1610	0.185	0.1060	0.456
KEI11AL1C300URDTX	300	20.6	3.4	79	1.0	1.8	42.6	92.1	28.2 / 10	7583	0.100	0.1300	0.157	0.1040	0.503

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
95	239	254	192	231	202
185	355	378	275	328	288
240	418	446	319	379	333
300	476	508	358	425	373

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Single Bond					
Area	In Air			In Ground	
mm2					
95	241	256	194	233	204
185	362	385	281	335	294
240	428	457	327	389	341
300	490	523	370	439	385

Note :
1. URD Cables with Screen Fault Rating 13.1 kA /sec will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

12.7/22kV URD TRIPLEX SINGLE CORE, INDIVIDUAL SCREENED, WBT & PVC-HDPE SHEATHED, ALUMINIUM

Screen Fault Rating - 3 kA for 1 sec

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Diameter of each phase Cable (+/- 3.0)	Overall Diameter of Triplex (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactanceat 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22AL1C95URDTX	95	11.4	5.5	24	1.0	1.8	35.9	77.5	8.9 / 3	4149	0.320	0.410	0.424	0.1220	0.214
KEI22AL1C185URDTX	185	16.1	5.5	24	1.0	1.8	40.6	87.7	17.4 / 3	5354	0.164	0.2110	0.231	0.1110	0.269
KEI22AL1C240URDTX	240	18.5	5.5	24	1.0	1.8	43.0	92.9	22.6 / 3	6042	0.125	0.1610	0.185	0.1060	0.298

Screen Fault Rating - 10 kA for 1 sec

Product Code	Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Diameter of each phase Cable (+/- 3.0)	Overall Diameter of Triplex (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactanceat 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	mm2	mm	mm	mm2	mm	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22AL1AL85URDTX	185	16.1	5.5	79	1.0	1.8	42.3	91.5	17.4 / 10	6964	0.164	0.2110	0.231	0.1110	0.269
KEI22AL1AL40URDTX	240	18.5	5.5	79	1.0	1.8	44.7	96.6	22.6 / 10	7652	0.125	0.1610	0.185	0.1060	0.298

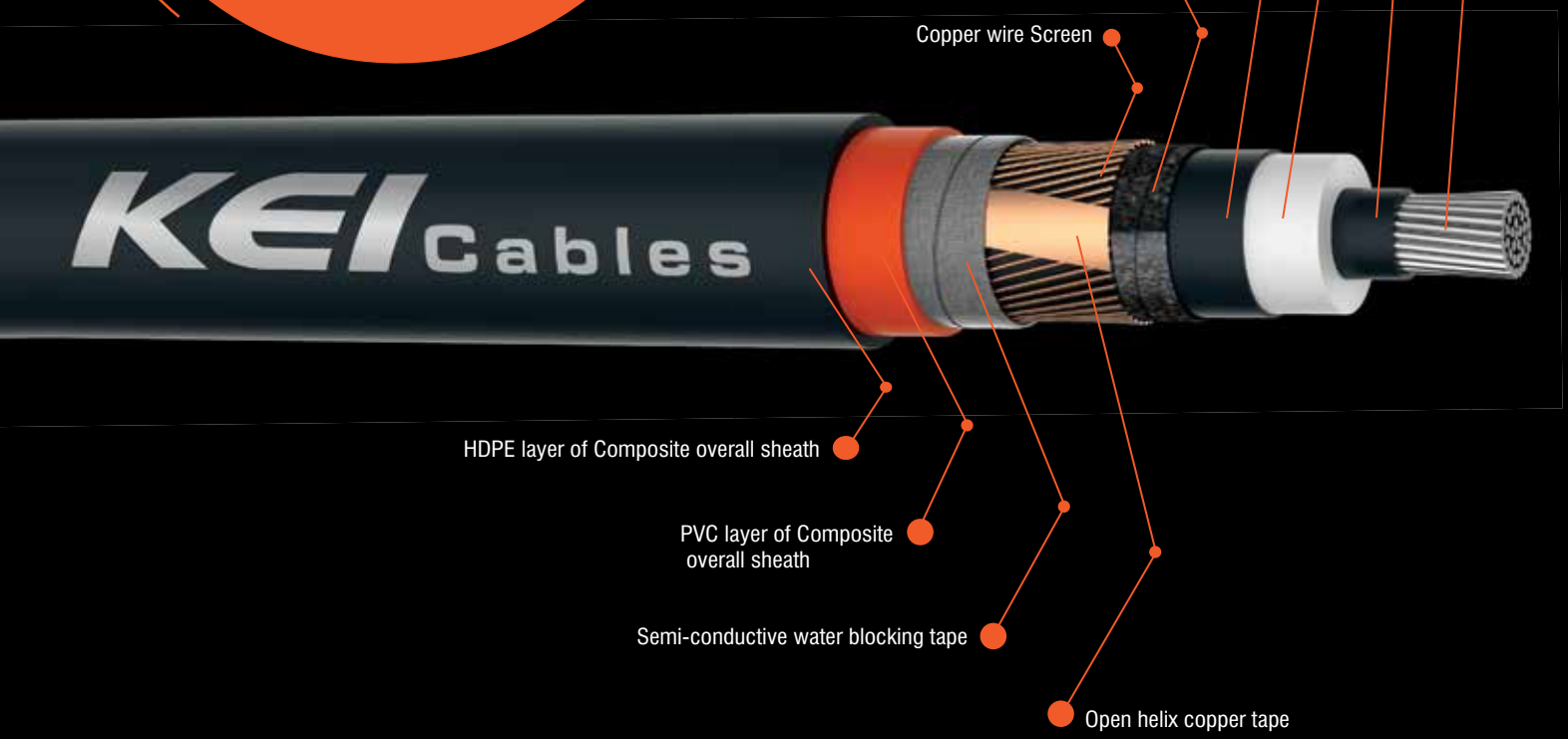
Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
95	242	256	193	230	203
185	359	381	277	328	289
240	423	449	320	379	333

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Single Bond					
Area	In Air			In Ground	
mm2					
95	244	258	194	232	205
185	365	388	282	335	295
240	432	459	328	388	342

Note :
1. URD Cables with Screen Fault Rating 13.1 kA /sec will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

SINGLE CORE, URD

6.35/11 kV to 12.7/22 kV, AS/NZS 1429.1 & AS/NZS 4026



UPON REQUEST INCORPORATING OPTIONAL BELOW MATERIAL FOR CONSTRUCTIONS CAN BE OFFERED.

1. Conductor - Water block as per AS/NZS 1125 : 2001
2. Insulation - EPR/TR - XLPE as per AS/NZS 3808
3. Barrier Tapes - Moisture Barrier Aluminium Polylaminated tape below composite sheath
4. Insect Protection - Polyamide (Nylon-12)/Double Brass tape/Chemical protection (Cypermethrin 0.25% in oversheath) as per AS/NZS 1429.1
5. Single overall sheath : HDPE

SINGLE CORE, SCREENED, WBT & PVC-HDPE SHEATHED URD 6.35/11 kV, ALUMINIUM

Screen Fault Rating - 3 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Overall Cable Diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11AL1C95URD	1C x 95	11.4	3.4	24	1.0	1.0	30.1	8.9 / 3	1110	0.320	0.410	0.424	0.1220	0.314
KEI11AL1C185URD	1C x 185	16.1	3.4	24	1.0	1.0	34.8	17.4 / 3	1472	0.164	0.2110	0.231	0.1110	0.407
KEI11AL1C240URD	1C x 240	18.5	3.4	24	1.0	1.0	37.2	22.6 / 3	1681	0.125	0.1610	0.185	0.1060	0.456
KEI11AL1C300URD	1C x 300	20.6	3.4	24	1.0	1.1	39.5	28.2 / 3	1907	0.100	0.1300	0.157	0.1040	0.503

Screen Fault Rating - 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Overall Cable Diameter (+/- 3.0)	Fault Rating of CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	kA /sec	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11AL1C185URD	1C x 185	16.1	3.4	79	1.0	1.0	36.5	17.4 / 10	2004	0.164	0.2110	0.231	0.1110	0.407
KEI11AL1C240URD	1C x 240	18.5	3.4	79	1.0	1.0	38.9	22.6 / 10	2213	0.125	0.1610	0.185	0.1060	0.456
KEI11AL1C300URD	1C x 300	20.6	3.4	79	1.0	1.1	41.2	28.2 / 10	2440	0.100	0.1300	0.157	0.1040	0.503

Current Ratings													
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond													
Area	In Air					In Ground			In Underground ducts				
mm2													
95	257	295	239	254	192	230	237	231	210	214	210	202	
185	378	427	355	378	275	325	330	328	290	289	292	288	
240	443	496	418	446	319	374	376	379	334	331	337	333	
300	501	556	476	508	358	418	417	425	368	361	374	373	

Current Ratings													
Continuous current-carrying capacity, Amps - Aluminium, Single Bond													
Area	In Air					In Ground			In Underground ducts				
mm2													
95	263	307	241	256	194	234	245	233	219	229	219	204	
185	396	463	362	385	281	337	354	335	314	328	313	294	
240	470	550	428	457	327	390	412	389	375	393	373	341	
300	538	630	490	523	370	440	465	439	422	442	420	385	

Note :
1. URD Cables with Screen Fault Rating 13.1 kA /sec will be provided on request.
2. Cable weight and overall diameters indicated above are for guidance only and may differ in actual product.

SINGLE CORE, SCREENED, WBT & PVC-HDPE SHEATHED URD 12.7/22 kV, ALUMINIUM

Screen Fault Rating – 3 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Overall Cable Diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22AL3C95URD	1C x 95	11.4	5.5	24	1.0	1.0	34.3	8.9 / 3	1299	0.320	0.410	0.424	0.1220	0.214
KEI22AL3C185URD	1C x 185	16.1	5.5	24	1.0	1.1	39.2	17.4 / 3	1701	0.164	0.2110	0.231	0.110	0.269
KEI22AL3C240URD	1C x 240	18.5	5.5	24	1.0	1.1	41.6	22.6 / 3	1926	0.125	0.1610	0.185	0.1060	0.298

Screen Fault Rating – 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC layer of Sheath	Nominal Thickness of HDPE layer of Sheath	Overall Cable Diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22AL3C185URD	1C x 185	16.1	5.5	79	1.0	1.1	40.9	17.4 / 10	2234	0.164	0.2110	0.231	0.110	0.269
KEI22AL3C240URD	1C x 240	18.5	5.5	79	1.0	1.1	43.3	22.6 / 10	2459	0.125	0.1610	0.185	0.1060	0.298

Current Ratings												
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond												
Area	In Air					In Ground			In Underground ducts			
mm2												
95	259	293	242	256	193	229	236	230	210	214	210	203
185	382	426	359	381	277	325	331	328	292	292	293	289
240	447	494	423	449	320	374	377	379	337	334	340	333

Current Ratings												
Continuous current-carrying capacity, Amps - Aluminium, Single Bond												
Area	In Air					In Ground			In Underground ducts			
mm2												
95	264	303	244	258	194	233	244	232	218	227	217	205
185	398	458	365	388	282	336	353	335	312	326	311	295
240	471	542	432	459	328	390	411	388	372	390	371	342

Note :
1. URD Cables with Screen Fault Rating 13.1 kA /sec will be provided on request.
2. Cable weight and overall diameters indicated above are for guidance only and may differ in actual product.

THREE CORE, SWA

3.8/6.6 kV to 19/33 kV, AS/NZS 1429.1

Upon request incorporating optional below material for constructions can be offered.

1. Conductor - Water block as per AS/NZS 1125 : 2001
2. Insulation - EPR/TR - XLPE as per AS/NZS 3808
3. Metallic Screen Bedding - Semi conductive water blocking tape
4. Barrier Tapes - Moisture Barrier Aluminium Polylaminated tape below composite sheath
5. Metal Sheath - Lead Alloy E to AS/NZS 2893 & CAL, CCU & CSS as per AS/NZS 1429.1
6. Insect Protection - Polyamide (Nylon-12)/Double Brass tape/Chemical protection (Cypermethrin 0.25% in oversheath) as per AS/NZS 1429.1
7. Overall Sheath - Polyolefin Material or Materials for Reduced fire hazard cables or Cross-linked Elastomeric Compounds
8. Composite sheath consisting of combination of an inner layer of 5V-90,LLDPE,MDPE or HFS and an outer layer of HDPE as per 1429.1 or as required by customer.
9. Cables with fibre optic Component as per Customer requirement.

THREE CORE, SCREENED, SWA & PVC SHEATHED 3.8/6.6 kV, COPPER

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI6.6CU3C35SWA	3C x 35	7.0	2.5	8	1.3	2.4	51.1	5 / 3	4740	0.524	0.668	0.679	0.1200	0.276
KEI6.6CU3C50SWA	3C x 50	8.1	2.5	8	1.3	2.5	53.7	7.2 / 3	5400	0.387	0.494	0.507	0.1150	0.308
KEI6.6CU3C70SWA	3C x 70	9.7	2.5	26	1.4	2.7	57.7	10 / 10	6849	0.268	0.342	0.359	0.1090	0.352
KEI6.6CU3C95SWA	3C x 95	11.4	2.5	26	1.5	2.8	61.8	13.6 / 10	7963	0.193	0.247	0.266	0.1010	0.404
KEI6.6CU3C120SWA	3C x 120	12.8	2.5	26	1.5	2.9	65.0	17.2 / 10	8945	0.153	0.196	0.218	0.0969	0.447
KEI6.6CU3C150SWA	3C x 150	14.2	2.5	26	1.6	3.0	68.4	21.5 / 10	10133	0.124	0.160	0.184	0.0942	0.486
KEI6.6CU3C185SWA	3C x 185	16.1	2.5	26	1.7	3.2	73.1	26.5 / 10	11604	0.0991	0.1280	0.156	0.0917	0.530
KEI6.6CU3C240SWA	3C x 240	18.5	2.6	26	1.8	3.4	80.7	34.3 / 10	14670	0.0754	0.0986	0.131	0.0890	0.576
KEI6.6CU3C300SWA	3C x 300	20.6	2.8	26	1.9	3.6	86.7	42.9 / 10	17084	0.0601	0.0754	0.117	0.0879	0.597
KEI6.6CU3C400SWA	3C x 400	23.6	3.0	26	2.0	3.9	95.3	57.2 / 10	20943	0.0470	0.0601	0.104	0.0852	0.627
KEI6.6CU3C500SWA	3C x 500	26.6	3.2	26	2.2	4.1	103.5	71.5 / 10	24820	0.0373	0.0470	0.093	0.0800	0.654

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm2					
35	148	156	123	158	132
50	175	185	149	186	158
70	216	228	182	227	192
95	260	275	223	270	228
120	297	315	245	306	258
150	334	357	286	341	297
185	379	402	322	382	333
240	440	467	370	436	379
300	493	525	411	484	421
400	558	595	468	539	474
500	622	664	516	592	520

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED,SWA & PVC SHEATHED 3.8/6.6 kV, ALUMINIUM

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI6.6AL3C35SWA	3C x 35	8.0	2.5	8	1.3	2.5	53.5	3.3 / 3	4460	0.868	1.110	1.116	0.1200	0.276
KEI6.6AL3C50SWA	3C x 50	8.1	2.5	8	1.3	2.5	53.7	4.7 / 3	4480	0.641	0.822	0.830	0.1150	0.308
KEI6.6AL3C70SWA	3C x 70	9.7	2.5	8	1.4	2.6	57.5	6.6 / 3	5031	0.443	0.569	0.578	0.1090	0.352
KEI6.6AL3C95SWA	3C x 95	11.4	2.5	8	1.5	2.8	61.8	8.9 / 3	5712	0.320	0.410	0.423	0.1010	0.404
KEI6.6AL3C120SWA	3C x 120	12.8	2.5	26	1.5	2.9	65.0	11.3 / 10	6738	0.253	0.325	0.339	0.0969	0.447
KEI6.6AL3C150SWA	3C x 150	14.2	2.5	26	1.6	3.0	68.4	14.1 / 10	7375	0.206	0.265	0.280	0.0942	0.486
KEI6.6AL3C185SWA	3C x 185	16.1	2.5	26	1.7	3.2	73.1	17.4 / 10	8202	0.164	0.2110	0.229	0.0917	0.530
KEI6.6AL3C240SWA	3C x 240	18.5	2.6	26	1.8	3.4	80.7	22.6 / 10	10256	0.125	0.1620	0.183	0.0890	0.576
KEI6.6AL3C300SWA	3C x 300	20.6	2.8	26	1.9	3.6	86.7	28.2 / 10	11567	0.100	0.1300	0.155	0.0879	0.597
KEI6.6AL3C400SWA	3C x 400	23.6	3.0	26	2.0	3.9	95.3	37.6 / 10	13587	0.0778	0.1020	0.131	0.0852	0.627
KEI6.6AL3C500SWA	3C x 500	26.6	3.2	26	2.2	4.1	103.5	47 / 10	15625	0.0617	0.0803	0.113	0.0800	0.654

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm^2					
35	117	124	97	125	103
50	136	144	116	145	123
70	168	178	141	177	149
95	202	214	169	210	178
120	232	246	192	239	202
150	261	277	224	267	232
185	298	317	254	301	262
240	349	371	294	347	302
300	395	420	330	389	338
400	456	485	383	441	383
500	519	553	432	496	436

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED, SWA & PVC SHEATHED 6.35/11 kV, COPPER

Screen Fault Rating – up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11CU3C35SWA	3C x 35	7.0	3.4	8	1.3	2.6	55.4	5 / 3	5247	0.524	0.668	0.683	0.1270	0.219
KEI11CU3C50SWA	3C x 50	8.1	3.4	8	1.4	2.7	58.2	7.2 / 3	5948	0.387	0.494	0.510	0.1210	0.242
KEI11CU3C70SWA	3C x 70	9.7	3.4	26	1.5	2.8	62.0	10 / 10	7396	0.268	0.342	0.362	0.1150	0.275
KEI11CU3C95SWA	3C x 95	11.4	3.4	26	1.6	3.0	66.3	13.6 / 10	8529	0.193	0.247	0.269	0.1060	0.314
KEI11CU3C120SWA	3C x 120	12.8	3.4	26	1.6	3.1	69.5	17.2 / 10	9571	0.153	0.196	0.221	0.1020	0.346
KEI11CU3C150SWA	3C x 150	14.2	3.4	26	1.7	3.2	72.9	21.5 / 10	10782	0.124	0.160	0.187	0.0990	0.374
KEI11CU3C185SWA	3C x 185	16.1	3.4	26	1.7	3.3	78.5	26.5 / 10	13024	0.0991	0.1280	0.159	0.0961	0.407
KEI11CU3C240SWA	3C x 240	18.5	3.4	26	1.8	3.5	84.3	34.3 / 10	15261	0.0754	0.0985	0.134	0.0926	0.456
KEI11CU3C300SWA	3C x 300	20.6	3.4	26	1.9	3.7	89.5	42.9 / 10	17544	0.0601	0.0796	0.119	0.0904	0.503
KEI11CU3C400SWA	3C x 400	23.6	3.4	26	2.1	3.9	97.2	57.2 / 10	21325	0.0470	0.0638	0.106	0.0870	0.561
KEI11CU3C500SWA	3C x 500	26.6	3.4	26	2.2	4.1	104.3	71.5 / 10	24999	0.0373	0.0525	0.097	0.0847	0.620

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm2					
35	150	158	127	159	135
50	177	187	150	187	159
70	218	230	183	227	193
95	262	277	227	270	236
120	299	317	257	306	267
150	336	356	287	341	297
185	383	406	324	383	334
240	443	471	371	438	381
300	496	528	413	485	422
400	558	595	468	539	474
500	662	664	517	592	520

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED, SWA & PVC SHEATHED 6.35/11 kV, ALUMINIUM

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI11AL3C50SWA	3C x 35	8.0	3.4	8	1.4	2.7	57.9	3.3 / 3	5009	0.868	1.110	1.117	0.1270	0.220
KEI11AL3C50SWA	3C x 50	8.1	3.4	8	1.4	2.7	58.2	4.7 / 3	5029	0.641	0.821	0.831	0.1210	0.242
KEI11AL3C70SWA	3C x 70	9.7	3.4	8	1.5	2.8	62.0	6.6 / 3	5605	0.443	0.569	0.579	0.1150	0.275
KEI11AL3C95SWA	3C x 95	11.4	3.4	8	1.5	2.9	65.9	8.9 / 3	6218	0.320	0.410	0.424	0.1060	0.314
KEI11AL3C120SWA	3C x 120	12.8	3.4	26	1.6	3.1	69.5	11.3 / 10	7364	0.253	0.325	0.340	0.1020	0.346
KEI11AL3C150SWA	3C x 150	14.2	3.4	26	1.7	3.2	72.9	14.1 / 10	8024	0.206	0.265	0.282	0.0990	0.374
KEI11AL3C185SWA	3C x 185	16.1	3.4	26	1.7	3.3	78.5	17.4 / 10	9621	0.164	0.2110	0.231	0.0961	0.407
KEI11AL3C240SWA	3C x 240	18.5	3.4	26	1.8	3.5	84.3	22.6 / 10	10847	0.125	0.1610	0.185	0.0926	0.456
KEI11AL3C300SWA	3C x 300	20.6	3.4	26	1.9	3.7	89.5	28.2 / 10	12027	0.100	0.1300	0.157	0.0904	0.503
KEI11AL3C400SWA	3C x 400	23.6	3.4	26	2.1	3.9	97.2	37.6 / 10	13969	0.0778	0.1020	0.133	0.0870	0.561
KEI11AL3C500SWA	3C x 500	26.6	3.4	26	2.2	4.1	104.3	47 / 10	15804	0.0617	0.0823	0.116	0.0847	0.620

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
35	118	125	100	125	106
50	137	145	116	145	123
70	170	179	142	177	150
95	204	216	177	211	184
120	234	247	201	239	209
150	263	278	225	267	233
185	302	320	255	302	263
240	351	373	295	348	303
300	397	422	331	389	338
400	455	485	383	440	388
500	519	553	432	496	436

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED, SWA & PVC SHEATHED 12.7/22 kV, COPPER

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22CU3C35SWA	3C x 35	7.0	5.5	8	1.5	2.9	65.4	5 / 3	6515	0.524	0.668	0.683	0.1410	0.156
KEI22CU3C50SWA	3C x 50	8.1	5.5	8	1.6	3.0	68.2	7.2 / 3	7259	0.387	0.494	0.512	0.1340	0.171
KEI22CU3C70SWA	3C x 70	9.7	5.5	26	1.7	3.2	72.3	10 / 10	8799	0.2680	0.342	0.365	0.1270	0.192
KEI22CU3C95SWA	3C x 95	11.4	5.5	26	1.7	3.3	77.5	13.6 / 10	10753	0.1930	0.247	0.272	0.1170	0.216
KEI22CU3C120SWA	3C x 120	12.8	5.5	26	1.8	3.4	80.9	17.2 / 10	11906	0.1530	0.196	0.225	0.1120	0.236
KEI22CU3C150SWA	3C x 150	14.2	5.5	26	1.9	3.6	84.5	21.5 / 10	13238	0.1240	0.160	0.192	0.1090	0.254
KEI22CU3C185SWA	3C x 185	16.1	5.5	26	1.9	3.7	88.8	26.5 / 10	14726	0.0991	0.1280	0.164	0.1050	0.274
KEI22CU3C240SWA	3C x 240	18.5	5.5	26	2.0	3.8	94.4	34.3 / 10	17008	0.0754	0.0981	0.139	0.1010	0.305
KEI22CU3C300SWA	3C x 300	20.6	5.5	26	2.1	4.0	99.5	42.9 / 10	19430	0.0601	0.0792	0.125	0.0988	0.330
KEI22CU3C400SWA	3C x 400	23.6	5.5	26	2.2	4.2	107.1	57.2 / 10	23217	0.0470	0.0633	0.112	0.0944	0.371
KEI22CU3C500SWA	3C x 500	26.6	5.5	26	2.4	4.5	114.6	71.5 / 10	27097	0.0373	0.0518	0.103	0.0915	0.407

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm2					
35	153	161	134	160	141
50	181	190	158	188	165
70	222	234	192	228	200
95	267	282	229	272	238
120	304	322	260	307	268
150	342	361	290	342	299
185	387	410	326	383	335
240	448	475	380	438	387
300	502	533	423	487	429
400	566	603	486	542	488
500	630	673	537	596	536

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED, SWA & PVC SHEATHED 12.7/22 kV, ALUMINIUM

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI22AL3C35SWA	3C x 35	8.0	5.5	8	1.6	3.0	68.0	3.3 / 3	6319	0.868	1.110	1.119	0.1400	0.157
KEI22AL3C50SWA	3C x 50	8.1	5.5	8	1.6	3.0	68.2	4.7 / 3	6339	0.641	0.821	0.832	0.1340	0.172
KEI22AL3C120SWA	3C x 70	9.7	5.5	8	1.6	3.1	71.9	6.6 / 3	6942	0.4430	0.568	0.343	0.127	0.192
KEI22AL3C95SWA	3C x 95	11.4	5.5	8	1.7	3.2	76.0	8.9 / 3	7642	0.3200	0.410	0.427	0.1170	0.216
KEI22AL3C120SWA	3C x 120	12.8	5.5	26	1.8	3.4	80.9	11.3 / 10	9699	0.2530	0.325	0.343	0.1120	0.236
KEI22AL3C150SWA	3C x 150	14.2	5.5	26	1.9	3.6	84.5	14.1 / 10	10480	0.2060	0.265	0.286	0.1090	0.254
KEI22AL3C185SWA	3C x 185	16.1	5.5	26	1.9	3.7	88.8	17.4 / 10	11324	0.1640	0.2110	0.235	0.1050	0.274
KEI22AL3C240SWA	3C x 240	18.5	5.5	26	2.0	3.8	94.4	22.6 / 10	12594	0.1250	0.1610	0.189	0.1010	0.305
KEI22AL3C300SWA	3C x 300	20.6	5.5	26	2.1	4.0	99.5	28.2 / 10	13913	0.1000	0.1300	0.162	0.0988	0.330
KEI22AL3C400SWA	3C x 400	23.6	5.5	26	2.2	4.2	107.1	37.6 / 10	15861	0.0778	0.1020	0.138	0.0944	0.371
KEI22AL3C500SWA	3C x 500	26.6	5.5	26	2.4	4.5	114.6	47 / 10	17902	0.0617	0.0819	0.121	0.0915	0.407

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
35	121	127	105	125	110
50	140	148	123	146	128
70	167	175	146	173	153
95	208	219	179	212	185
120	238	251	203	240	210
150	267	283	227	268	234
185	305	323	257	302	264
240	355	376	296	348	308
300	401	426	338	390	344
400	460	489	396	442	398
500	523	557	447	496	447

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED, SWA & PVC SHEATHED 19/33 kV, COPPER

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	μf/km
KEI33CU3C70SWA	3C x 70	9.7	8.0	26	1.9	3.6	86.4	10 / 10	11637	0.268	0.342	0.369	0.139	0.148
KEI33CU3C95SWA	3C x 95	11.4	8.0	26	2.0	3.7	90.5	13.6 / 10	12969	0.1930	0.247	0.277	0.1280	0.165
KEI33CU3C120SWA	3C x 120	12.8	8.0	26	2.0	3.8	93.7	17.2 / 10	14148	0.1530	0.196	0.231	0.1230	0.179
KEI33CU3C150SWA	3C x 150	14.2	8.0	26	2.1	4.0	97.4	21.5 / 10	15553	0.1240	0.159	0.198	0.1200	0.191
KEI33CU3C185SWA	3C x 185	16.1	8.0	26	2.1	4.1	101.7	26.5 / 10	17120	0.0991	0.1280	0.172	0.1160	0.205
KEI33CU3C240SWA	3C x 240	18.5	8.0	26	2.2	4.2	107.3	34.3 / 10	19506	0.0754	0.0978	0.147	0.1110	0.227
KEI33CU3C300SWA	3C x 300	20.6	8.0	26	2.3	4.4	112.4	42.9 / 10	22027	0.0601	0.0788	0.132	0.1070	0.247
KEI33CU3C400SWA	3C x 400	23.6	8.0	26	2.5	4.6	120.2	57.2 / 10	26012	0.0470	0.0628	0.126	0.1102	0.272
KEI33CU3C500SWA	3C x 500	26.6	8.0	26	2.6	4.8	127.3	71.5 / 10	29924	0.0373	0.0513	0.110	0.0990	0.297
KEI33CU3C630SWA	3C x 630	30.2	8.0	26	2.7	5.1	135.8	90.1 / 10	34940	0.0283	0.0361	0.104	0.0980	0.310

Current Ratings					
Continuous current-carrying capacity, Amps - Copper, Solid Bond					
Area	In Air			In Ground	
mm2					
70	226	238	194	229	202
95	272	287	231	273	240
120	309	326	266	308	273
150	346	365	296	343	304
185	391	414	333	384	340
240	452	480	393	439	397
300	507	538	437	488	440
400	572	608	489	543	490
500	636	678	540	598	538
630	703	750	605	652	597

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

THREE CORE, SCREENED, SWA & PVC SHEATHED 19/33 kV, ALUMINIUM

Screen Fault Rating - up to 10 kA for 1 sec

Product Code	Cores x Nominal Area	Conductor diameter (Approx.)	Nominal Insulation Thickness	Approx. CWS area on each core	Nominal Thickness of PVC Separation Sheath	Nominal Thickness of PVC Overall Sheath	Overall Cable diameter (+/- 3.0)	Short Circuit rating of Conductor /CWS	Cable Weight (Approx.)	Max. Conductor DC Resistance at 20 °C	Max. Conductor AC Resistance at 90 °C	Impedance at 90 °C	Inductive Reactance at 50 Hz (Maximum)	Capacitance conductor to screen (Maximum)
	No. X mm2	mm	mm	mm2	mm	mm	mm	(kA for 1sec)	kg/km	(Ohms/km)	(Ohms/km)	(Ohms/km)	(Ohms/km)	µf/km
KEI33AL3C70SWA	3C x 70	9.7	8.0	8	1.9	3.6	86.4	6.6 / 3	9846	0.443	0.568	0.584	0.1360	0.148
KEI33AL3C95SWA	3C x 95	11.4	8.0	8	1.9	3.7	90.3	8.9 / 3	10679	0.3200	0.410	0.430	0.1280	0.165
KEI33AL3C120SWA	3C x 120	12.8	8.0	26	2.0	3.8	93.7	11.3 / 10	11941	0.2530	0.325	0.347	0.1230	0.179
KEI33AL3C150SWA	3C x 150	14.2	8.0	26	2.1	4.0	97.4	14.1 / 10	12794	0.2060	0.264	0.290	0.1200	0.191
KEI33AL3C185SWA	3C x 185	16.1	8.0	26	2.1	4.1	101.7	17.4 / 10	13718	0.1640	0.2110	0.240	0.1160	0.205
KEI33AL3C240SWA	3C x 240	18.5	8.0	26	2.2	4.2	107.3	22.6 / 10	15093	0.1250	0.1610	0.195	0.1110	0.227
KEI33AL3C300SWA	3C x 300	20.6	8.0	26	2.3	4.4	112.4	28.2 / 10	16510	0.1000	0.1300	0.167	0.1070	0.247
KEI33AL3C400SWA	3C x 400	23.6	8.0	26	2.5	4.6	120.2	37.6 / 10	18656	0.0778	0.1020	0.149	0.1102	0.272
KEI33AL3C500SWA	3C x 500	26.6	8.0	26	2.6	4.8	127.3	47 / 10	20729	0.0617	0.0815	0.127	0.0990	0.297
KEI33AL3C630SWA	3C x 630	30.2	8.0	26	2.7	5.1	135.8	59.2 / 10	23354	0.0469	0.0601	0.115	0.0980	0.310

Current Ratings					
Continuous current-carrying capacity, Amps - Aluminium, Solid Bond					
Area	In Air			In Ground	
mm2					
70	176	186	152	179	157
95	212	223	181	213	187
120	241	255	208	241	214
150	270	286	232	268	238
185	308	326	263	303	268
240	358	380	312	349	316
300	404	429	349	390	353
400	463	492	397	442	399
500	526	559	447	496	447
630	594	634	513	554	508

Note :
1. Other sizes will be provided on request.
2. Cable weight and overall diameter indicated above are for guidance only and may differ in actual product.

CORRECTION FACTORS FOR CABLE CURRENT RATING

Cable current rating given for each type of cable are based on following standard conditions of cable installation. To obtain the maximum current carrying capacity of a cable operating at different conditions from the standard, various rating factors are to be multiplied.
Important Considerations –

A number for factors must be considered to accurately size cables for any particular installation. The Current rating of a cable depends on:

- Installation method, eg., In air or ground, enclosed or unenclosed, etc.
- Ambient environmental condition.
- Maximum Conductor temperature of conductor of the cables for normal use
- Rating of Earth Screen
- Thickness, type and Composition of Protective Sheaths.
- Proximity to other services and circuits.
- Fault Current
- Voltage Drop
- Earthing arrangement

De-rating tables & Grouping factors contained here are based on IEC 60502-2 as applicable. the de-rating tables are based on empirical data and should not be relied upon for complex installations. detailed rating studies are recommended for cable rating calculations.

STANDARD CONDITIONS OF CABLE INSTALLATION :

1	Ambient Air temperature	-	40°C
2	Ambient Soil/Ground temperature	-	25°C
3	Soil thermal resistivity	-	1.2K.m/W
4	Depth of Laying	-	0.8 m

RATING FACTORS

A. Ambient Air Temperature Variation

Air Temperature (°C)	20	25	35	40	45	50	55
Rating Factor	1.18	1.14	1.05	1.00	0.95	0.90	0.83

B. Ground Temperature Variation
Cables laid direct in ground or in ducts

Ground Temperature (°C)	10	15	20	25	30	35	40
Rating Factor	1.11	1.08	1.04	1.00	0.97	0.92	0.88

C. Depth of Burial Variation

Depth of laying (m)	Direct in Ground		
	Single-core cables		Three-core cables
	≤185 mm2	>185 mm2	
0.80	1.00	1.00	1.00
1.00	0.98	0.97	0.98
1.25	0.96	0.95	0.96
1.50	0.95	0.93	0.95
1.75	0.94	0.91	0.94
2.00	0.93	0.90	0.93
2.50	0.91	0.88	0.91
3.00	0.90	0.86	0.90

Depth of laying (m)	Direct in Ducts		
	Single-core cables		Three-core cables
	≤185 mm2	>185 mm2	
0.80	1.00	1.00	1.00
1.00	0.98	0.97	0.99
1.25	0.96	0.95	0.97
1.50	0.95	0.93	0.96
1.75	0.94	0.92	0.95
2.00	0.93	0.91	0.94
2.50	0.91	0.89	0.93
3.00	0.90	0.88	0.92

CORRECTION FACTORS FOR CABLE CURRENT RATING

D. Thermal Resistivity of Soil Variation

Single Core Cable Laid in Single Way Ducts

Area sq.mm	Thermal resistivity (°C m/W) area									
	0.7	0.8	0.9	1.0	1.5	2.0	2.5	3.0	3.5	4.0
50	1.08	1.06	1.04	1.03	0.96	0.90	0.85	0.81	0.77	0.74
70	1.08	1.06	1.05	1.03	0.96	0.90	0.84	0.80	0.76	0.73
95	1.08	1.07	1.05	1.03	0.95	0.89	0.84	0.80	0.75	0.72
120	1.09	1.07	1.05	1.03	0.95	0.89	0.83	0.79	0.75	0.71
150	1.09	1.07	1.05	1.03	0.95	0.88	0.83	0.79	0.74	0.71
185	1.09	1.07	1.05	1.03	0.95	0.88	0.83	0.78	0.74	0.70
240	1.10	1.08	1.05	1.04	0.95	0.88	0.82	0.78	0.73	0.70
300	1.10	1.08	1.06	1.04	0.95	0.87	0.82	0.77	0.72	0.69
400	1.11	1.08	1.06	1.04	0.94	0.87	0.82	0.77	0.72	0.68
500	1.12	1.08	1.06	1.04	0.94	0.87	0.81	0.76	0.71	0.68
630	1.12	1.09	1.06	1.04	0.94	0.87	0.81	0.76	0.71	0.67
800	1.13	1.10	1.07	1.04	0.94	0.86	0.80	0.75	0.71	0.67
1000	1.13	1.10	1.07	1.04	0.94	0.86	0.80	0.75	0.70	0.66
1200	1.13	1.10	1.07	1.05	0.94	0.86	0.80	0.75	0.70	0.66

Single Core Cable Laid Direct in Ground

Area sq.mm	Thermal resistivity (°C m/W) area									
	0.7	0.8	0.9	1.0	1.5	2.0	2.5	3.0	3.5	4.0
50	1.21	1.16	1.11	1.07	0.91	0.81	0.73	0.68	0.63	0.59
70	1.22	1.16	1.12	1.07	0.91	0.81	0.73	0.68	0.63	0.59
95	1.22	1.16	1.12	1.07	0.91	0.81	0.73	0.68	0.63	0.59
120	1.22	1.16	1.12	1.07	0.91	0.81	0.73	0.68	0.63	0.59
150	1.22	1.16	1.12	1.07	0.91	0.81	0.73	0.68	0.63	0.59
185	1.22	1.17	1.12	1.07	0.91	0.81	0.73	0.68	0.62	0.59
240	1.23	1.17	1.12	1.07	0.91	0.80	0.73	0.68	0.62	0.59
300	1.23	1.17	1.12	1.07	0.91	0.80	0.73	0.68	0.62	0.59
400	1.23	1.17	1.12	1.07	0.91	0.80	0.73	0.67	0.62	0.58
500	1.23	1.17	1.12	1.07	0.91	0.80	0.73	0.67	0.62	0.58
630	1.23	1.17	1.12	1.07	0.91	0.80	0.73	0.67	0.61	0.58
800	1.23	1.17	1.12	1.07	0.91	0.80	0.72	0.66	0.61	0.58
1000	1.24	1.18	1.12	1.07	0.91	0.80	0.72	0.66	0.61	0.58
1200	1.24	1.18	1.12	1.08	0.90	0.80	0.72	0.66	0.61	0.58

Three Core Cables Laid in Duct

Area sq.mm	Thermal resistivity (°C m/W) area									
	0.7	0.8	0.9	1.0	1.5	2.0	2.5	3.0	3.5	4.0
35	1.06	1.05	1.03	1.02	0.96	0.92	0.87	0.83	0.81	0.77
50	1.07	1.05	1.03	1.02	0.96	0.91	0.87	0.83	0.80	0.77
70	1.07	1.05	1.04	1.02	0.96	0.91	0.86	0.82	0.79	0.76
95	1.07	1.06	1.04	1.02	0.96	0.91	0.86	0.82	0.78	0.75
120	1.08	1.06	1.04	1.03	0.95	0.90	0.85	0.81	0.78	0.74
150	1.09	1.06	1.04	1.03	0.95	0.90	0.85	0.80	0.77	0.73
185	1.09	1.07	1.05	1.03	0.95	0.89	0.84	0.80	0.76	0.72
240	1.09	1.07	1.05	1.03	0.95	0.89	0.84	0.79	0.76	0.72
300	1.10	1.07	1.05	1.03	0.95	0.88	0.83	0.78	0.75	0.71
400	1.10	1.07	1.05	1.03	0.95	0.88	0.83	0.78	0.75	0.71
500	1.11	1.08	1.06	1.04	0.94	0.87	0.82	0.77	0.74	0.70
630	1.11	1.08	1.06	1.04	0.94	0.87	0.82	0.77	0.74	0.70

Three Core Cables Laid Direct in Ground

Area sq.mm	Thermal resistivity (°C m/W) area									
	0.7	0.8	0.9	1.0	1.5	2.0	2.5	3.0	3.5	4.0
35	1.17	1.13	1.09	1.06	0.92	0.83	0.76	0.71	0.65	0.61
50	1.17	1.13	1.09	1.06	0.92	0.83	0.76	0.71	0.65	0.61
70	1.18	1.14	1.09	1.06	0.92	0.83	0.75	0.70	0.64	0.60
95	1.18	1.14	1.09	1.06	0.92	0.83	0.75	0.70	0.64	0.60
120	1.19	1.14	1.10	1.06	0.92	0.82	0.75	0.69	0.64	0.60
150	1.19	1.14	1.10	1.06	0.92	0.82	0.75	0.69	0.63	0.59
185	1.19	1.14	1.10	1.06	0.92	0.82	0.74	0.69	0.63	0.59
240	1.20	1.15	1.10	1.07	0.92	0.81	0.74	0.69	0.63	0.59
300	1.20	1.15	1.10	1.07	0.92	0.81	0.74	0.69	0.63	0.59
400	1.20	1.15	1.10	1.07	0.92	0.81	0.74	0.69	0.63	0.59
500	1.21	1.16	1.11	1.08	0.91	0.80	0.73	0.68	0.62	0.58
630	1.21	1.16	1.11	1.08	0.91	0.80	0.73	0.68	0.62	0.58

SINGLE CORE CABLES

Laid flat, spaced, horizontal formation, laid direct in ground

No. of circuits	Spacing of circuits – metre			
	0.15	0.30	0.45	0.60
2	0.80	0.84	0.87	0.89
3	0.69	0.75	0.79	0.82
4	0.63	0.70	0.75	0.79
5	0.59	0.66	0.72	0.76
6	0.56	0.64	0.70	0.74
7	0.53	0.62	0.68	0.73
8	0.52	0.60	0.67	0.72
9	0.50	0.59	0.66	0.71
10	0.49	0.58	0.65	0.71
11	0.48	0.57	0.65	0.70
12	0.47	0.57	0.64	0.70

Trefoil touching (incl. Triplex), laid flat touching horizontal formation, laid directly in ground

No. of circuits	Touching		Spacing of circuits – metre			
	Trefoil	Laid flat	0.15	0.30	0.45	0.60
2	0.78	0.80	0.82	0.86	0.89	0.91
3	0.66	0.68	0.71	0.77	0.80	0.83
4	0.59	0.62	0.65	0.72	0.77	0.80
5	0.55	0.58	0.61	0.68	0.74	0.78
6	0.52	0.55	0.58	0.66	0.72	0.76
7	0.49	0.52	0.56	0.64	0.70	0.75
8	0.47	0.50	0.54	0.63	0.69	0.74
9	0.45	0.48	0.52	0.61	0.68	0.74
10	0.44	0.47	0.51	0.61	0.68	0.73
11	0.43	0.46	0.50	0.60	0.67	0.73
12	0.41	0.45	0.49	0.59	0.67	0.72

Trefoil single way ducts, horizontal formation

No. of circuits	Touching	Spacing of circuits – metre	
	Trefoil	0.45	0.60
2	0.85	0.88	0.90
3	0.75	0.80	0.83
4	0.70	0.77	0.80
5	0.67	0.74	0.78
6	0.64	0.72	0.76
7	0.62	0.70	0.75
8	0.61	0.69	0.74
9	0.59	0.68	0.73
10	0.58	0.67	0.73
11	0.57	0.67	0.72
12	0.57	0.66	0.72

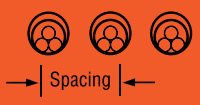
THREE CORE CABLES

Horizontal formation laid directly in ground

No. of cables in group	Touching	Spacing – metre			
		0.15	0.30	0.45	0.60
2	0.80	0.85	0.89	0.91	0.93
3	0.68	0.76	0.81	0.84	0.87
4	0.62	0.71	0.77	0.81	0.84
5	0.57	0.66	0.73	0.78	0.82
6	0.54	0.64	0.71	0.77	0.81
7	0.51	0.61	0.69	0.75	0.79
8	0.49	0.59	0.68	0.74	0.79
9	0.47	0.58	0.67	0.73	0.78
10	0.45	0.57	0.66	0.73	0.78
11	0.44	0.55	0.65	0.72	0.77
12	0.43	0.54	0.64	0.72	0.77

THREE CORE CABLES

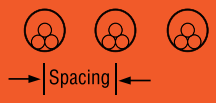
Horizontal formation in single way ducts



No. of ducts in group	Touching	Spacing – metre		
		0.30	0.45	0.60
2	0.85	0.88	0.90	0.92
3	0.76	0.80	0.83	0.86
4	0.71	0.76	0.80	0.83
5	0.66	0.72	0.77	0.80
6	0.63	0.70	0.75	0.79
7	0.61	0.68	0.73	0.77
8	0.59	0.66	0.72	0.76
9	0.57	0.65	0.71	0.76
10	0.56	0.64	0.70	0.75
11	0.55	0.63	0.70	0.74
12	0.54	0.62	0.66	0.74

SINGLE CORE OR TRIPLEX CABLES

Horizontal formation in single way ducts



No. of ducts in group	Touching	Spacing – metre		
		0.30	0.45	0.60
2	0.83	0.86	0.88	0.90
3	0.73	0.76	0.80	0.83
4	0.68	0.72	0.76	0.79
5	0.63	0.68	0.73	0.76
6	0.60	0.65	0.71	0.75
7	0.58	0.63	0.69	0.73
8	0.56	0.62	0.68	0.72
9	0.54	0.60	0.66	0.71
10	0.53	0.59	0.66	0.71
11	0.52	0.58	0.65	0.70
12	0.51	0.57	0.64	0.70

CABLEGRID®

BENDING RADIUS

The bending radius for cable is limited by the mechanical properties of the insulation and sheathing material used. To avoid any damage to the cable during packing, handling, installation and after it is important to maintain minimum limits of cable bending radius.

Minimum Bending Radius (mm) = K x Cable overall Diameter in mm

A. Recommended diameter of drum barrel and Bending Radius Factors for single core and 3 core MV Cables

Cable oversheath or covering	Multiplying factor (k)		
	Diameter of drum barrel	Installation bending radius	
		During installation	Installed
(a) HDPE	18	25	15
(b) Polyamide with or without further protection	25*	30*	20*
(c) PVC and all other oversheathing materials	18	18	12
(d) Rubber flexible cable	10	10	8

* In multiples of diameter over the polyamide layer

B. Recommended diameter of drum barrel and Bending Radius Factors for Triplex Cables

Cable oversheath or covering	Multiplying factor (k)		
	Diameter of drum barrel	Installation bending radius	
		During installation	Installed
(a) HDPE			
(i) Bundled Cable	12	15	10
(ii) Phase Cable	-	25	15
(b) Polyamide with or without further protection			
(i) Bundled Cable	16	20	15
(ii) Phase Cable	-	30	20
(c) PVC and all other oversheathing materials			
(i) Bundled Cable	12	12	8
(ii) Phase Cable	-	18	12

MAXIMUM RECOMMENDED PULLING TENSIONS

Maximum allowable pulling tension of cables during installation shall be calaculated as per following formula, when pulled by pulling eye or stockings. The following safe limits shall not be exceeded in any case to avoid conductor or armour wire breaking, conductor and insulation displacement- and increase in conductor/armour resistance values.

A. USING A PULLING EYE ON CONDUCTOR

Copper conductor (N) = 70 x No of cores x Conductor cross sectional area
Aluminium conductor (N) = 50 x No of cores x Conductor cross sectional area

B. USING A PULLING EYE ON THE STEEL WIRE ARMOUR

$P\ (N) = 5 \times D^2$

Where P is pulling tension in N
Where D is overall cable diameter in mm

C. PULLED BY STOCKINGS

$P\ (N) = 3.5 \times D^2$

Where D is overall cable diameter in mm

Note :
1. Tension should not exceed the values given for pulling eye when considering the use of stocking grip.
2. For KEI MV cables, max. safe pulling tension shall not exceed 80kN when pulled either by pulling eye or stockings along straight pull s or along bends. Please consult KEI if installation tensions is expected to exceed 80kN
3. Recommended above bending radius as per 1429.1 for lower bending radius Please consult.

DUCT SIZE

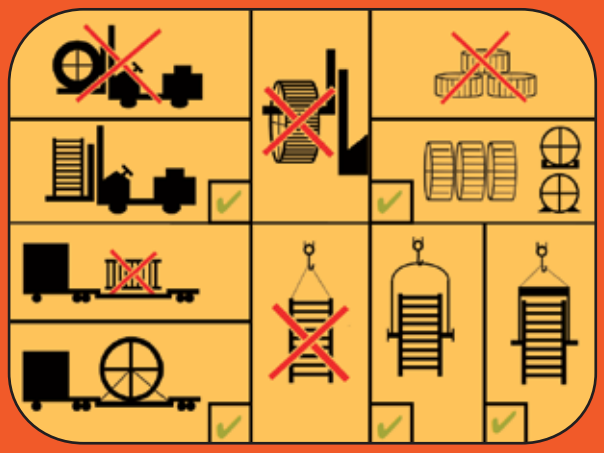
Recommended duct sizes are given in the below table,

Nominal Overall Cable diameter (mm)	Nominal inside duct diameter (mm)
Up to 65 mm	100
Above 65 and up to 90	125
Above 90 and up to 115	150

MV POWER CABLE HANDLING GUIDELINES

Section 1.1 Transportation handling guidelines

During transportation the following basic rules must be observed under all circumstances to avoid any damages to the drum and the cable. The pictogram shown below, which is also to be found at the cable drum, indicates the main rules accordingly



- Don't drop the drum, not even from small heights
- Securely protect the drum against moving
- Always use axle spreader when lifting the drum with a crane
- Use lifting equipment with appropriate lifting capacity
- Avoid mechanical stress of the wooden protection
- Place rubber mats underneath the drum when loaded onto a trailer
- Observe high centre of gravity when loaded on a trailer
- Do not remove the fastening support of the drum until cable pulling begins

'It's the duty of the freight forwarder to ensure a safe transport and to use intact equipment only. Especially the following issues need to be carefully taken into account:

- Height and width clearance of all roads, tunnels and bridges to be passed
- Width of the roads and sufficient load capacity
- Curve radii, inclinations, bumps, holes, tilt angles of the roads
- Sufficient loading capacity and braking force of the trailer and towing vehicle
- For ship transport: proper fixing of the drums to avoid falling from deck or being harmed by a storm

Section 1.2 Transportation and Storage conditions

It is important throughout the entire transportation and storage duration that the permissible ambient temperature of the cables on their drums is respected. The following table lists the permissible ambient temperatures for different cable types on their drums.

Cable Type	Ambient Temperature range	Relative humidity
XLPE insulated cables with HDPE or PVC outer sheath	-20^0 C ... +50^0 C	up to 100% condensing
XLPE Insulated cables with FRNE outer sheath	-5^0 C ... +35^0 C (*)	up to 100% condensing
XLPE insulated cables with FR-LSOH outer sheath	- 5^0 C....+ 35^0 C	up to 100% condensing

In addition the following conditions must be ensured throughout the entire transportation and storage duration:

- The cables must be protected against mechanical damage, e.g. by wood lagging of the drums
- The cables must be protected against direct sun radiation, e.g. by wood lagging of the drumsor a suitable roof
- The drums must always be standing upright; do not tilt the drums or lay them on their side

Note:

- The colour of the outer sheath may vary and bleach if it's not black. This is not a defect and does not affect the function of the cable.

MV POWER CABLE HANDLING GUIDELINES

Section 2 Laying guidelines :-

1. Remove the planks / covering from the reel and examine the surface of the cable.
2. Prepare cable ends and measure insulation resistance at 2.5 kV d.c. upto 22 kV cables and 5 kV for 33 kV cables. The test duration shall be 1 minute. Test shall be performed with megger.
3. If IR Test is OK then place the reel on strong spindle over the jack with opposite direction of arrow on the reel. The cable reel should be lifted on the jack to a suitable height giving a sufficient clearance for rolling of cable reel, normally 12 inches are sufficient. A suitable breaking arrangement should be on the jack to avoid buckling of the cable.
4. With a temperature below 3°C. the cables should be treated with hot air for 24 hours to achieve about 10°C before laying.
5. The cable should be pulled from the leading end.
6. Use Pay-in rollers, Corner rollers and properly alligned and smooth running cable rollers should be placed at every 3 to 4 meter cable trench. Graphite grease can also be used on these rollers to avoid abrasions especially around a bend in the trench.
7. The cable reel on the jack should be equally balanced and should not incline on either side.
8. There should not be any sharp object in the trench/tray which cause damage to the cable while pulling. A felt or suitable material shall be used for cushioning of cable at sharp edges in the trench/tray as well as tie should be applied at regular interval.
9. The pulling of the cables can be mechanised or with the gangman “Heave Ho” method.
   Heave – grip the cable Ho – Tug it vigorously"
10. After laying, all the cable ends must be checked for proper capping as well as the sheath opening/damages if any must be taken immediately by application of Heat shrinkable sleeves to avoid water penetration from atmosphere causing oxidation of metallic parts due to electrolysis & degradation of polymeric layer due to high discharge activity during operation.
11. If moisture/water ingress is noticed from open cable ends/torn caps/ opening from sheath damages, such affected portion of the cable should be removed before carrying out jointing/termination at affted portion. The water ingress can have seepage into Joints & will result in failures.

CABLE INSTALLATION CONDITIONS

Single Core Cables												
Installed In	In Air					In Ground			In underground ducts			
Symbol												
Identification details	In air flat touching	In air flat spaced	In air trefoil touching to surface	In air trefoil spaced from surface	In air enclosed	In ground flat touching	In ground flat spaced	In ground trefoil touching	Underground ducts flat touching	Underground ducts flat spaced	Underground in separate ducts in trefoil	Underground in single way duct

Triplex Cables					
Installed In	In Air			In Ground	In underground ducts
Symbol					
Identification details	In air trefoil touching to surface	In air trefoil spaced from surface	In air enclosed	In ground trefoil touching	Underground in single way duct

Three Core Cables					
Installed In	In Air			In Ground	In underground ducts
Symbol					
Identification details	In air enclosed	In air spaced from surface	In air single way duct	In Ground directly buried	Underground in single way duct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Wires and Cables

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