

Primary UD EPR / PVC, Concentric Neutral

15 kV – 46 kV

CME[®]
wire and cable

A Viakable Company

Features

Low tension stripping compounds.

Sealed conductor passes the production water penetration tests per ICEA-T-31-610 at 15 psi for 60 minutes.

Strand Filled compound meets compatibility test requirements in accordance with ICEA-T-32-610.

True Triple extrusion system and closed handling raw materials system, to eliminate any contact with ambient, until extrusion of insulation and shields.

On request, can be UL Listed as MV105 for use in accordance with Article 328 of the NEC.

On request, two abrasion resistant ripcords placed longitudinally 180° apart for easy jacket removal.

Application

Underground primary residential and commercial distribution circuits.

May be used in wet or dry locations, installed in underground ducts or direct burial.

Standards

ICEA S-94-649: Standard for Concentric Neutral Rated Cables 5 kV – 46 kV

AEIC CS8: Specifications for Extruded Dielectric, Shielded Power Cable, rated 5 kV – 46 kV

Specifications

Maximum operating voltage:

- 5 kV – 46 kV, 100 and 133% IL
- Maximum conductor operation temperatures:

Wet and dry locations

- Normal: 105 °C
- Emergency: 140 °C
- Short Circuit: 250 °C

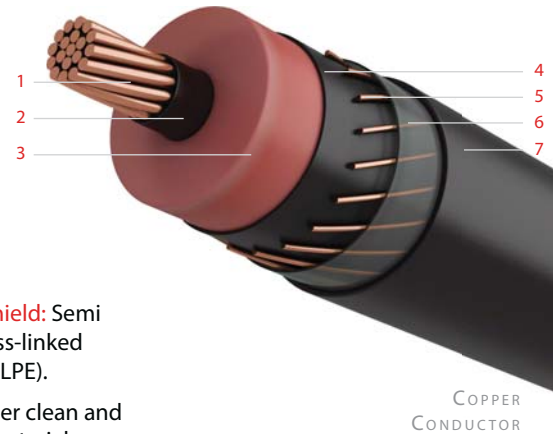
Engineering Information

1. Conductor: Soft annealed uncoated copper Class B compressed or unilay compressed per ASTM B8 or hard drawn aluminum Class B compressed or unilay compressed stranding per ASTM B231.

On request: strand filled.

Sizes: 8 AWG – 1000 kcmil.

On request, larger sizes.



2. Conductor Shield: Semi conducting cross-linked polyethylene (XLPE).

On request: super clean and super smooth materials.

3. Insulation: Thermoset ethylene propylene rubber (EPR).

On request: amorphous EPR.

4. Insulation Shield: Semi conducting cross-linked polyethylene (XLPE).

5. Concentric Neutral: Soft annealed solid copper wires per ASTM B3, helically applied and uniformly spaced.

Full or 1/3 Neutral.

On request options: alternate neutral constructions, Water Swellable Powder (WSP), and ripcords.

6. Binder Tape: A suitable polyester tape, as required.

7. Jacket: Extruded Overlying (Sleeve) Black polyvinyl chloride (PVC) sunlight resistant.

Configuration Options:

On request: Triplex or Paralleled configurations.



Technical Data

15 kV EPR Insulated

Size AWG or kcmil	Number of Strands	Nominal OD Over Insulation in	1/3 Neutral					Full Neutral				
			Number of Wires	Size AWG	Jacket Thickness mil	Approximate Outside Diameter in	Approximate Net Weight lb/kft	Number of Wires	Size AWG	Jacket Thickness mil	Approximate Outside Diameter in	Approximate Net Weight lb/kft
Copper 100% Insulation Level (175 mil)												
2	7	0.68	6	14	80	1.05	646	16	14	80	1.05	779
1	19	0.71	7	14	80	1.09	733	13	12	80	1.12	921
1/0	19	0.75	9	14	80	1.13	850	16	12	80	1.16	1075
2/0	19	0.80	11	14	80	1.17	987	13	10	80	1.25	1292
3/0	19	0.85	14	14	80	1.22	1163	16	10	80	1.30	1530
4/0	19	0.90	18	14	80	1.28	1385	16	9	80	1.38	1842
250	37	0.96	13	12	80	1.37	1576	25	10	80	1.41	2151
350	37	1.06	18	12	80	1.49	2075	22	8	80	1.59	2890
500	37	1.19	17	10	80	1.66	2814	31	8	110	1.78	4020
750	61	1.38	20	9	110	1.94	4095	—	—	—	—	—
1000	61	1.53	26	9	110	2.12	5268	—	—	—	—	—
Aluminum 100% Insulation Level (175 mil)												
2	7	0.67	6	14	80	1.05	503	10	14	80	1.05	556
1	19	0.71	6	14	80	1.08	540	13	14	80	1.08	633
1/0	19	0.75	6	14	80	1.12	582	16	14	80	1.12	716
2/0	19	0.80	7	14	80	1.17	647	13	12	80	1.20	835
3/0	19	0.85	9	14	80	1.22	735	16	12	80	1.25	960
4/0	19	0.90	11	14	80	1.27	836	13	10	80	1.35	1141
250	37	0.96	13	14	80	1.33	930	16	10	80	1.41	1309
350	37	1.06	18	14	80	1.46	1174	16	9	80	1.56	1631
500	37	1.19	16	12	80	1.62	1495	29	10	80	1.66	2142
750	61	1.40	15	10	110	1.93	2153	—	—	—	—	—
1000	61	1.54	16	9	110	2.13	2715	—	—	—	—	—

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.
Ampacities: Refer to beginning of section.

Technical Data continued

15 kV EPR Insulated

Size AWG or kcmil	Number of Strands	Nominal OD Over Insulation in	1/3 Neutral					Full Neutral				
			Number of Wires	Size AWG	Jacket Thickness mil	Approximate Outside Diameter in	Approximate Net Weight lb/kft	Number of Wires	Size AWG	Jacket Thickness mil	Approximate Outside Diameter in	Approximate Net Weight lb/kft
Copper 133% Insulation Level (220 mil)												
2	7	0.77	6	14	80	1.14	721	16	14	80	1.14	855
1	19	0.81	7	14	80	1.18	812	13	12	80	1.21	1000
1/0	19	0.85	9	14	80	1.22	932	16	12	80	1.25	1157
2/0	19	0.89	11	14	80	1.26	1072	13	10	80	1.34	1377
3/0	19	0.94	14	14	80	1.31	1252	16	10	80	1.39	1618
4/0	19	1.00	18	14	80	1.37	1478	16	9	80	1.47	1935
250	37	1.05	13	12	80	1.48	1698	25	10	80	1.52	2273
350	37	1.16	18	12	80	1.58	2182	22	8	80	1.68	2997
500	37	1.28	17	10	110	1.82	3039	31	8	110	1.87	4143
750	61	1.47	20	9	110	2.03	4232	—	—	—	—	—
1000	61	1.62	26	9	110	2.21	5418	—	—	—	—	—
Aluminum 133% Insulation Level (220 mil)												
2	7	0.76	6	14	80	1.14	577	10	14	80	1.14	631
1	19	0.80	6	14	80	1.18	617	13	14	80	1.18	711
1/0	19	0.84	6	14	80	1.22	663	16	14	80	1.22	797
2/0	19	0.89	7	14	80	1.26	731	13	12	80	1.29	919
3/0	19	0.94	9	14	80	1.31	823	16	12	80	1.34	1048
4/0	19	0.99	11	14	80	1.37	928	13	10	80	1.44	1233
250	37	1.05	13	14	80	1.44	1050	16	10	80	1.52	1430
350	37	1.15	18	14	80	1.55	1279	16	9	80	1.65	1737
500	37	1.28	16	12	110	1.77	1718	29	10	110	1.81	2367
750	61	1.49	15	10	110	2.02	2289	—	—	—	—	—
1000	61	1.64	16	9	110	2.23	2864	—	—	—	—	—

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.
Ampacities: Refer to beginning of section.

Technical Data continued

25 kV EPR Insulated

Size AWG or kcmil	Number of Strands	Nominal OD Over Insulation in	1/3 Neutral					Full Neutral				
			Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight	Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight
				AWG	mil	in	lb/kft		AWG	mil	in	lb/kft
Copper 100% Insulation Level (260 mil)												
1	19	0.89	7	14	80	1.26	887	13	12	80	1.29	1076
1/0	19	0.93	9	14	80	1.30	1010	16	12	80	1.33	1235
2/0	19	0.97	11	14	80	1.34	1154	13	10	80	1.42	1458
3/0	19	1.02	14	14	80	1.42	1361	16	10	80	1.49	1727
4/0	19	1.08	18	14	80	1.47	1591	16	9	80	1.57	2049
250	37	1.13	13	12	80	1.56	1792	25	10	80	1.60	2367
350	37	1.24	18	12	80	1.66	2282	22	8	110	1.82	3207
500	37	1.37	17	10	110	1.90	3154	31	8	110	1.95	4257
750	61	1.56	20	9	110	2.14	4408	—	—	—	—	—
1000	61	1.70	26	9	110	2.29	5558	—	—	—	—	—
Aluminum 100% Insulation Level (260 mil)												
1	19	0.88	6	14	80	1.26	692	13	14	80	1.26	785
1/0	19	0.92	6	14	80	1.30	741	16	14	80	1.30	874
2/0	19	0.97	7	14	80	1.34	812	13	12	80	1.37	1000
3/0	19	1.02	9	14	80	1.41	930	16	12	80	1.45	1155
4/0	19	1.07	11	14	80	1.47	1040	13	10	80	1.54	1345
250	37	1.13	13	14	80	1.53	1143	16	10	80	1.60	1522
350	37	1.23	18	14	80	1.63	1379	16	9	110	1.79	1945
500	37	1.36	16	12	110	1.85	1831	29	10	110	1.90	2480
750	61	1.57	15	10	110	2.13	2464	—	—	—	—	—
1000	61	1.72	16	9	110	2.31	3003	—	—	—	—	—

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Ampacities: Refer to beginning of section.

Technical Data continued

25 kV EPR Insulated

Size AWG or kcmil	Number of Strands	Nominal OD Over Insulation in	1/3 Neutral					Full Neutral				
			Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight	Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight
				AWG	mil	in	lb/kft		AWG	mil	in	lb/kft
Copper 133% Insulation Level (320 mil)												
1	19	1.01	7	14	80	1.38	1011	13	12	80	1.41	1199
1/0	19	1.05	9	14	80	1.44	1163	16	12	80	1.48	1388
2/0	19	1.09	11	14	80	1.49	1311	13	10	80	1.56	1616
3/0	19	1.14	14	14	80	1.54	1501	16	10	80	1.61	1867
4/0	19	1.20	18	14	80	1.59	1737	16	9	110	1.76	2299
250	37	1.26	13	12	80	1.68	1943	25	10	110	1.79	2625
350	37	1.36	18	12	110	1.85	2554	22	8	110	1.94	3376
500	37	1.49	17	10	110	2.02	3336	31	8	110	2.07	4439
750	61	1.68	20	9	110	2.27	4612	—	—	—	—	—
1000	61	1.83	26	9	110	2.42	5777	—	—	—	—	—
Aluminum 133% Insulation Level (320 mil)												
1/0	19	1.05	6	14	80	1.44	891	16	14	80	1.44	1024
2/0	19	1.09	7	14	80	1.48	967	13	12	80	1.52	1155
3/0	19	1.14	9	14	80	1.53	1068	16	12	80	1.57	1293
4/0	19	1.20	11	14	80	1.59	1183	13	10	80	1.67	1488
250	37	1.25	13	14	80	1.65	1292	16	10	110	1.79	1780
350	37	1.35	18	14	110	1.81	1648	16	9	110	1.91	2112
500	37	1.48	16	12	110	1.97	2011	29	10	110	2.02	2660
750	61	1.69	15	10	110	2.25	2668	—	—	—	—	—
1000	61	1.84	16	9	110	2.43	3222	—	—	—	—	—

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Ampacities: Refer to beginning of section.

Technical Data continued

35 kV EPR Insulated

Size AWG or kcmil	Number of Strands	Nominal OD Over Insulation in	1/3 Neutral					Full Neutral				
			Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight	Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight
				AWG	mil	in	lb/kft		AWG	mil	in	lb/kft
Copper 100% Insulation Level (345 mil)												
1/0	19	1.10	9	14	80	1.50	1221	16	12	80	1.53	1446
2/0	19	1.15	11	14	80	1.54	1371	13	10	80	1.62	1676
3/0	19	1.20	14	14	80	1.59	1563	16	10	80	1.67	1929
4/0	19	1.25	18	14	80	1.65	1801	16	9	110	1.81	2367
250	37	1.31	13	12	110	1.80	2117	25	10	110	1.84	2695
350	37	1.41	18	12	110	1.90	2629	22	8	110	2.00	3450
500	37	1.54	17	10	110	2.10	3464	31	8	110	2.16	4567
750	61	1.73	20	9	110	2.32	4701	—	—	—	—	—
1000	61	1.88	26	9	110	2.47	5872	—	—	—	—	—
Aluminum 100% Insulation Level (345 mil)												
1/0	19	1.10	6	14	80	1.49	948	16	14	80	1.49	1082
2/0	19	1.14	7	14	80	1.53	1026	13	12	80	1.57	1214
3/0	19	1.19	9	14	80	1.58	1129	16	12	80	1.62	1354
4/0	19	1.25	11	14	80	1.64	1247	13	10	110	1.78	1660
250	37	1.30	13	14	110	1.76	1465	16	10	110	1.84	1849
350	37	1.40	18	14	110	1.86	1722	16	9	110	1.96	2186
500	37	1.53	16	12	110	2.06	2137	29	10	110	2.10	2786
750	61	1.74	15	10	110	2.30	2756	—	—	—	—	—
1000	61	1.89	16	9	110	2.48	3317	—	—	—	—	—

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.
Ampacities: Refer to beginning of section.

Technical Data continued

35 kV EPR Insulated

Size AWG or kcmil	Number of Strands	Nominal OD Over Insulation in	1/3 Neutral					Full Neutral				
			Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight	Number of Wires	Size	Jacket Thickness	Approximate Outside Diameter	Approximate Net Weight
				AWG	mil	in	lb/kft		AWG	mil	in	lb/kft
Copper 133% Insulation Level (420 mil)												
1/0	19	1.25	9	14	80	1.65	1407	16	12	80	1.68	1632
2/0	19	1.30	11	14	110	1.76	1668	13	10	110	1.83	1978
3/0	19	1.35	14	14	110	1.81	1869	16	10	110	1.88	2240
4/0	19	1.40	18	14	110	1.86	2118	16	9	110	1.96	2582
250	37	1.46	13	12	110	1.95	2339	25	10	110	1.99	2917
350	37	1.56	18	12	110	2.08	2913	22	8	110	2.18	3734
500	37	1.69	17	10	110	2.26	3719	31	8	110	2.31	4822
750	61	1.88	20	9	110	2.47	4980	—	—	—	—	—
1000	61	2.03	26	9	110	2.62	6171	—	—	—	—	—
Aluminum 133% Insulation Level (420 mil)												
1/0	19	1.25	6	14	80	1.64	1132	16	14	80	1.64	1266
2/0	19	1.29	7	14	110	1.75	1322	13	12	110	1.78	1512
3/0	19	1.34	9	14	110	1.80	1434	16	12	110	1.83	1662
4/0	19	1.40	11	14	110	1.86	1563	13	10	110	1.93	1872
250	37	1.45	13	14	110	1.91	1684	16	10	110	1.99	2069
350	37	1.56	18	14	110	2.04	2001	16	9	110	2.15	2466
500	37	1.68	16	12	110	2.21	2389	29	10	110	2.25	3038
750	61	1.89	15	10	110	2.46	3034	—	—	—	—	—
1000	61	2.04	16	9	110	2.63	3613	—	—	—	—	—

The above data are approximate and subject to normal manufacturing tolerances. Other sizes available upon request.
Ampacities: Refer to beginning of section.

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