Application

The MV 105 15kV Cable is designed for various applications including overhead installations, direct burial, cable tray, conduit, and underground duct installations as permitted by the National Electric Code (NEC). It is suitable for use in commercial, industrial, and utility power distribution systems.
The 3 Core MV 105 cable is engineered to operate continuously with a conductor temperature not exceeding 105°C for normal operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions, ensuring reliable performance under various operating scenarios.

Construction

Conductor: Made of annealed bare copper with compact Class B stranding. Also available in Class B compressed copper.
Conductor Shield: Extruded thermoset semi-conducting stress control layer.
Insulation: Utilizes EPR-based insulation.
Insulation Shield: Thermoset semi-conducting polymeric layer.
Metallic Shield: 5 mils annealed copper tape with a 25% overlap.
Grounding Conductors: 1 Class B copper conductor per ASTM B3 and ASTM B8.
Fillers: Non-hygroscopic fillers.
Binder Tape: Poly glass tape.
Jacket: Black flame-retardant PVC jacket.

Specification

-AEIC CS8 Standard for Shielded Power Cable, 5-46kV
-ICEA S-93-639, 5-46 kV Shielded Power Cable
-ICEA S-97-682, Utility Shielded Power Cable Rated 5-46 kV
-UL 1072 MV-105 Standard

Eastful Cable Lab

We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.
CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rhineland and CCS.

National Green Factory

Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.
We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

15KV CU 100% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
2	175	3	10	0.284	0.68	0.74	1.87	1888	14	150	165
1	175	3	8	0.324	0.72	0.78	1.96	2179	14	170	185
1/0	175	3	8	0.364	0.76	0.82	2.04	2466	15	195	215
2/0	175	3	8	0.408	0.81	0.86	2.14	2813	15	220	245
3/0	175	3	7	0.458	0.86	0.91	2.24	3275	16	250	285
4/0	175	3	7	0.515	0.91	0.97	2.37	3803	17	285	325
250	175	3	7	0.561	0.97	1.02	2.48	4268	18	310	360
350	175	3	6	0.664	1.07	1.14	2.74	5529	20	375	435
500	175	3	5	0.794	1.2	1.27	3.08	7447	22	450	535
750	175	3	4	0.974	1.39	1.46	3.48	10333	25	545	670
1000	175	3	4	1.124	1.54	1.62	3.84	13138	27	615	770

15KV CU 133% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
2	220	3	10	0.284	0.77	0.83	2.06	2124	15	150	165
1	220	3	8	0.324	0.81	0.87	2.15	2424	16	170	185
1/0	220	3	8	0.364	0.85	0.91	2.24	2719	16	195	215
2/0	220	3	8	0.408	0.9	0.95	2.33	3075	17	220	245
3/0	220	3	7	0.458	0.95	1	2.44	3548	18	250	285
4/0	220	3	7	0.515	1	1.06	2.56	4088	18	285	325
250	220	3	7	0.561	1.06	1.13	2.71	4627	19	310	360
350	220	3	6	0.664	1.16	1.23	2.99	6018	21	375	435
500	220	3	5	0.794	1.29	1.36	3.27	7808	23	450	535
750	220	3	4	0.974	1.48	1.55	3.68	10733	26	545	670
1000	220	3	4	1.124	1.63	1.71	4.04	13574	29	615	770

Technical Parameters

15KV AL 100% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
2	175	3	10	0.284	0.68	0.74	1.87	1469	14	115	125
1	175	3	10	0.324	0.72	0.78	1.96	1590	14	135	145
1/0	175	3	10	0.364	0.76	0.82	2.04	1736	15	150	170
2/0	175	3	8	0.408	0.81	0.86	2.14	1965	15	170	190
3/0	175	3	8	0.458	0.86	0.91	2.24	2168	16	195	220
4/0	175	3	8	0.515	0.91	0.97	2.37	2416	17	220	255
250	175	3	8	0.561	0.97	1.02	2.48	2638	18	245	280
350	175	3	7	0.664	1.07	1.14	2.74	3254	20	295	345
500	175	3	6	0.794	1.2	1.27	3.08	4203	22	355	425
750	175	3	5	0.974	1.39	1.46	3.48	5459	25	440	540
1000	175	3	4	1.124	1.54	1.62	3.84	6737	27	510	635

15KV AL 133% MV-105 Cable Specification											
Size	Insulation Thickness	No. of Ground Wires	Size of Ground Wires	Conductor Dia.	Insulation Dia.	Insulation Shield Dia.	Overall Jacket Dia.	Approx. Weight	Min. Bending Radius	Ampacity 90°C in Duct	Ampacity 90°C in Air
AWG/kcmil	mils	No.	mils	inch	inch	inch	inch	lb/MFT	inch	A	A
2	220	3	10	0.284	0.77	0.83	2.06	1705	15	115	125
1	220	3	10	0.324	0.81	0.87	2.15	1834	16	135	145
1/0	220	3	10	0.364	0.85	0.91	2.24	1989	16	150	170
2/0	220	3	8	0.408	0.9	0.95	2.33	2227	17	170	190
3/0	220	3	8	0.458	0.95	1	2.44	2441	18	195	220
4/0	220	3	8	0.515	1	1.06	2.56	2701	18	220	255
250	220	3	8	0.561	1.06	1.13	2.71	2997	19	245	280
350	220	3	7	0.664	1.16	1.23	2.99	3743	21	295	345
500	220	3	6	0.794	1.29	1.36	3.27	4564	23	355	425
750	220	3	5	0.974	1.48	1.55	3.68	5859	26	440	540
1000	220	3	4	1.124	1.63	1.71	4.04	7173	29	510	635