

TYPE MC - ALUMINUM CONDUCTOR - ALUMINUM ARMOR - 600V

XHHW-2 CONDUCTORS (6 AWG - 4/0 AWG)

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories® Standards UL-44, UL-1569, UL-1581, UL-1685, UL-2556 for type MC; Federal Specification AA-56544; NFPA 70 (NEC®) Article 330; NEMA RV-1; UL 1685-Method 1 (70,000 Btu/hr) Flame Test; Compact Stranded Aluminum Alloy 8000 Series per ASTM B800, ASTM B801, ASTM B836; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; VW-1 or IEEE 1202 (FT4) optional. UL Listing #E-301130



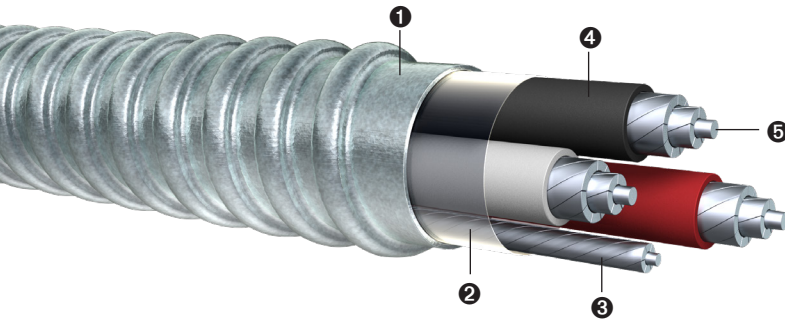
APPLICATIONS

Type MC shall be permitted as follows:

- Permitted use for services, feeders, and branch circuits in residential, commercial and industrial locations;
- Permitted for use in non-patient care areas of health care facilities (NEC 517.12);
- Acceptable for power, lighting, control, and signal circuits;
- Allowable in concealed or exposed installations;
- Permitted use in dry locations or when embedded in plaster finish on brick or other masonry except in damp or wet locations;
- Utilized for environmental air-handling spaces (NEC 300.22(C));
- Allowable in assembly occupancies (NEC 518.4);
- Permissible in theaters, audience areas of motion pictures, television studios, and similar locations (NEC 520.5);
- Allowable installations in approved raceways and cable trays (NEC 392);
- Suitable for installations under raised floors for IT equipment (NEC 645.5(E));
- Permitted in Class I Div. 2, Class II Div. 2, and Class III Div. 1 Hazardous Locations and listed for use in UL 1, 2, and 3-Hour Through-Penetration Firestop Systems.

CONSTRUCTION

Available in sizes 6 AWG through 750 KCMIL, Encore Wire's Metal-Clad Cable is constructed with Compact Stranded Conductors, Aluminum Alloy 8000 Series per ASTM B800, ASTM B801 and ASTM B836. Type XHHW-2 conductors rated 90°C dry. Sizes 6 AWG through 750 KCMIL contain bare aluminum ground wire. All conductors are cabled together with separator tape, which contains the identification print legend. Interlocked aluminum armor is applied over the assembly. AVAILABLE WITH LIGHTWEIGHT GALVANIZED STEEL ARMOR.



- ① Interlocked Aluminum Armor
- ② Separator Tape
- ③ Bare Compact Stranded Ground Conductor, AA-8000 Series
- ④ XLPE Insulation
- ⑤ Compact Stranded Conductor, AA-8000 Series

Phase Conductors			Ground Conductor		Outside Diameter over Armor (in)	Approximate Net Weight (lbs/1000 ft)	Allowable Ampacity (Amps) ¹		Standard Packaging (ft)	
AWG or KCMIL/ No. of Conductors	No. of Strands	XLPE Thickness (in)	Bare Ground (AWG)	No. of Strands			75°C	90°C	Coils	Reels
6/3	7	.045	6	7	0.810	231	50	55	125'	500' 1000'
6/4	7	.045	6	7	0.923	280	50	55	125'	500' 1000'
4/3	7	.045	6	7	0.920	291	65	75	100'	500'
4/4	7	.045	6	7	1.042	366	65	75	100'	500'
2/3	7	.045	4	7	1.020	401	90	100	100'	500'
2/4	7	.045	4	7	1.150	495	90	100	100'	500'
1/3	8	.055	4	7	1.111	490	100	115	-	1000'
1/4	8	.055	4	7	1.250	615	100	115	-	1000'
1/0-3	10	.055	4	7	1.225	573	120	135	-	1000'
1/0-4	10	.055	4	7	1.350	711	120	135	-	1000'
2/0-3	12	.055	4	7	1.250	667	135	150	-	1000'
2/0-4	12	.055	4	7	1.450	847	135	150	-	1000'
3/0-3	15	.055	4	7	1.370	807	155	175	-	1000'
3/0-4	15	.055	4	7	1.600	1121	155	175	-	1000'
4/0-3	19	.055	2	7	1.610	1072	180	205	-	1000'
4/0-4	19	.055	2	7	1.735	1357	180	205	-	1000'

Standard Conductor Color Coding

No.	120V/208V/240V
2	Black/White
3	Black/Red/White
4	Black/Red/Blue/White
Ground	Bare

No.	277V/480V
2	Brown/Gray
3	Brown/Orange/Gray
4	Brown/Orange/Yellow/Gray
Ground	Bare

Additional colors available subject to ERQ

FEATURES

Installation costs reduced up to 50% over conduit and wire; aluminum armor weight is up to 45% less than steel; while not required by Section 330.40, Insulating anti-short bushings are supplied with each reel; for ease of installation and pulling, cable is reverse wound on reels.

¹ Ampacity of conductors are based on the National Electrical Code (NFPA 70) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.

NEC Article 310.15(B)(2)(a) for ambient temperature correction factors for temperatures other than 30°C (86°F).

NEC Table 310.15(B)(3)(a) for ampacity adjustment factors, as applicable, for more than three current-carrying conductors.

NEC Article 110.14(C) for conductor temperature limitations for equipment rated 100 amps or less, or for equipment rated for more than 100 amps.

The above data is approximate and subject to manufacturing tolerances.

TYPE MC - ALUMINUM CONDUCTOR - ALUMINUM ARMOR - 600V

XHHW-2 CONDUCTORS (250 KCMIL - 750 KCMIL)

ENGINEERING SPECIFICATIONS

Standards

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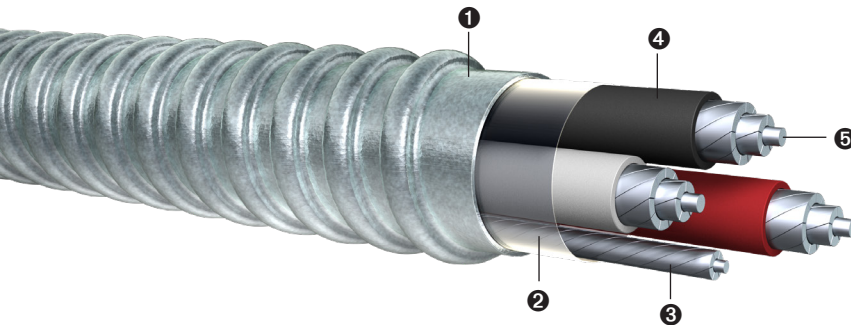
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Phase Conductors			Ground Conductor		Outside Diameter over Armor (in)	Approximate Net Weight (lbs/1000 ft)	Allowable Ampacity (Amps) ¹		Standard Packaging (ft)
AWG or KCMIL/ No. of Conductors	No. of Strands	XLPE Thickness (in)	Bare Ground (AWG)	No. of Strands			75°C	90°C	
250/3	22	.065	2	7	1.700	1256	205	230	1000' Reels
250/3	22	.065	3/0	15	1.890	1383	205	230	1000' Reels
250/4	22	.065	1	8	1.905	1618	205	230	1000' Reels
300/3	21	.065	1	8	1.769	1430	230	260	1000' Reels
300/4	21	.065	1	8	1.942	1770	230	260	1000' Reels
350/3	24	.065	1	8	1.892	1635	250	280	1000' Reels
350/4	24	.065	1/0	10	2.125	2110	250	280	1000' Reels
400/3	27	.065	1	8	1.900	1688	270	305	1000' Reels
400/4	27	.065	1/0	10	2.200	2195	270	305	1000' Reels
500/3	34	.065	1	8	2.210	2150	310	350	1000' Reels
500/3	34	.065	2/0	12	2.225	2209	310	350	1000' Reels
500/3	34	.065	3/0	15	2.230	2238	310	350	1000' Reels
500/4	34	.065	3/0	15	2.410	2858	310	350	1000' Reels
600/3	41	.080	1	8	2.239	2500	340	385	1000' Reels
600/3	41	.080	1/0	10	2.289	2587	340	385	1000' Reels
600/4	41	.080	3/0	15	2.655	3395	340	385	1000' Reels
750/3	47	.080	1/0	10	2.550	3101	385	435	1000' Reels
750/3	47	.080	3/0	15	2.610	3158	385	435	1000' Reels
750/4	47	.080	3/0	15	2.910	4065	385	435	1000' Reels
750/4	47	.080	750	47	3.250	4583	385	435	1000' Reels

Standard Conductor Color Coding

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