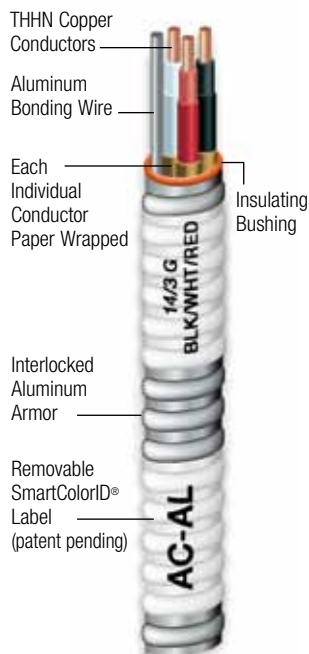


TYPE AC-COPPER CONDUCTOR-ALUMINUM ARMOR/THHN INNERS



SmartColorID®

ENGINEERING SPECIFICATIONS:

Standards:

Underwriters Laboratories Standards UL-4, UL-83
Federal Specification A-A59544
NEMA WC 70/CEA 5-95-658
National Electrical Code (NEC)

Applications:

- Permitted use for services, feeders, and branch circuits in industrial, commercial, and multi-residential buildings
- Acceptable for power, lighting, control, and signal circuits
- Allowable in concealed or exposed systems
- Permitted use in dry locations and embedded in plaster finish on brick or other masonry except in damp or wet locations
- Utilized for environmental air-handling spaces (NEC 300.22) and allowable installations in approved raceways and cable trays (NEC 392)
- Suitable for installation under raised floors for IT equipment (NEC 645.5)
- Permitted use to be run or fished in the air voids of masonry block or tile walls where such walls are not exposed or subject to excessive moisture or dampness as well as listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems

CONSTRUCTION:

Encore's Armored Cable is constructed with soft-drawn copper, Type THHN conductors. Each insulated conductor is individually wrapped with a moisture-resistant paper covering which has flame retardant properties. These conductors, are cabled together to form the cable core. A 16 AWG solid aluminum bond wire is placed longitudinally underneath the armor and remains in contact with the armor throughout the entire length. Interlocked aluminum armor is applied over the entire assembly.

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Conductors		Aluminum Bond Wire (AWG)	Overall Diameter (in)	Approximate Net Weight (lbs/1000 ft)	Allowable Ampacity (Amps)*	Standard Packaging	
AWG/No.	Type					90°C	Coil (ft)
14/2	Solid	16	0.418	76	15	250'	1000'
14/3	Solid	16	0.436	94	15	250'	1000'
14/4	Solid	16	0.465	113	15	250'	1000'
12/2	Solid	16	0.451	96	20	250'	1000'
12/3	Solid	16	0.471	123	20	250'	1000'
12/4	Solid	16	0.505	151	20	250'	1000'
10/2	Solid	16	0.512	131	30	250'	1000'
10/3	Solid	16	0.537	171	30	250'	1000'
10/4	Solid	16	0.604	216	30	250'	1000'
8/2	Stranded	16	0.641	196	55	200'	500'/1000'
8/3	Stranded	16	0.676	262	55	200'	500'/1000'
8/4	Stranded	16	0.752	358	55	200'	500'/1000'
6/2	Stranded	16	0.731	293	75	100'	500'/1000'
6/3	Stranded	16	0.772	393	75	100'	500'/1000'
6/4	Stranded	16	0.839	498	75	100'	500'/1000'
4/3	Stranded	16	0.920	583	95	100'	500'
4/4	Stranded	16	1.006	746	95	100'	500'
3/3	Stranded	16	0.981	698	110	100'	500'
3/4	Stranded	16	1.073	896	110	100'	500'
2/3	Stranded	16	1.050	840	130	100'	500'
2/4	Stranded	16	1.151	1084	130	100'	500'

Note: Ampacities are based on Table 310.15(B)(16) of the NEC. *Ampacities shown are for general use as specified by the NEC, Section 310.15.

For equipment marked for use at higher temperatures, the conductor ampacity shall be limited to the following per NEC 110.14(C):

60°C when terminated to equipment for circuits rated 100 amperes or less or marked for size 14 AWG through 1 AWG conductor.

75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG.

90°C for ampacity derating purposes. When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(2)(a).

The above data is approximate and subject to normal manufacturing tolerances.

Features:

NEC Article 250.118(8) recognizes the combination of the interlocking armor and bond wire as an equipment grounding conductor. Installation costs reduced up to 50% over conduit and wire. Weight of aluminum armor is as much as 45% less than steel. Insulation anti-short bushings are supplied with each reel or coil. SmartColorID® labels are spaced at regular intervals on the exterior of the metal sheathing and are removable. When installing, simply detach labels from terminating ends to ensure a conductive surface. For ease of installation and pulling, cable is reverse wound on reels. Coils are designed to be pulled from the inside.

Standard Conductor Color Coding

Number	120/208Y
2	Black/White
3	Black/Red/White
4	Black/Red/Blue/White

Additional colors available subject to ERQ

SmartColorID® Legend:



See page 104 for complete legend

Number	277/480Y
2	Brown/Gray
2	Orange/Gray
2	Yellow/Gray
2	Purple/Gray
3	Brown/Yellow/Gray
3	Brown/Orange/Gray
4	Brown/Orange/Yellow/Gray
4	Brown/Yellow/Purple/Gray



Listed E-E306553



SmartColorID®