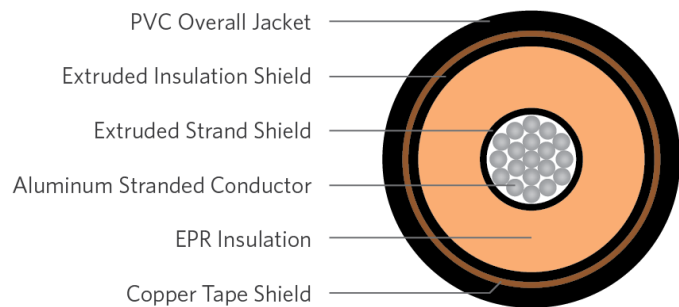## EPR/CTS/PVC Power, Type MV-105, 35kV (133%) 420-mils
1C 500kcmil 61-wires Al 8000 CMPCT 35kV (133%) 420-MILS EPR Cu Tape Shield PVC
Part Number: E8NLE-A64E01CA00

DESCRIPTION
The Medium Voltage, EPR/Cu Tape Shield/PVC, Type MV-105 Cable consists of compact 8000 Al stranded conductors, covered with ethylene propylene rubber (EPR), copper tape shield, and black PVC jacket. These cables are used in industrial power circuits.

APPLICATION
- In conduit, duct, free air, and raceways, primary installations include cable trays, and outdoor locations
- • Approved for Class I, Div. 2 industrial hazardous locations per NEC
- Designed to operate continuously at a conductor temperature not exceeding
    » 105°C for normal operations
    » 140°C for emergency overload
    » 250°C for short circuit

PVC Overall Jacket
Extruded Insulation Shield
Extruded Strand Shield
Aluminum Stranded Conductor
EPR Insulation
Copper Tape Shield

SPECIFICATIONS

Conductor	Aluminum 8000 compact Class B strand
Insulation	EPR
Conductor Strand Shield	Extruded thermoset semi-conducting
Copper Tape Shield	5-mil with 25% overlap
Jacket	PVC

Packaging	Non-returnable reels
Performance	ASTM B-836 UL 1072 ICEA S-93-639 ICEA S-97-682 AEIC CS8 UL 1685 Vertical Flame Test NEC
Other Compliances	EPA 40 CFR, Part 261 OSHA

PART NUMBER AND PHYSICAL CHARACTERISTICS

Part Number	Conductor Size (AWG/kcmil)	Conductor Diameter (in.)	Insulation Diameter (in.)	Jacket Thickness (in.)	Overall Diameter (in.)	Net Weight (lbs./MFT)
E8NLE-A64E01CA00	500	0.738	1.63	0.110	1.93	1,905

The dimensions and weights shown are nominal and subject to industry standards and manufacturing tolerances. Other designs available upon request.

ELECTRICAL AND ENGINEERING DATA

Cdr Size	DC [1] @ 25°C Ω/MFT	AC [1] @ 25°C Ω/MFT	Xc [2] @ 60Hz Ω/MFT	XL @ 60Hz Ω/MFT	Pos Sequence Impedance Ω/MFT	Zero Sequence Impedance Ω/MFT	Current 6 Cycles Amps
500	0.035	0.046	0.038	0.044	0.046+j0.043	0.344+j0.019	5717

[1] temperature adjusted from 20C using AL Assoc. Formula 3-5
[2] calculated from capacitance value in CYMCAP