

## CCW® Armored Power, 25 kV 100%, Shielded, 3/C

UL Type MC-HL or MV-105, CSA Type HL, EPR, 105°C, Cable Tray Use, Sunlight-Resistant Direct Burial, ABS CWCMC



### Product Construction:

#### Conductor:

- Bare annealed copper per ASTM B3
- Compact stranding per ASTM B496

#### Extruded Strand Shield (ESS):

- Extruded thermoset semi-conductor stress control layer over the conductor per ICEA S-93-639 and UL 1072

#### Insulation:

- 260 mils Ethylene Propylene Rubber (EPR) insulation per ICEA S-93-639 and UL 1072

#### Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer, free stripping from the insulation per ICEA S-93-639 and UL 1072

#### Shield:

- 5 mil annealed bare copper tape with 25% overlap

#### Phase Identification:

- Color-coded polymeric identification tape laid under the shield - black, red and blue

#### Grounding Conductor:

- Class B stranded bare annealed copper grounding conductor
- Sized in accordance with UL 1072 and NEC Article 250

#### Cable Assembly:

- Insulated and grounding conductors are cabled together with non-hygroscopic fillers when required
- Binder tape is applied over the cabled core

#### CCW Armor:

- Impervious, continuously welded and corrugated aluminum alloy sheath per UL 1072 and UL 1569
- CCW armor conductivity meets the grounding requirements of the NEC

#### Jacket:

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC) per UL 1072, orange
- Low temperature performance meets ASTM D746 brittleness temperature at or below -40°C

#### Applications:

- CCW armored medium-voltage power cables offer an economical, rugged and reliable alternative to labor-intensive cable in conduit wiring methods
- For use on feeders and branch circuits in industrial power distribution systems per NEC Articles 328 and 330
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- Installed on metal racks, troughs, in raceways, in cable trays or secured to supports spaced not more than six feet apart
- Installed in both exposed and concealed work, wet or dry locations, directly buried or embedded in concrete
- Recognized for use on fixed or floating offshore petroleum facilities as recommended by the American Petroleum Institute

#### Features:

- CCW armor provides an impervious barrier to moisture, gas and liquids and meets the grounding requirements of UL 1072 and the NEC
- Triple Extrusion: The strand shield, EPR insulation and insulation shield are all extruded in one operation

### Features: (cont'd.)

- General Cable's EPR insulation system has outstanding corona resistance and high dielectric strength, and it provides electrical stability under stress
- Cable meets cold impact at -40°C
- 105°C continuous operating temperature, wet or dry
- 140°C emergency rating
- 250°C short circuit rating

### Specifications:

#### Design Adherence:

- ICEA S-93-639/WC74, 5-46 kV Shielded Power Cable
- AEIC CS8 Specification for Shielded Power Cable, 5-46 kV
- UL 1072 Medium-Voltage Power Cables
- UL 1569 Metal Clad Cables
- UL 2225 Cables and Cable Fittings for Use in Hazardous Locations
- UL 1309 Marine Shipboard Cable
- CSA 68.10

#### Flame Tests:

- ICEA T-29-520 (210,000 BTU/hr)
- IEEE 383 (70,000 BTU/hr)
- CSA FT4
- IEEE 1202 (70,000 BTU/hr)
- UL 1072
- IEC 60332-3 Category A

#### Compliances:

- UL Type MV-105 or MC-HL, SUN RES, CT USE, DIR BUR, -40°C, FT4, UL File # E90501
- UL Listed Marine Shipboard, UL File # E85994
- CSA Type HL, SR, FT4, -40°C, CSA File # 27161
- American Bureau of Shipping (ABS) Listed for CWCMC

# CCW<sup>®</sup> Armored Power, 25 kV 100%, Shielded, 3/C

UL Type MC-HL or MV-105, CSA Type HL, EPR, 105°C, Cable Tray Use, Sunlight-Resistant Direct Burial, ABS CWCMC

CATALOG NUMBER	COND. SIZE	NO. OF COND.	INSULATION THICKNESS		NOMINAL O.D. OVER INSULATION		BARE GROUND	NOMINAL CORE O.D.		NOMINAL ARMOR O.D.		JACKET THICKNESS		NOMINAL OVERALL O.D.		APPROXIMATE NET WEIGHT		AMPACITY		
	AWG (kcmil)		mils	mm	INCHES	mm	AWG	INCHES	mm	INCHES	mm	mils	mm	INCHES	mm	LBS/1000 FT	kg/1000 m	IN AIR <sup>1</sup>	DIRECT BURIAL <sup>2</sup>	
<b>3/C WITH GROUND MC-HL OR MV-105, 260 MILS EPR, 25 kV 100% INSULATION LEVEL</b>																				
9845.00103104	1 (19/W) (42.4 mm <sup>2</sup> )	3	260	6.6	0.87	22.1	4	2.07	52.6	2.45	62.2	75	1.91	2.61	66.3	3,189	4,746	210	225	
9845.11003104	1/0 (19/W) (53.5 mm <sup>2</sup> )	3	260	6.6	0.90	22.9	4	2.15	54.6	2.53	64.3	75	1.91	2.69	68.3	3,536	5,262	240	255	
9845.21003104	2/0 (19/W) (67.4 mm <sup>2</sup> )	3	260	6.6	0.94	23.9	4	2.24	56.9	2.62	66.5	75	1.91	2.79	70.9	3,939	5,862	275	290	
9845.41003103	4/0 (19/W) (107 mm <sup>2</sup> )	3	260	6.6	1.04	26.4	3	2.51	63.8	2.93	74.4	75	1.91	3.10	78.7	5,122	7,622	360	345	
9845.25003102	250 (37/W) (127 mm <sup>2</sup> )	3	260	6.6	1.10	27.9	2	2.61	66.3	3.07	78.0	85	2.16	3.25	82.6	5,819	8,660	400	410	
9845.35003102	350 (37/W) (177 mm <sup>2</sup> )	3	260	6.6	1.19	30.2	2	2.82	71.6	3.32	84.3	85	2.16	3.50	88.9	7,115	10,588	490	495	
9845.50003101	500 (37/W) (253 mm <sup>2</sup> )	3	260	6.6	1.31	33.3	1	3.08	78.2	3.62	91.9	85	2.16	3.81	96.8	9,125	13,579	600	590	

Dimensions and weights are nominal; subject to industry tolerances.

<sup>1</sup> In-air ampacities are per NEC Table 310.60(C)(71) for three insulated copper conductors rated 105°C, cabled with an overall covering and isolated in air at 40°C ambient temperature.

<sup>2</sup> Direct burial ampacities are per NEC Table 310.60(C)(83) for three insulated copper conductors rated 105°C, cabled within an overall covering and directly buried in earth at 20°C ambient earth temperature.

