

# CVTC® VFD

XLPE/PVC, Low-Voltage Power, Copper Tape Shielded  
2000 V, UL Type TC-ER<sup>1</sup>—Method 4 Color Code



## Product Construction:

### Conductor:

- 14 AWG thru 500 kcmil fully annealed bare stranded copper
- Class B stranding per ASTM B8

### Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE)—90°C, VW-1
- Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink

### Ground:

- 3 symmetrically placed annealed bare copper conductors in direct contact with shield
- Class B stranding per ASTM B8

### Metallic Shield:

- Overall 5 mil annealed bare copper tape shield with 50% overlap

### Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

### Applications:

- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 2000 volts. These motor drive systems require cables that are designed to prevent radio frequency interference (RFI) which can lead to malfunction
- In raceways, cable trays or direct burial
- In wet or dry locations
- Permitted for use in Class I, Division 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

## Features:

- Rated at 90°C wet or dry
- Overlapped bare copper tape shield provides necessary shield coverage required for Variable Frequency Drive (VFD) applications
- Meets cold bend test at -25°C
- Meets crush and impact requirements for Type MC cable
- Abrasion- and chemical-resistant
- Excellent electrical properties
- Sunlight- and weather-resistant

## Compliances:

### Industry Compliances:

- UL 1277 Type TC-ER, 2000 V, UL File # E57179
- UL Type RHH or RHW-2 conductors per UL 44

### Flame Test Compliances:

- UL 1581/UL 2556 VW-1
- UL 1685 Vertical Flame Test
- IEEE 383
- IEEE 1202
- ICEA T-29-520

### Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

## Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	NO. OF COND.	COND. SIZE (AWG/kcmil)	COND. STRAND	GROUND WIRE SIZE (AWG)	MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		COPPER WEIGHT		NET WEIGHT	
					INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km
<b>14 AWG - 500 kcmil CONDUCTORS</b>														
395070V	3	14	7W	3 x 18	0.060	1.52	0.060	1.52	0.580	14.73	91	135	212	315
395080V	3	12	7W	3 x 16	0.060	1.52	0.060	1.52	0.615	15.37	127	189	260	387
395090V	3	10	7W	3 x 14	0.060	1.52	0.060	1.52	0.670	17.02	183	272	329	490
395100V	3	8	7W	3 x 14	0.070	1.78	0.060	1.52	0.770	19.56	246	366	441	656
395110V	3	6	7W	3 x 12	0.070	1.78	0.080	2.03	0.895	22.73	368	548	618	920
395120V	3	4	7W	3 x 12	0.070	1.78	0.080	2.03	0.995	25.27	522	777	830	1235
395130V	3	2	7W	3 x 10	0.070	1.78	0.080	2.03	1.125	28.58	801	1192	1152	1714
395140V	3	1/0	19W	3 x 6	0.090	2.29	0.080	2.03	1.385	35.18	1348	2006	1853	2757
395150V	3	2/0	19W	3 x 6	0.090	2.29	0.080	2.03	1.480	37.59	1616	2405	2169	3227
395160V*	3	3/0	19W	3 x 5	0.090	2.29	0.080	2.03	1.590	40.39	2010	2991	2619	3897
395170V	3	4/0	19W	3 x 4	0.090	2.29	0.110	2.79	1.780	45.21	2517	3745	3241	4823
395180V*	3	250	37W	3 x 4	0.105	2.67	0.110	2.79	1.940	49.28	2895	4308	3763	5599
395190V	3	350	37W	3 x 2	0.105	2.67	0.110	2.79	2.160	54.86	4089	6084	5109	7602
395200V	3	500	37W	3 x 1	0.105	2.67	0.110	2.79	2.455	62.36	5693	8471	6933	10316

Dimensions and weights are nominal; subject to industry tolerances.

\* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

<sup>1</sup> Approved as TYPE TC-ER for Exposed Run applications of 3 or more conductors as defined by NEC.