CVTC® VFD - Flexible Motor Supply Cable

XLPE/PVC, Low-Voltage Power, Al/Polyester/Al + TC Braid Shielded,
1000 V UL Flexible Motor Supply and WTTC, 600 V or 1000 V
UL Type TC-ER—Method 4 Color Code w/Green/Yellow Ground

Product Construction:

Conductor:
- 16 AWG thru 10 AWG tinned copper per ASTM B33. Class K stranding per ASTM B172
- 8 AWG thru 2 AWG tinned copper per ASTM B33.Class H stranding per ASTM B173

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:
- One full-sized green/yellow insulated ground, same AWG size as circuit conductors

Metallic Shield:
- Overall aluminum/polyester/aluminum shield with 25% minimum overlap in conjunction with overall tinned copper braid with 85% coverage and full-sized tinned copper drain wire(s)

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

Options:
- Colored jackets available upon request
- 2000 V rated designs

Applications:
- For use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 1000 V
- In free air, raceways or direct burial
- For use in aerial, conduit, open tray and underground duct/installations
- Permitted for use in Class I, Div. 2 industrial hazardous locations per NEC
- Permitted for Exposed Run (ER) use in accordance with NEC

Features:
- Rated at 90°C wet or dry
- Combination foil/braid shield provides maximum shield coverage required for Variable Frequency Drive (VFD) applications
- Meets cold bend test at -25°C
- TC-ER listing meets crush and impact requirements for Type MC cables
- Abrasion- and chemical-resistant
- Stable electrical properties over a broad temperature range

Features (cont'd):
- UV/sunlight-resistant
- Flexible strand conductors for all sizes to allow for ease of installation and long-term performance in light duty flexing applications

Compliances:

Industry Compliances:
- UL 2277 1000 V Flexible Motor Supply Cable and 1000 V Wind Turbine Tray Cable
- UL 1277 600 V Type TC-ER UL File # E57179
- UL 44 Type RHH or RHW-2 conductors
- ICEA S-95-658/NEMA WC70
- CSA C22.2 No. 210 1000 V AWM I/II A/B FT4 SR

Flame Test Compliances:
- UL 1581 VW-1
- IEEE 1202/CSA FT4
- UL 1685

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	INSULATED GROUND WIRE SIZE (AWG)	DRAIN WIRE NUMBER X SIZE (AWG)	NOMINAL CONDUCTOR DIAMETER		MINIMUM AVG. INSULATION THICKNESS		MINIMUM AVG. JACKET THICKNESS		NOMINAL CABLE O.D.		NET WEIGHT	
						IN	mm	IN	mm	IN	mm	IN	mm	LBS/ 1000 FT	kg/km
16 AWG - 2 AWG CONDUCTORS															
438070	3	16	26W	16	1 x 16	0.055	1.40	0.045	1.14	0.045	1.14	0.485	12.32	153	227
438080	3	14	41W	14	1 x 14	0.070	1.78	0.045	1.14	0.060	1.52	0.550	13.97	205	305
438090	3	12	65W	12	1 x 12	0.093	2.36	0.045	1.14	0.060	1.52	0.610	15.49	263	392
438100	3	10	105W	10	1 x 10	0.112	2.84	0.045	1.14	0.060	1.52	0.655	16.64	343	510
438110	3	8	133W	8	4 x 14	0.154	3.91	0.060	1.52	0.080	2.03	0.875	22.23	546	813
438120	3	6	133W	6	4 x 12	0.210	5.33	0.060	1.52	0.080	2.03	1.025	26.04	832	1238
438130	3	4	133W	4	4 x 10	0.260	6.60	0.060	1.52	0.080	2.03	1.150	29.21	1178	1752
438140	3	2	133W	2	4 x 8	0.327	8.31	0.060	1.52	0.080	2.03	1.314	33.38	1665	2478

Dimensions and weights are nominal, subject to industry tolerances.
† 16 AWG conductors are not listed as RHH or RHW-2.