



### SHIELDED VFD TRAY CABLE - 2000VOLTS

FOR VARIABLE FREQUENCY MOTOR DRIVE SYSTEMS  
XLP INSULATION, PVC JACKET, TYPE TC-ER

**CONSTRUCTION:**

**CONDUCTOR** CLASS B STRANDED BARE COPPER PER ASTM B-3.

**INSULATION** FLAME RETARDANT CROSSLINKED POLYETHYLENE (XLP) TYPE RHH/RHW-2/VW1 RATED 90DEG C WET OR DRY.

**CONDUCTOR IDENTIFICATION** INSULATED CONDUCTORS COLOR CODED PER ICEA METHOD 4 (BLACK CONDUCTORS WITH PRINTED NUMBERS).

**GROUND** 3 STRANDED BARE COPPER GROUNDS (ONE IN EACH INTERSTICE).

**SHIELDING** 5 MIL COPPER TAPE HELICALLY APPLIED OVER CONDUCTORS.

**ASSEMBLY** CONDUCTORS CABLED TOGETHER WITH A STRANDED COPPER GROUND WIRE IN ONE OF THE INTERSTICES, SUITABLE FILLERS FOR ROUNDNESS WHERE NEEDED, AND CABLE TAPE.

**JACKET** SUNLIGHT RESISTANT, FLAME RETARDANT BLACK PVC PER UL 1277, WHICH PROTECTS AGAINST HEAT, FLAME, CHEMICALS, MOISTURE, AND MECHANICAL DAMAGE.

Charlotte Wire Part#	Size AWG	Number of Strands	No. of Cdrs	Insulation Thickness (in.)	Ground Wire Size (AWG)	Jacket Thickness (in.)	Overall Diameter (in.)	Approx. Net Wt. (Lbs/Mft)	Ampacity 30Deg C Ambient*
CW02581	14	7	3	.060"	3 - #18's	.060"	.59"	215	25**
CW02582	12	7	3	.060"	3 - #16's	.060"	.63"	265	30**
CW02583	10	7	3	.060"	3 - #14's	.060"	.68"	335	40**
CW02584	8	7	3	.070"	3 - #14's	.060"	.78"	445	55
CW02585	6	7	3	.070"	3 - #12's	.080"	.90"	620	75
CW02586	4	7	3	.070"	3 - #12's	.080"	1.01"	840	95
CW02587	2	7	3	.070"	3 - #10's	.080"	1.14"	1160	130
CW02597	1	19	3	.090"	3 - #8's	.080"	1.27"	1440	145
CW02588	1/0	19	3	.090"	3 - #6's	.080"	1.40"	1860	170
CW02589	2/0	19	3	.090"	3 - #6's	.080"	1.49"	2180	195
CW02590	3/0	19	3	.090"	3 - #5's	.080"	1.60"	2630	225
CW02591	4/0	19	3	.090"	3 - #4's	.110"	1.79"	3250	260
CW02592	250MCM	37	3	.105"	3 - #4's	.110"	1.95"	3780	290
CW02593	300MCM	37	3	.105"	3 - #2's	.110"	2.06"	4410	320
CW02594	350MCM	37	3	.105"	3 - #2's	.110"	2.17"	5120	350
CW02595	500MCM	37	3	.105"	3 - #1's	.110"	2.47"	6950	430

\*Ampacity values based on ambient temperature of 30Deg C and 90Deg C conductor temperature per NEC 310.15(B)(16).

\*\*Overcurrent protection shall not exceed 15amps for 14AWG, 20amps for 12AWG, and 30amps for 10AWG (NEC).

**APPLICATION:**

For use on variable frequency motor drive systems in various industries such as automotive, pulp, and paper, and petrochemical. Cable is suitable for use up to 2000Volts 90Deg C Wet or Dry, sunlight resistant, and direct burial. XLP insulation provides good resistance to voltage spikes encountered in VFD applications. Per NEC Articles 336 & 392, approved for installation in

- 1) raceway and cable tray systems, and
- 2) hazardous locations per Article 501 Class 1 Division 2.

**STANDARDS:**

- UL Standard 1277 for Type TC cables.
- UL Standard 44 for RHH/RHW-2 Conductors.
- Passes UL & IEEE383 70,000BTU Flame Tests.
- ICEA S-95-658/NEMA WC70 for Nonshielded 0-2KV Cables.
- NEC Articles 336 & 392 for Tray Cables uses and constructions.
- TC-ER rated cables comply with crush and impact requirements of MC cable.