

VFD POWER CABLE

FOR LOW VOLTAGE VARIABLE FREQUENCY DRIVE SYSTEMS
XLPE INSULATION • PVC JACKET SHIELDED 600 VOLT

Construction

Conductors:

- Class B, soft drawn, bare copper per ASTM B3 and ASTM B8.

Insulation:

- Heat and moisture resistant, cross-linked thermo-setting polyethylene (XLPE) meeting the requirements of UL44. The insulation is suitable for use in wet or dry locations at a conductor temperature not exceeding 90°C for normal operation. The insulation thickness is in accordance with Table 15.3 of UL 44. Single conductors pass VW-1 flame test.

Grounding Conductors:

- Class B stranded, soft drawn, bare copper per ASTM B3 and ASTM B8. The grounding conductor is sectioned into three equal sections.

Circuit Identification:

- Black conductors with number print: 1 - ONE, 2 - TWO & 3 - THREE.

Assembly:

- The insulated circuit conductors and three bare grounding conductors are cabled together with non-hygroscopic fillers as needed. The cabled core is wrapped with a binder tape. A corrugated copper shield is applied to the taped core. A PVC jacket is applied to the shielded core.

Shield:

- 5 mil thick copper tape (10 mil for 250, 350 and 500 KCML versions) corrugated and longitudinally applied with a minimum overlap of 15%.

Overall Jacket:

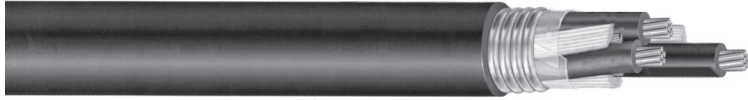
- Heat and moisture resistant, black polyvinyl chloride (PVC) meeting the requirements of UL 1581. The thickness is in accordance with Table 11.3 of UL 1277.

Surface Marking:

- The overall jacket will have the following information printed: "number & size of conductor" XHHW-2 TYPE TC "number and size of grounding conductor" VFD POWER CABLE UL 600V, SUN RES DIR BUR.

Special Installation Practices:

- It is highly recommended that proper cable fittings be used to terminate the cables at junction boxes, control centers, panel boards and enclosures.



CUSTOM CATALOG NUMBER	NUM. OF CONDUCTORS/ SIZE (AWG.)	NUM. OF GROUNDS/ SIZE (AWG.)	NOM. INSUL. THICKNESS	DIAMETER OVER SHIELD	NOMINAL O.D.	APPROX. CABLE WT.
			INCHES	INCHES	INCHES	LBS/MFT
25601	16/3	18/3	.030	0.32	0.43	92
25602	14/3	18/3	.030	0.35	0.46	144
25603	12/3	18/3	.030	0.39	0.51	176
25604	10/3	16/3	.030	0.45	0.59	254
25605	8/3	14/3	.045	0.58	0.73	390
25606	6/3	12/3	.045	0.66	0.78	263
25607	4/3	10/3	.045	0.76	0.93	769
25608	2/3	8/3	.045	0.89	1.11	1154
25609	1/3	8/3	.055	1.05	1.28	1427
25610	1/0-3	6/3	.055	1.15	1.37	1764
25611	2/0-3	6/3	.055	1.21	1.43	2077
25612	3/0-3	4/3	.055	1.32	1.55	2599
25613	4/0-3	4/3	.055	1.43	1.66	3093
25614	250/3 MCM	4/3	.065	1.57	1.88	3791
25615	350/3 MCM	2/3	.065	1.81	2.00	5020
25616	500/3 MCM	1/0-3	.065	2.08	2.30	7012
25617	750/3 MCM	2/0-3	.080	2.51	2.93	10214

* Insulation thicknesses shown are 600 volt. 2000 volt insulation thicknesses can also be supplied on special order.

* Can also supply Ethylene propylene rubber (EPR) insulation, CPE or TPE jacket. Please specify at time of order.

* Information is subject to change without notice. Consult factory for a variety of alternate constructions for specific applications.

Applications:

- These are three conductor, 600 volt, Variable Frequency Drive cables with cross-linked thermosetting polyethylene (XLPE) insulation, three bare grounding conductors (one in each interstice), a corrugated copper shield and an overall polyvinyl chloride (PVC) jacket. These cables are UL type TC rated.

- The VFD Power Cables are designed for use with low voltage (600 volt) AC motors controlled for speed by modern PWM (pulse width modulated) inverters. These PWM inverters require properly designed power cables to prevent RF (radio frequency) electrical signals from causing stray electrical noise or malfunction of the motor.

Ratings:

- UL Standard 44
- UL Standard 1277
- IEEE 1202 (70,000 BTU/HR) Flame Test
- ICEA T-29-520 (210,000 BTU/HR) Flame Test
- MSHA approved

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