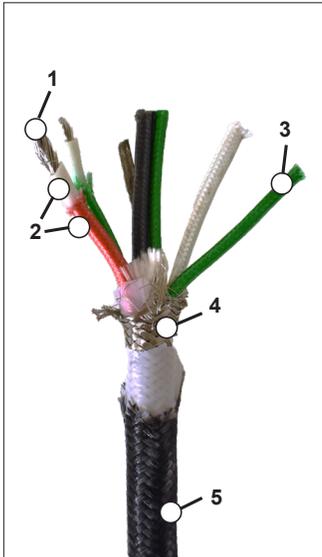


Thermo-Trex® VFD Power Cable - 3 Conductors with 3 Symmetrical Grounds

- UL Pending
- Max Conductor Temperature 200°C
- 600V
- Corona Resistant to 2,000V

Designed specifically for the harsh electrical environment of typical variable frequency drive systems, Thermo-Trex® VFD cable features three conductors with three symmetrical grounds, a braided shield, a temperature resistant jacket that provides excellent protection against heat and mechanical abuse in both fixed and motion applications in high heat environments. The cable is constructed to withstand corona voltages up to 2,000 volts. Symmetrical ground wires are used to reduce the effect of common-mode-voltage noise and the reduction of stray currents. Ideal for high heat VFD applications where longer lasting cable is desired.



FEATURES & BENEFITS

1. FINELY STRANDED NICKEL PLATED COPPER CONDUCTORS

— Improves flexibility and extends conductor life in dynamic applications while meeting high heat resistance.

2. CONDUCTOR INSULATION — Silicone rubber insulation covered by color-coded braided fiberglass yarn impregnated with a saturant to minimize fraying.

3. THREE SYMMETRICAL GROUNDS — Silicone rubber insulation covered by braided fiberglass. The three core power conductors shall be twisted together with a left-hand lay along with the three ground

conductors placed in the interstices of the power conductors with a spiral-wrapped skived PTFE tape cabled as to create a smooth round bundle.

4. ULTRA-SHIELD CONSTRUCTION — Nickel plated copper wire 34AWG shield to provide 90% coverage with a flat drain wire and spiral-wrapped skived PTFE tape

5. THERMO-TREX® HEAT RESISTANT JACKET — Braided fiberglass jacket offers superior protection against heat, abrasion and mechanical abuse.

Do you have failures of your VFD cable due to heat exposure?

CONDUCTOR COLOR CODE	
Power Conductors	Black, Red, White
Ground Conductors	Green

APPLICATIONS

The most common method of controlling VFD motors is the use of Pulse Width Modulation (PWM), a method where the frequency or pulse width of the drive signal is controlled to vary the motor speed. The issues associated with VFD systems are high switching speeds (10 KHz and higher) which generate electrical noise, corona discharge and “stray voltages”. The generation of electrical noise, corona and “stray voltages” are potentially damaging to the motor and equipment if a non VFD or “drive rated” cable is installed. TPC High Temperature VFD cable for dynamic high heat industrial applications reduces the effects of electrical noise and corona discharge, while providing a low impedance path to ground to eliminate the potential damage caused by “stray voltages”.

ORDERING INFORMATION (MINIMUM PURCHASE MAY BE REQUIRED IF PRODUCT NOT STOCKED)

PART NO.	POWER CONDUCTOR SIZE (AWG)	POWER CONDUCTOR STRANDING	GROUND CONDUCTOR SIZE (AWG)	GROUND CONDUCTOR STRANDING	DRAIN WIRE & STRANDING	AMPACITY ¹	NOMINAL O.D. (IN)	WT. (LBS) PER 1000' FT
41280	14 AWG - 3 Conductor	41/30	3x18 AWG	19/30	18AWG x 19/30	40	.495	178
41281	12 AWG - 3 Conductor	65/30	3x16 AWG	26/30	16AWG x 26/30	55	.540	225
41282	10 AWG - 3 Conductor	105/30	3x14 AWG	41/30	14AWG x 41/30	74	.630	316
41283	8 AWG - 3 Conductor	133/29	3x12 AWG	65/30	12AWG x 65/30	102	.805	506