Screened power & VFD / motor supply cables

VFD XLPE 2KV TR (869)

Large-AWG VFD Cable

Large-AWG 2,000 V RHW-2 symmetrical Type TC-ER VFD cable



UL 1277 TC-ER · NFPA 79 | 2,000 V · Large-AWG 8–500 kcmil | 5-mil Bare Cu Tape · Dir-Burial

Application

Heavy-gauge 2,000 V UL 1277 Type TC-ER / RHW-2 symmetrical VFD feeder cable (869 series) with annealed bare copper conductors, heavy-wall 90 °C XLPE insulation, three bare copper grounds, 5-mil bare copper tape shield, and oil/UV-resistant PVC jacket.

Typical uses: High-horsepower industrial AC drives, Heavy manufacturing & extruders, Compressors, pumps & HVAC chillers, Steel, cement & mining plants, NFPA 79 machinery & NEC trays

Construction





Cross-section, not to scale

1	**Conductor**	Uncoated annealed stranded bare copper (ASTM B8 Class B) · ASTM B3 / B8 large-AWG bare copper
2	**Phase insulation**	2 kV heavy-wall RHW-2 XLPE (Black consecutively numbered) · UL 44 RHW-2 + 3 × bare Cu interstitial grounds
3	**Fillers & separator**	Extruded/cabled interstitial fillers & separator tape
4	**5-mil copper tape shield**	Uncoated 5-mil helically overlapped bare copper tape (100%)
5	**Outer jacket**	Black oil-, UV- & direct-burial thermoplastic PVC jacket (RAL 9005) · UL 1277 Type TC-ER / NFPA 79

Technical data

Typical values

Rated voltage	2,000 V (2 kV) AC	**Conductor class**	ASTM B8 Class B annealed bare Cu
EMC shield	100% uncoated 5-mil bare Cu tape	**Grounding system**	3 × symmetrical bare Cu in interstices
Max. conductor temp.	+90 °C wet or dry (RHW-2)	**Ambient temp. (fixed)**	−40 °C to +90 °C
Min. bending radius	12 × OD (Cu-tape shielded)	**Flame test**	IEEE 1202 / CSA FT4 / UL 1685
Environmental ratings	Oil-, UV- & Direct-Burial RAL 9005	**Machinery compliance**	NFPA 79 · NEC Class I Div 2

Sizes

12 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

	Phase + 3× Ground (AWG)	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 12×D mm
☐	3×8 AWG + 3×14 AWG	20.8	2.100	352	759	250
☐	3×6 AWG + 3×12 AWG	22.9	1.320	528	1,048	275
☐	3×4 AWG + 3×12 AWG	26.6	0.832	756	1,469	319
☐	3×2 AWG + 3×10 AWG	31.0	0.523	1,164	2,168	372
☐	3×1 AWG + 3×8 AWG	33.0	0.415	1,497	2,682	396
☐	3×1/0 AWG + 3×6 AWG	35.2	0.329	1,944	3,355	422
☐	3×2/0 AWG + 3×6 AWG	37.7	0.261	2,333	3,979	452
☐	3×3/0 AWG + 3×4 AWG	41.2	0.207	3,044	5,077	494
☐	3×4/0 AWG + 3×4 AWG	44.4	0.164	3,664	6,059	533
☐	3×250 kcmil + 3×4 AWG	48.5	0.139	4,212	7,028	582
☐	3×350 kcmil + 3×2 AWG	54.2	0.099	5,959	9,659	650
☐	3×500 kcmil + 3×2 AWG	61.4	0.070	8,071	12,931	737

- Conductor max. DC resistance R20 follows ASTM B8 Class B annealed bare copper at 20 °C.
- Designed for high-power industrial VFD feeders requiring NFPA 79 machinery compliance, exposed-run TC-ER approval, and direct burial.

Standards and approvals

- UL 1277 Type TC-ER (2,000 V) · UL 44 RHW-2
- NFPA 79 Industrial Machinery Compliant
- IEEE 1202 / FT4 · Sunlight, Oil & Direct Burial

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/vfd-xlpe-2kv-tr-869-symmetrical-tc-er-vfd-cable

Typical values for this cable type, based on UL 1277 Type TC-ER · UL 44 RHW-2 · IEEE 1202 / FT4 · NFPA 79. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.