Screened power & VFD / motor supply cables

37-000VFD 2kV TC-ER

37-000VFD 2 kV Cu-Tape Shielded TC-ER VFD Cable

2 kV RHW-2 XLPE/PVC helical copper tape TC-ER VFD cable



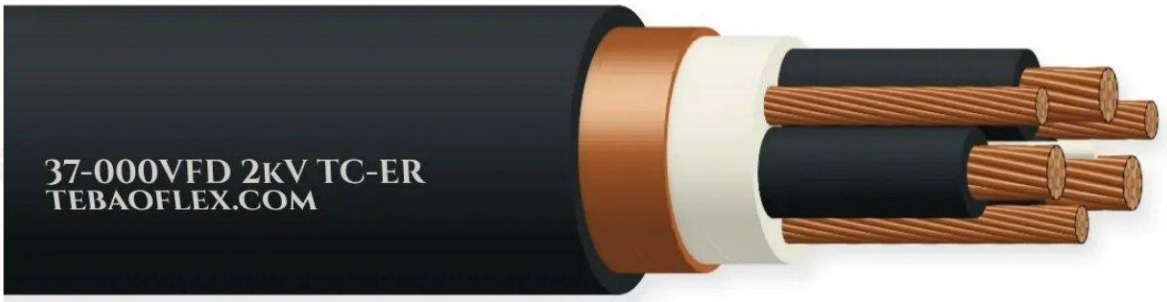
UL 1277 TC-ER · UL 44 RHW-2 | **2,000 V · 90 °C Wet/Dry** | **Helical Cu Tape · Direct Burial**

Application

Industrial 2,000 V UL 1277 Type TC-ER VFD tray cable with stranded bare copper conductors, heavy-wall 90 °C RHW-2 XLPE insulation, three symmetrical uninsulated bare copper grounds, 100% helical copper tape shield, and sunlight-resistant PVC jacket.

Typical uses: Oil & gas midstream & refineries, Heavy process & chemical plants, Water & wastewater pumping stations, Mining surface facilities & conveyors, Industrial UL 1277 tray installations

Construction





Cross-section, not to scale

1	**Conductor**	Stranded bare annealed copper (ASTM B8 Class B) · ASTM B3 / B8 bare copper
2	**Phase insulation**	2 kV heavy-wall cross-linked polyethylene (RHW-2 XLPE)
3	**Fillers & binder tape**	Polypropylene interstitial fillers & binder tape · Symmetrical 3+3 round core assembly
4	**Helical copper tape shield**	100% coverage helically applied overlapping bare copper tape · ICEA S-95-658 continuous EMC shield
5	**Outer jacket**	Black flame- & sunlight-resistant direct-burial PVC · UL 1277 Type TC-ER / FT4

Technical data

Typical values

Rated voltage	2,000 V (2 kV) AC	**Conductor class**	ASTM B8 Class B bare copper
EMC shield	100% helical overlapping bare Cu tape	**Grounding system**	3 × symmetrical uninsulated bare Cu
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 / UL 1685 / CSA FT4
Outdoor & burial	Sunlight Resistant · Direct Burial	**Hazardous locations**	NEC Class I Div 2

Sizes

15 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
☐	3×14 AWG + 3×18 AWG	15.6	8.450	123	322	187
☐	3×12 AWG + 3×16 AWG	16.6	5.310	173	406	199
☐	3×10 AWG + 3×14 AWG	17.9	3.340	252	535	215
☐	3×8 AWG + 3×14 AWG	20.7	2.100	345	725	248
☐	3×6 AWG + 3×12 AWG	22.8	1.320	520	1,004	274
☐	3×4 AWG + 3×12 AWG	26.5	0.832	747	1,411	318
☐	3×2 AWG + 3×10 AWG	30.9	0.523	1,153	2,086	371
☐	3×1 AWG + 3×8 AWG	32.9	0.415	1,486	2,584	395
☐	3×1/0 AWG + 3×6 AWG	35.1	0.329	1,932	3,236	421
☐	3×2/0 AWG + 3×6 AWG	37.6	0.261	2,320	3,840	451
☐	3×3/0 AWG + 3×4 AWG	41.1	0.207	3,030	4,904	493
☐	3×4/0 AWG + 3×4 AWG	44.3	0.164	3,649	5,855	532
☐	3×250 kcmil + 3×4 AWG	48.4	0.139	4,195	6,792	581
☐	3×350 kcmil + 3×2 AWG	54.1	0.099	5,941	9,343	649
☐	3×500 kcmil + 3×2 AWG	61.3	0.070	8,050	12,513	736

- Conductor max. DC resistance R20 follows ASTM B8 / UL 44 Class B bare annealed copper at 20 °C.
- Minimum bend radius 12 × OD follows ICEA S-95-658 guidance for helically applied metallic copper tape shielded power cables.

Standards and approvals

- ✓ UL 1277 Type TC-ER (2,000 V Exposed Run)
- ✓ UL 44 Type RHW-2 (90 °C Wet/Dry)
- ✓ ICEA S-95-658 · IEEE 1202 / FT4 · 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/37-000vfd-2kv-copper-tape-shielded-tc-er-vfd-cable

Typical values for this cable type, based on UL 1277 Type TC-ER · UL 44 RHW-2 · ICEA S-95-658 · IEEE 1202. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.