Screened power & VFD / motor supply cables

VFD2KTCP 2kV RWU90 TC-ER

VFD2KTCP 2 kV RWU90 TC-ER Copper Tape VFD Cable

Dual-listed UL 2 kV TC-ER / CSA RWU90 VFD cable



UL TC-ER 2 kV · CSA RWU90 1 kV | **5-mil Cu Tape (50% Lap)** | **−40 °C Cold Bend · Oil Res II PVC**

Application

Dual-certified VFD tray cable rated 2,000 V UL TC-ER / RHW-2 and 1,000 V CSA RWU90 with bare copper conductors, 90 °C XLPE, three bare grounds, 5-mil 50%-lap copper tape, and −40 °C Oil Res II PVC jacket.

Typical uses: US & Canadian oil & gas facilities, Cold-climate mines & mineral plants, Refineries & petrochemical trays, Pulp, paper & heavy industrial mills, Municipal water & pumping stations

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 moisture- & heat-resistant XLPE (RWU90 / RHW-2, black numbered) · UL 44 RHW-2 / CSA C22.2 No. 38 RWU90
3	**Binder & grounds**	Polyester separator binder tape + 3 × symmetrical bare Cu grounds · Symmetrical 3C+3G core geometry
4	**5-mil copper tape shield**	5-mil helical bare copper tape shield (50% overlap, double thickness) · 100% double-lap EMI barrier
5	**Outer jacket**	Black −40 °C cold-bend, Oil Res II & sunlight-resistant PVC · UL 1277 TC-ER · CSA C22.2 No. 230

Technical data

Typical values

Rated voltage	2,000 V UL TC-ER · 1,000 V CSA RWU90	**Conductor class**	ASTM B8 Class B bare copper
EMC shield	5-mil bare Cu tape (50% double lap)	**Grounding system**	3 × symmetrical bare Cu in interstices
Max. conductor temp.	+90 °C wet or dry (RWU90 / RHW-2)	**Cold bend rating**	−40 °C cold bend & impact
Min. bending radius	12 × OD (Cu-tape shielded)	**Flame test**	IEEE 1202 / CSA FT4 / UL 1685
Oil & UV ratings	Oil Res II · Sunlight · Direct Burial	**Hazardous locations**	NEC / CEC Class I Div 2

Sizes

16 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	130	341	187
☐	3×12 AWG + 3×16 AWG	16.6	5.310	180	428	199
☐	3×10 AWG + 3×14 AWG	17.9	3.340	259	560	215
☐	3×8 AWG + 3×14 AWG	20.7	2.100	354	759	248
☐	3×6 AWG + 3×12 AWG	22.8	1.320	529	1,046	274
☐	3×4 AWG + 3×12 AWG	26.5	0.832	758	1,468	318
☐	3×2 AWG + 3×10 AWG	30.9	0.523	1,166	2,166	371
☐	3×1 AWG + 3×8 AWG	32.9	0.415	1,500	2,681	395
☐	3×1/0 AWG + 3×6 AWG	35.1	0.329	1,947	3,354	421
☐	3×2/0 AWG + 3×6 AWG	37.6	0.261	2,336	3,977	451
☐	3×3/0 AWG + 3×4 AWG	41.1	0.207	3,048	5,076	493
☐	3×4/0 AWG + 3×4 AWG	44.3	0.164	3,667	6,057	532
☐	3×250 kcmil + 3×4 AWG	48.4	0.139	4,216	7,026	581
☐	3×350 kcmil + 3×2 AWG	54.1	0.099	5,963	9,657	649
☐	3×500 kcmil + 3×2 AWG	61.3	0.070	8,076	12,929	736
☐	3×750 kcmil + 3×1/0 AWG	73.6	0.046	12,137	19,262	883

- Conductor max. DC resistance R20 follows ASTM B8 Class B bare annealed copper at 20 °C.
- Dual UL 1277 TC-ER (2,000 V) and CSA C22.2 No. 38 RWU90 (1,000 V) certification covers both US NEC and Canadian CEC tray and direct-burial installations.

Standards and approvals

- UL 1277 Type TC-ER (2,000 V) · UL 44 RHW-2
- CSA C22.2 No. 38 RWU90 (1,000 V) · C22.2 No. 230
- IEEE 1202 / FT4 · −40 °C Cold Bend · Oil Res II

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/vfd2ktcp-2kv-rwu90-tc-er-copper-tape-vfd-cable

Typical values for this cable type, based on UL 1277 Type TC-ER · UL 44 RHW-2 · CSA C22.2 No. 38 RWU90. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.