Screened power & VFD / motor supply cables

37-102 CIRVA2 2kV TC-ER-HL

37-102 CIRVA2 2 kV TC-ER-HL Hazardous VFD Cable

2000 V crush- & impact-resistant UL 2225 TC-ER-HL VFD cable

UL 2225 Type TC-ER-HL | U0/U 2000 V · 6 kV AC | Armoured EMC

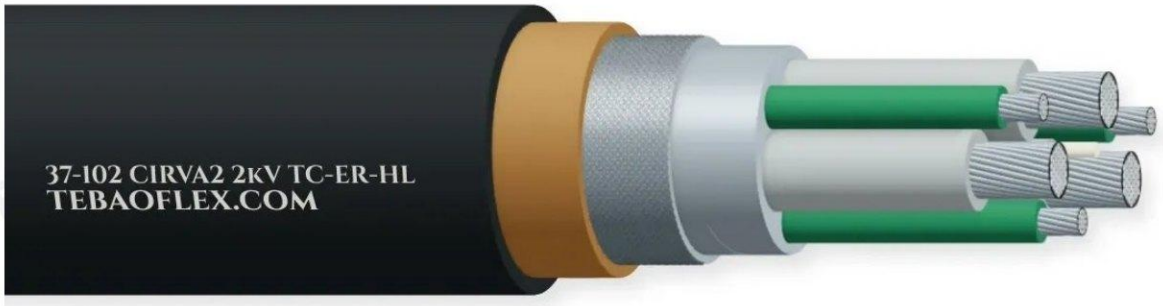


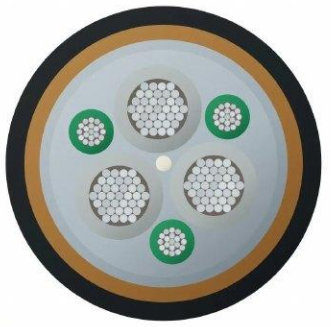
Application

37-102 CIRVA2 2 kV TC-ER-HL delivers flexible tinned copper conductors, 2000 V thermoset XLPE/EPR insulation, copper tape + metallic armor protection, and UL 2225 Class I Div 1 hazardous-location compliance.

Typical uses: Variable frequency drive (VFD) motor bays, Industrial pumps, fans & compressor skids, Process plants, oil & gas & HVAC systems, Heavy manufacturing & plant MCC feeders

Construction





Cross-section, not to scale

1	**Conductor**	ASTM B172 Class K flexible tinned annealed copper · ASTM B172 Class K / UL 1277
2	**Core insulation**	2000 V thermoset XLPE / RHW-2 dielectric · UL 2225 Type TC-ER-HL
3	**Core assembly & separator**	Concentric cabled assembly with low-friction fleece or polyester binder tape · UL 2225 Type TC-ER-HL
4	**EMC metallic screen**	Helical copper tape shield + 3 symmetrical tinned grounds · EMC ≥ 85% / 100% foil
5	**Metallic armour**	Crush- & impact-resistant metallic armor barrier (TC-ER-HL) · UL 2225 Type TC-ER-HL
6	**Outer sheath**	Black heavy-duty oil-, mud- & UV-resistant CPE jacket · IEEE 1202 / FT4 Flame

Technical data

Typical values

Rated voltage U0/U	2000 V	AC test voltage	6 kV AC / 5 min
Conductor class	ASTM B172 Class K tinned Cu	EMC screen	Helical copper tape shield + 3
Insulation resistance	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-40 °C to +90 °C
Temp. range (flexing)	-25 °C to +90 °C	Short-circuit temp.	+250 °C (5 s)
Min. bending radius	12 × OD (fixed)	Flame retardance	IEEE 1202 / FT4 Flame
Oil & chemical perf.	UL Oil Res I/II	Environmental / EMC	Class I Div 1 & 2 Crush/Impact
Outer sheath	Black heavy-duty oil-, mud- &		

Sizes

12 standard constructions

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

Cores × AWG/kcmil	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	21.3	9.070	148	575	256
☐ 3×12 AWG + 3×16 AWG	22.4	5.710	198	680	269
☐ 3×10 AWG + 3×14 AWG	23.8	3.590	278	837	286
☐ 3×8 AWG + 3×14 AWG	26.6	2.260	372	1,078	319
☐ 3×6 AWG + 3×12 AWG	28.8	1.420	548	1,406	346
☐ 3×4 AWG + 3×12 AWG	32.5	0.892	777	1,892	390
☐ 3×2 AWG + 3×10 AWG	37.0	0.561	1,185	2,680	444
☐ 3×1/0 AWG + 3×6 AWG	41.4	0.353	1,966	3,973	497
☐ 3×2/0 AWG + 3×6 AWG	44.0	0.280	2,356	4,661	528
☐ 3×4/0 AWG + 3×4 AWG	50.9	0.176	3,687	6,922	611
☐ 3×350 kcmil + 3×2 AWG	61.0	0.107	5,984	10,822	732
☐ 3×500 kcmil + 3×2 AWG	68.5	0.075	8,097	14,353	822

- Max. conductor DC resistance R20 at 20 °C per ASTM B172 / B8 (tinned copper).
- Minimum bending radius calculated at 12 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- UL 2225 Type TC-ER-HL
- UL 1277 Type TC-ER
- CSA C22.2 No. 230
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

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/37-102-cirva2-2kv-tc-er-hl-armored-vfd-cable

Typical values for this cable type, based on UL 2225 Type TC-ER-HL · UL 1277 Type TC-ER · CSA C22.2 No. 230. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.