Screened power & VFD / motor supply cables

6002xLC 1000V VFD Brake

6002xLC 1000 V Low-Cap VFD + Brake Pair Cable

Yellow TPE 1000 V VFD motor power cable with shielded brake pair



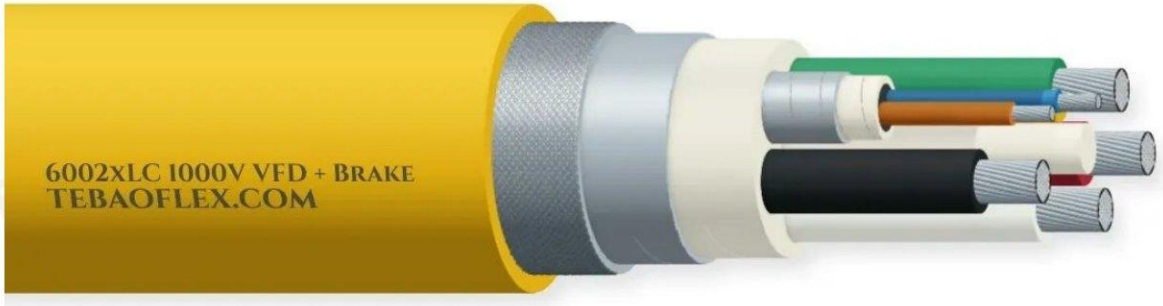
UL 1277 Type TC-ER | U0/U 1000 V · 4 kV AC | EMC Screened

Application

6002xLC 1000 V VFD Brake integrates four power/ground conductors with an individually shielded brake/thermal pair, low-capacitance insulation, and a yellow oil-resistant TPE jacket for dynamic VFD brake motors.

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	Low-capacitance thermoset XLPE / PP hybrid · UL 1277 Type TC-ER
3	Core assembly & separator	Concentric cabled assembly with low-friction fleece or polyester binder tape · UL 1277 Type TC-ER
4	EMC metallic screen	Individually foil-shielded brake pair + overall ≥ 85% tinned Cu braid · EMC ≥ 85% / 100% foil
5	Outer sheath	High-visibility yellow oil- & abrasion-resistant TPE jacket · UL Oil Res I/II

Technical data

Typical values

Rated voltage U0/U	1000 V	AC test voltage	4 kV AC / 5 min
Conductor class	ASTM B172 Class K tinned Cu	EMC screen	Individually foil-shielded brake pair +
Insulation resistance	≥ 1,000 MΩ·km at 20 °C	Temp. range (fixed)	-40 °C to +90 °C
Temp. range (flexing)	-30 °C to +90 °C	Short-circuit temp.	+250 °C (5 s)
Min. bending radius	8 × OD (flexing)	Flame retardance	UL Oil Res I/II
Oil & chemical perf.	Low-Capacitance Dielectric	Environmental / EMC	Sunlight Resistant
Outer sheath	High-visibility yellow oil- &		

Sizes

8 standard constructions

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

Power + Brake AWG	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 8×D mm
☐ 4×14 AWG + 2×16 AWG	14.8	9.070	146	329	118
☐ 4×12 AWG + 2×16 AWG	16.1	5.710	195	418	129
☐ 4×10 AWG + 2×16 AWG	17.6	3.590	271	548	141
☐ 4×8 AWG + 2×16 AWG	21.4	2.260	397	806	171
☐ 4×6 AWG + 2×16 AWG	23.9	1.420	585	1,120	191
☐ 4×4 AWG + 2×16 AWG	27.8	0.892	886	1,636	222
☐ 4×2 AWG + 2×14 AWG	33.0	0.561	1,370	2,461	264
☐ 4×1/0 AWG + 2×14 AWG	37.9	0.353	2,114	3,640	303

- Max. conductor DC resistance R20 at 20 °C per ASTM B172 / B8 (tinned copper).
- Minimum bending radius calculated at 8 × nominal outer diameter (OD). Custom core counts and lengths available on request.

Standards and approvals

- UL 1277 Type TC-ER
- UL 2277 Type WTTC
- CSA AWM I/II A/B FT4
- 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/6002xlc-1000v-low-cap-vfd-brake-cable

Typical values for this cable type, based on UL 1277 Type TC-ER · UL 2277 Type WTTC · CSA AWM I/II A/B FT4. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.