Screened power & VFD / motor supply cables

3-PLUS-2XSLCYK-J 0.6/1 kV

XLPE VFD Cable

90 °C XLPE 3+3 symmetrical EMC drive cable with UV/oil PVC

DIN VDE 0250 · EN 55011 **U0/U 0.6/1 kV · 90 °C XLPE**

3+3 Symmetrical · Foil + TCWB

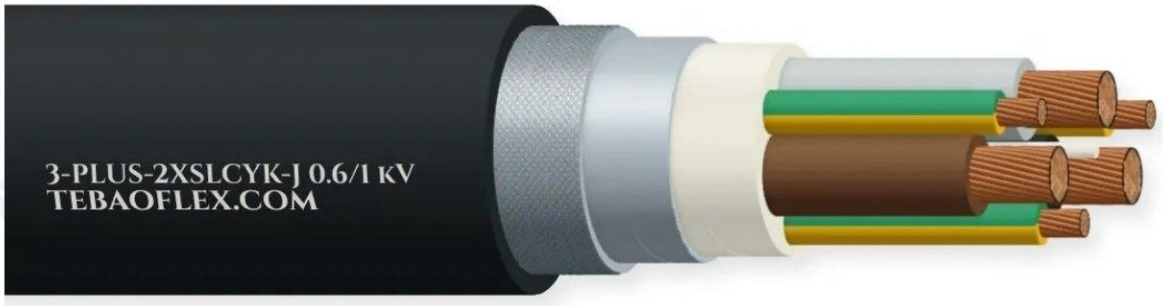


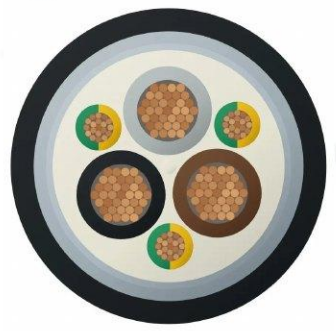
Application

High-ampacity 0.6/1 kV symmetrical 3+3 VFD motor supply cable built to DIN VDE 0250 with Class 5 bare copper, 90 °C XLPE insulation (2X), Al/PET foil plus ≥ 85% tinned copper braid, and oil- and UV-resistant black PVC sheath.

Typical uses: High-ampacity industrial VFD drives, Process plants, pumps & fans, Outdoor crane & port facilities, Automotive & heavy manufacturing, Renewable power converters

Construction





Cross-section, not to scale

1	**Conductor**	Class 5 fine-wire bare annealed copper · DIN VDE 0295 / IEC 60228 Class 5
2	**Phase & earth insulation**	90 °C cross-linked polyethylene (2X / XLPE), HD 308 S2
3	**Separator tape**	Non-woven polyester separator tape over 3+3 core
4	**Foil screen**	Plastic-coated aluminium laminate foil (100% coverage)
5	**Braid screen**	Tinned copper wire braid (≥ 85% coverage) · EN 55011 low transfer impedance
6	**Outer sheath**	Black oil- & UV-resistant special PVC (RAL 9005)

Technical data

Typical values

Rated voltage U0/U	0.6/1 kV (max. 0.7/1.2 kV AC)	**AC test voltage**	4 kV (core/core & core/screen)
Conductor class	IEC 60228 / VDE 0295 Class 5	**Dual EMC screen**	100% Al/PET foil + ≥ 85% TCWB
Transfer impedance	≤ 250 mΩ/m at 30 MHz	**Max. conductor temp.**	+90 °C continuous (XLPE 2X)
Short-circuit temp.	+250 °C (max. 5 s)	**Ambient temp. (fixed)**	−40 °C to +80 °C
Ambient temp. (flexed)	−5 °C to +80 °C	**Min. bending radius**	10 × OD fixed / 15 × OD flexed
Flame retardance	IEC 60332-1-2 / VDE 0482-332-1-2	**Oil & UV resistance**	Oil- & UV-resistant RAL 9005 PVC
EMC compliance	EN 55011 / EN 61800-3		

Sizes

14 standard constructions

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

Cores × mm²	Outer Ø ≈ mm	Max. R20 Ω/km	Copper index kg/km	Weight ≈ kg/km	Min. bend R 10×D mm
☐ 3×2.5 + 3G0.5	13.0	7.980	118	256	130
☐ 3×4 + 3G0.75	14.1	4.950	169	340	141
☐ 3×6 + 3G1	15.4	3.300	234	447	154
☐ 3×10 + 3G1.5	17.4	1.910	362	651	174
☐ 3×16 + 3G2.5	19.8	1.210	560	960	198
☐ 3×25 + 3G4	24.1	0.780	858	1,458	241
☐ 3×35 + 3G6	26.7	0.554	1,193	1,969	267
☐ 3×50 + 3G10	30.4	0.386	1,722	2,777	304
☐ 3×70 + 3G16	35.5	0.272	2,446	3,912	355
☐ 3×95 + 3G16	39.4	0.206	3,139	4,980	394
☐ 3×120 + 3G25	43.2	0.161	4,078	6,377	432
☐ 3×150 + 3G25	49.0	0.129	4,913	7,777	490
☐ 3×185 + 3G35	53.7	0.106	6,154	9,665	537
☐ 3×240 + 3G50	59.4	0.080	8,081	12,531	594

- Conductor max. DC resistance R20 follows DIN VDE 0295 / IEC 60228 Class 5 bare annealed copper at 20 °C.
- Cross-linked polyethylene (2X) raises continuous conductor rating to +90 °C and short-circuit rating to +250 °C (5 s).

Standards and approvals

- DIN VDE 0250 / 0276-603 XLPE Symmetrical VFD
- EN 55011 / EN 61800-3 EMC Compliance
- IEC 60332-1-2 Flame Retardant · Oil & UV Resistant

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/3-plus-2xslcyk-j-0-6-1kv-xlpe-symmetrical-vfd-cable

Typical values for this cable type, based on DIN VDE 0250 · DIN VDE 0276-603 · IEC 60228 Cl.5 · EN 55011. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.