Screened power & VFD / motor supply cables

2YSL(St)CYK-J 3PLUS 0.6/1 kV

Symmetrical VFD Cable

Symmetrical 3+3 low-capacitance PE VFD cable with UV PVC sheath



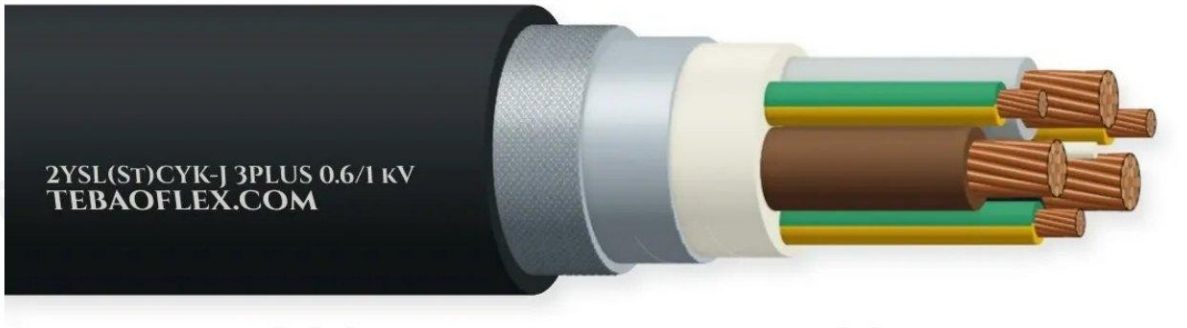
DIN VDE 0250 · EN 55011 | U0/U 0.6/1 kV · 4 kV Test | 3+3 Symmetrical · UV Black PVC

Application

Symmetrical 3+3 EMC motor supply cable built to DIN VDE 0250 with Class 5 bare copper, low-capacitance PE insulation (2Y), Al/PET foil (St) plus ≥ 85% tinned copper braid (C), and black UV-resistant RAL 9005 FR-PVC sheath.

Typical uses: Outdoor & indoor VFD pump stations, HVAC, fans & cooling towers, Material handling & crane bridges, Process & water treatment plants, Automated industrial drives

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**	Low-capacitance PE (2Y), HD 308 S2 colour code
3	**Core wrap**	Polyester wrapping tape over symmetrical 3+3 assembly
4	**Static foil screen (St)**	Aluminium/polyester laminate foil (100% coverage)
5	**Braid screen (C)**	Tinned copper wire braid (≥ 85% coverage) · EN 55011 low transfer impedance
6	**Outer sheath (YK)**	Black UV-resistant flame-retardant 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 (St) + ≥ 85% TCWB (C)
Transfer impedance	≤ 250 mΩ/m at 30 MHz	Max. conductor temp.	+70 °C continuous (PE 2Y)
Ambient temp. (fixed)	−40 °C to +70 °C	Ambient temp. (flexed)	−5 °C to +70 °C
Min. bending radius	10 × OD fixed / 15 × OD flexed	Flame retardance	IEC 60332-1-2 / VDE 0482-332-1-2
UV & outdoor rating	UV-resistant black PVC (RAL 9005)	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	12.8	7.980	117	249	128
☐	3×4 + 3G0.75	14.0	4.950	168	333	140
☐	3×6 + 3G1	15.3	3.300	233	439	153
☐	3×10 + 3G1.5	17.3	1.910	362	642	173
☐	3×16 + 3G2.5	19.6	1.210	559	944	196
☐	3×25 + 3G4	23.9	0.780	858	1,438	239
☐	3×35 + 3G6	26.4	0.554	1,192	1,938	264
☐	3×50 + 3G10	30.1	0.386	1,721	2,737	301
☐	3×70 + 3G16	35.1	0.272	2,445	3,855	351
☐	3×95 + 3G16	39.0	0.206	3,138	4,910	390
☐	3×120 + 3G25	42.8	0.161	4,077	6,291	428
☐	3×150 + 3G25	48.5	0.129	4,911	7,667	485
☐	3×185 + 3G35	53.1	0.106	6,153	9,528	531
☐	3×240 + 3G50	58.8	0.080	8,079	12,360	588

- Conductor max. DC resistance R20 follows DIN VDE 0295 / IEC 60228 Class 5 bare annealed copper at 20 °C.
- For higher +90 °C continuous conductor temperature and higher ampacity, specify XLPE-insulated 3-PLUS-2XSLCYK-J 0.6/1 kV.

Standards and approvals

- DIN VDE 0250 Symmetrical 3+3 VFD Cable
- EN 55011 / EN 61800-3 EMC Compliance
- IEC 60332-1-2 Flame Retardant · 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/2ysl-st-cyk-j-3plus-0-6-1kv-symmetrical-vfd-cable

Typical values for this cable type, based on DIN VDE 0250 · EN 55011 · IEC 60228 Cl.5 · HD 308 S2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.