Marine & offshore MV EMC VFD cable

3GSEGCH

6/10 kV Marine & Offshore EMC VFD Motor Cable

IEC 60092-354 · 6/10 kV (3.6/6 kV VFD) · −30…+90 °C dual-screened offshore VFD cable



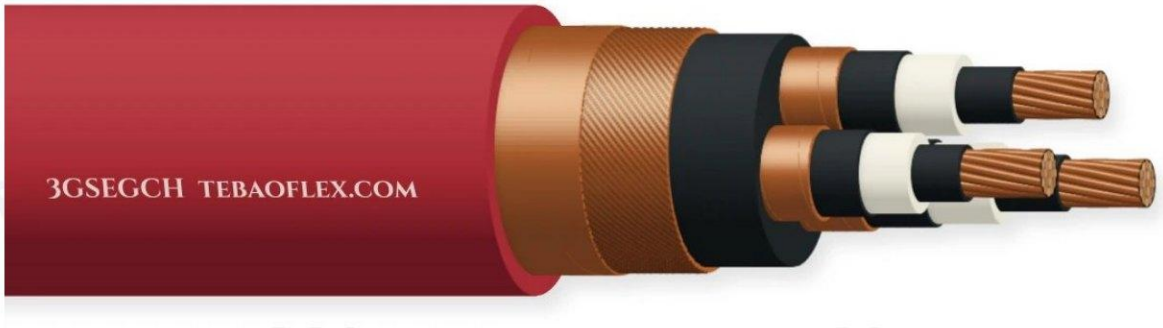
6/10 kV MV VFD | Dual Cu Screen | IEC 60092-354

Application

3GSEGCH 6/10 kV (3.6/6 kV VFD) marine and offshore medium-voltage VFD motor power cable featuring Class 2 copper conductors, EPR dielectric stack, per-phase copper tape screen, overall concentric copper wire screen and LSZH ST8 sheath.

Typical uses: Marine Propulsion & Azimuth Thruster Drives, Offshore Drilling Rigs & FPSO Topside Modules, Dredgers, Pipe-Laying & Heavy Marine Vessels, High-Power Industrial MV Inverter Systems

Construction





Cross-section, not to scale

1	Phase Conductors (3x70 mm²)	IEC 60092-354 / IEC 60092-350
2	MV EPR Dielectric Stack	IEC 60092-354 / IEC 60092-350
3	Individual Phase Screen	IEC 60092-354 / IEC 60092-350
4	Inner Covering	IEC 60092-354 / IEC 60092-350
5	Overall Concentric EMC Screen	IEC 60092-354 / IEC 60092-350
6	Outer Sheath (ST8)	IEC 60092-354 / IEC 60092-350

Technical data

Typical values

Rated voltage / transmission duty	6/10 kV (IEC 60092-354 / IEC 60092-350)	**Core / conductor construction**	Phase Conductors (3x70 mm²) — Class 2 circular stranded plain annealed copper phase conductors for marine medium-voltage propulsion & VFD drives
Primary dielectric / insulation	MV EPR Dielectric Stack — Triple-extruded inner semiconductive elastomer screen, 6/10 kV EPR primary dielectric, and outer semiconductive elastomer layer	**Continuous operating temperature**	−30…+90 °C (rated operating envelope)
Storage & transport temperature	−40…+80 °C on export drum or reel	**Outer protection / sheath**	Outer Sheath (ST8) — Red flame-retardant, low-smoke zero-halogen (LSZH / SHF1) polyolefin outer sheath for shipboard & offshore installations
Minimum bending radius	12–15 × OD	**Structural layer count**	6 concentric functional layers
Environmental & chemical resistance	Industrial moisture, oils and mechanical wear per IEC 60092-354 / IEC 60092-350	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	IEC 60092-354 / IEC 60092-350		

Sizes

5 standard constructions

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

Order designation	Configuration	Core / stranding	Outer Ø ≈ mm	Weight ≈ kg/km	Tensile load kN ≈	Min. bend R mm
3GSEGCH Construction Schedule (−30…+90 °C) 5 sizes						
☐ 3GSEGCH 3×35 mm² 6/10 kV	3 × 35 mm²	Class 2 Cu + dual Cu screen	41.5	2,450	15.5	500
☐ 3GSEGCH 3×50 mm² 6/10 kV	3 × 50 mm²	Class 2 Cu + dual Cu screen	44.8	3,020	22.0	540
☐ 3GSEGCH 3×70 mm² 6/10 kV	3 × 70 mm²	Class 2 Cu + dual Cu screen	48.6	3,890	31.0	585
☐ 3GSEGCH 3×95 mm² 6/10 kV	3 × 95 mm²	Class 2 Cu + dual Cu screen	52.8	4,860	42.0	635
☐ 3GSEGCH 3×120 mm² 6/10 kV	3 × 120 mm²	Class 2 Cu + dual Cu screen	56.4	5,780	53.0	680

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per IEC 60092-354 / IEC 60092-350.

Electrical, optical & thermal parameters

5 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Capacity	Operating temp.
3 × 35 mm²	0.52	6/10 kV / 155 A	−30…+90 °C
3 × 50 mm²	0.39	6/10 kV / 190 A	−30…+90 °C
3 × 70 mm²	0.27	6/10 kV / 235 A	−30…+90 °C
3 × 95 mm²	0.19	6/10 kV / 285 A	−30…+90 °C
3 × 120 mm²	0.15	6/10 kV / 330 A	−30…+90 °C

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric and dimensional verification.

Standards and approvals

- IEC 60092-354 Compliant
- 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/3gsegch-6-10kv-marine-offshore-emc-vfd-motor-cable

Typical values for this cable type, based on IEC 60092-354 / IEC 60092-350. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.