EMC-screened marine & offshore VFD cable

RFOU-VFD P18 & RU-VFD 0.6/1-1.8/3 KV (NEK 606)

RFOU-VFD P18 & RU-VFD 0.6/1–1.8/3 kV NEK 606 Symmetrical 3+3E Offshore

NEK TS 606 P18 / IEC 60092-353 · 0.6/1 kV – 1.8/3 kV · Emc-screened marine & offshore



NEK TS 606 P18 / IEC 60092-353 | 0.6/1 kV – 1.8/3 kV (-40 to +90 °C) | SHF2-MUD Offshore Outer Sheath (P18)

Application

RFOU-VFD P18 & RU-VFD 0.6/1 kV & 1.8/3 kV (Type P) Symmetrical 3+3E EPR-Insulated Dual-EMC-Screened SHF2 Mud-Resistant Offshore VFD Motor Cable (NEK TS 606 P18 / IEC 60092-353, 0.6/1 kV – 1.8/3 kV, -40 to +90 °C).

Typical uses: Marine Azimuth & Tunnel Thruster Drives, Offshore Drilling Drawworks & Mud Pumps, Diesel-Electric & Hybrid Vessel Propulsion, Offshore Deck Winch & Crane Inverter Feeds

Construction





Cross-section, not to scale

1. Tinned Copper Phase Cores (3×95 mm² EPR)
2. 3+3E Symmetrical Split Earth (3G16 mm²)
3. Dual EMC Screen (Copper Tape + TCWB)
4. SHF2-MUD Offshore Outer Sheath (P18)

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV – 1.8/3 kV (NEK TS 606 Code P18 (RFOU-VFD) & RU-VFD / IEC 60092-353 SHF2-MUD)	**Core / conductor construction**	Tinned Copper Phase Cores (3×95 mm² EPR) — 1.8/3 kV corona-resistant EPR insulation withstanding PWM voltage spikes
Primary dielectric / buffering	3+3E Symmetrical Split Earth (3G16 mm²) — Three interstitial earth conductors balancing common-mode currents	**Continuous operating temperature**	−40…+90 °C (shipboard & offshore duty)
Short-circuit / peak thermal rating	Verified thermal stability per NEK TS 606 Code P18 (RFOU-VFD) & RU-VFD / IEC 60092-353 SHF2-MUD	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	SHF2-MUD Offshore Outer Sheath (P18) — NEK TS 606 oil- and ester-mud resistant cross-linked elastomer jacket	**Minimum bending radius**	8 × OD
Armour, screen & mechanical duty	Dual EMC Screen (Copper Tape + TCWB) — 100% copper-backed tape + tinned copper wire braid over SHF2 inner sheath	**Flame, fire & smoke performance**	Qualified for marine flame-retardance and low-smoke zero-halogen / fire safety per NEK TS 606 Code P18 (RFOU-VFD) & RU-VFD / IEC 60092-353 SHF2-MUD
Oil, drilling mud & seawater resistance	Resistant to marine fuel/lube oils, salt mist and offshore fluids per NEK TS 606 Code P18 (RFOU-VFD) & RU-VFD / IEC 60092-353 SHF2-MUD	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	NEK TS 606 Code P18 (RFOU-VFD) & RU-VFD / IEC 60092-353 SHF2-MUD		

Sizes

3 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	Net weight ≈ kg/km	Tensile rating kN ≈	Min. bend R mm
RFOU-VFD P18 & RU-VFD 0.6/1-1.8/3 KV (NEK 606) Construction Schedule (−40…+90 °C) 3 sizes						
☐ **RFOU-VFD P18 3×35+3G6 VFD**	**3 × 35 + 3G6 mm² (3+3E EMC)**	**IEC 60228 Class 2/5 Cu/SnCu**	**29.4**	**1,760**	**15.8**	**235**
☐ **RFOU-VFD P18 3×70+3G10 VFD**	**3 × 70 + 3G10 mm² (3+3E EMC)**	**IEC 60228 Class 2/5 Cu/SnCu**	**37.8**	**3,190**	**31.5**	**305**
☐ **RFOU-VFD P18 3×120+3G16 VFD**	**3 × 120 + 3G16 mm² (3+3E EMC)**	**IEC 60228 Class 2/5 Cu/SnCu**	**46.5**	**5,120**	**54.0**	**375**

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per NEK TS 606 Code P18 (RFOU-VFD) & RU-VFD / IEC 60092-353 SHF2-MUD.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 35 + 3G6 mm² (3+3E EMC)	**0.52**	**0.6/1 kV – 1.8/3 kV (138 A VFD)**	**−40…+90 °C**
3 × 70 + 3G10 mm² (3+3E EMC)	**0.27**	**0.6/1 kV – 1.8/3 kV (215 A VFD)**	**−40…+90 °C**
3 × 120 + 3G16 mm² (3+3E EMC)	**0.15**	**0.6/1 kV – 1.8/3 kV (305 A VFD)**	**−40…+90 °C**

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

Standards and approvals

- NEK TS 606 P18 / IEC 60092-353 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/rfou-vfd-p18-ru-vfd-0-6-1-1-8-3-kv-nek-606

Typical values for this cable type, based on NEK TS 606 Code P18 (RFOU-VFD) & RU-VFD / IEC 60092-353 SHF2-MUD. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.