halogen-free wind turbine torsion & tower cable

S-3GSHCOEU 0.6/1 kV

(IEC) & 1,000 V (UL 758) EMC-Screened LSZH Wind Tu

DIN VDE 0250 / UL 758 · 0.6/1 kV / 1,000 V · Halogen-free wind turbine torsion & tower



DIN VDE 0250 / UL 758 | 0.6/1 kV / 1,000 V (-40 to +90 °C) | 5GM5 Halogen-Free Elastomer Outer Sh

Application

S-3GSHCOEU 0.6/1 kV (IEC) & 1,000 V (UL 758) EMC-Screened LSZH Wind Turbine Torsion Cable (DIN VDE 0250 / UL 758) engineered for 0.6/1 kV / 1,000 V wind turbine service across -40 to +90 °C (min. bend radius 6 × OD).

Typical uses: Onshore & Offshore Wind Turbine Nacelle Drip Loops, Wind Turbine Generator-to-Converter Main Power Drops, Halogen-Free Wind Tower Vertical Power Distribution, Cold-Climate (−40 °C) Renewable Energy Installations

Construction





Cross-section, not to scale

1. VDE 0295 Class 5 Bare Copper Conductors
2. 3GI3 Heat-Resistant EPR Core Insulation
3. Tinned Copper Wire Braid EMC Screen (SHC
4. 5GM5 Halogen-Free Elastomer Outer Sheath

Technical data

Typical values

Rated voltage / operating system	0.6/1 kV / 1,000 V (DIN VDE 0250 & UL 758 AWM 1,000 V S-3GSHCOEU Screened Wind Torsion Specification)
Primary dielectric / insulation	3GI3 Heat-Resistant EPR Core Insulation — Cross-linked ethylene-propylene rubber rated 0.6/1 kV & UL 1000 V
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+90 °C per DIN VDE 0250 & UL 758 AWM 1,000 V S-3GSHCOEU Screened Wind Torsion Specification
Outer jacket / sheath protection	5GM5 Halogen-Free Elastomer Outer Sheath — Flame-retardant thermoset jacket rated for ±150°/m yaw torsion
Intermediate screen / separator / core layer	Tinned Copper Wire Braid EMC Screen (SHC) — Torsion-stabilized tinned copper braid shielding converter EMI
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per DIN VDE 0250 & UL 758 AWM 1,000 V S-3GSHCOEU Screened Wind Torsion Specification
Standards	DIN VDE 0250 & UL 758 AWM 1,000 V S-3GSHCOEU Screened Wind Torsion Specification
Core / conductor construction	VDE 0295 Class 5 Bare Copper Conductors — Flexible plain copper cores (1C, 3-5C power or multi-core control)
Continuous operating temperature	−40…+90 °C (wind turbine nacelle, hub & tower duty)
Storage & transport temperature	−40…+80 °C on export wooden/steel cable drum
Minimum bending radius	6 × OD
Oil, grease, ozone & UV resistance	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per DIN VDE 0250 & UL 758 AWM 1,000 V S-3GSHCOEU Screened Wind Torsion Specification
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant

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	Max. pulling kN ≈	Min. bend R mm
S-3GSHCOEU 0.6/1 kV Construction Schedule (−40…+90 °C) 3 sizes						
☐ S-3GSHCOEU 0.6 4G16 / 3×16+3G2.5	4G16 mm² (or 3×6 AWG + 3G10 AWG)	IEC 60228 Class 5 / Class K Cu	21.8	790	9.5	130
☐ S-3GSHCOEU 0.6 4G50 / 3×50+3G10	4G50 mm² (or 3×1 AWG + 3G6 AWG)	IEC 60228 Class 5 / Class K Cu	31.4	2,140	22.5	190
☐ S-3GSHCOEU 0.6 3×150+3G25 VFD	3×150 + 3G25 mm² (or 3×350 kcmil)	IEC 60228 Class 5 / Class K Cu	47.2	5,480	58.0	285

– Custom conductor cross-sections, core counts, pre-lugged tower kits and drum lengths available per DIN VDE 0250 & UL 758 AWM 1,000 V S-3GSHCOEU Screened Wind Torsion Specification.

Electrical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance	Operating temp.
4G16 mm² (or 3×6 AWG + 3G10 AWG)	1.15	0.6/1 kV / 1,000 V (98 A VFD)	−40…+90 °C
4G50 mm² (or 3×1 AWG + 3G6 AWG)	0.39	0.6/1 kV / 1,000 V (195 A VFD)	−40…+90 °C
3×150 + 3G25 mm² (or 3×350 kcmil)	0.13	0.6/1 kV / 1,000 V (395 A VFD)	−40…+90 °C

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

Standards and approvals

- DIN VDE 0250 / UL 758 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/s-3gshcoeu-0-6-1kv-ul-1000v-screened-torsion-cable

Typical values for this cable type, based on DIN VDE 0250 & UL 758 AWM 1,000 V S-3GSHCOEU Screened Wind Torsion Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.