wind turbine tower, DLO & blade grounding power cable

NSGAFOU 1.8/3 kV CPR Eca

DIN VDE 0250-602 NSGAFOU 1.8/3 kV (Umax 3,600 V AC / 5,400 V DC) 3GI3/

DIN VDE 0250-602 / EN 50575 Eca · 1.8/3 kV (5.4 kV DC) · Wind turbine tower, dlo &



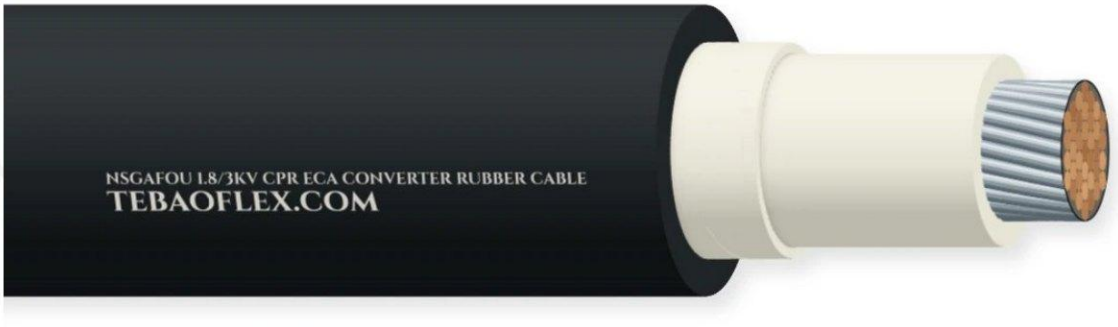
DIN VDE 0250-602 / EN 50575 Eca | **1.8/3 kV (5.4 kV DC) (-40 to +90 °C)** | **5GM3 Oil-Resistant Polychloroprene S**

Application

DIN VDE 0250-602 NSGAFOU 1.8/3 kV (Umax 3,600 V AC / 5,400 V DC) 3GI3/5GM3 Short-Circuit-Proof Wind Converter Cable (DIN VDE 0250-602 / EN 50575 Eca, 1.8/3 kV (5.4 kV DC), -40 to +90 °C, min. bend radius 5 × OD).

Typical uses: Wind Turbine Tower Vertical Power Feeders (Cu & Al), North American UL 2277 WTTC & 2 kV DLO Wind Turbines, IEC 61400-24 Wind Blade Lightning Down-Conductors, Nacelle Converter Busbars & Transformer Interconnects

Construction





Cross-section, not to scale

1. EN 60228 Class 5 Tinned Copper (1.5–300
2. 1.8/3 kV 3GI3 Special EPR Insulation
3. 5GM3 Oil-Resistant Polychloroprene Sheat

Technical data

Typical values

Rated voltage / operating system	1.8/3 kV (5.4 kV DC) (DIN VDE 0250-602 NSGAFOU 1.8/3 kV Short-Circuit-Proof Converter Busbar Specification)	**Core / conductor construction**	EN 60228 Class 5 Tinned Copper (1.5–300 mm²) — Finely stranded annealed tinned copper conductor
Primary dielectric / insulation	1.8/3 kV 3GI3 Special EPR Insulation — Inherently short-circuit and earth-fault proof rubber dielectric	**Continuous operating temperature**	−40…+90 °C (wind turbine nacelle, hub & tower duty)
Low-temperature torsion & cold bend	Verified cold-flex and torsion endurance across −40…+90 °C per DIN VDE 0250-602 NSGAFOU 1.8/3 kV Short-Circuit-Proof Converter Busbar Specification	**Storage & transport temperature**	−40…+80 °C on export wooden/steel cable drum
Outer jacket / sheath protection	5GM3 Oil-Resistant Polychloroprene Sheath (Eca) — Flame-retardant PCP rubber jacket for nacelle converter cabinets	**Minimum bending radius**	5 × OD
Intermediate screen / separator / core layer	1.8/3 kV 3GI3 Special EPR Insulation — Inherently short-circuit and earth-fault proof rubber dielectric	**Oil, grease, ozone & UV resistance**	Resistant to wind turbine gearbox oil, hydraulic fluid, ozone and UV weathering per DIN VDE 0250-602 NSGAFOU 1.8/3 kV Short-Circuit-Proof Converter Busbar Specification
Flame retardancy & smoke/halogen emission	Flame-retardant and environmental performance verified per DIN VDE 0250-602 NSGAFOU 1.8/3 kV Short-Circuit-Proof Converter Busbar Specification	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	DIN VDE 0250-602 NSGAFOU 1.8/3 kV Short-Circuit-Proof Converter Busbar Specification		

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
NSGAFOU 1.8/3 kV CPR Eca Construction Schedule (−40…+90 °C) 3 sizes						
☐ **NSGAFOU 1.8 1×95 / 4G25 Cu**	**1 × 95 mm² (or 4G25 mm² / 3/0 AWG)**	**IEC 60228 Class 5 Flexible Cu/SnCu**	**21.6**	**1,080**	**14.2**	**110**
☐ **NSGAFOU 1.8 1×185 / 4G50 Cu**	**1 × 185 mm² (or 4G50 mm² / 373 kcmil)**	**IEC 60228 Class 5 Flexible Cu/SnCu**	**27.8**	**1,960**	**27.5**	**140**
☐ **NSGAFOU 1.8 1×300 / 4G95 Cu**	**1 × 300 mm² (or 1×535/777 kcmil)**	**IEC 60228 Class 5 Flexible Cu/SnCu**	**34.6**	**3,120**	**45.0**	**175**

– Custom conductor cross-sections, core counts, pre-lugged tower kits and drum lengths available per DIN VDE 0250-602 NSGAFOU 1.8/3 kV Short-Circuit-Proof Converter Busbar Specification.

Electrical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} Ω/km	Rating / Impedance	Operating temp.
1 × 95 mm² (or 4G25 mm² / 3/0 AWG)	**0.21**	**1.8/3 kV (5.4 kV DC) (320 A Cu)**	**−40…+90 °C**
1 × 185 mm² (or 4G50 mm² / 373 kcmil)	**0.11**	**1.8/3 kV (5.4 kV DC) (495 A Cu)**	**−40…+90 °C**
1 × 300 mm² (or 1×535/777 kcmil)	**0.06**	**1.8/3 kV (5.4 kV DC) (680 A Cu)**	**−40…+90 °C**

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

Standards and approvals

- DIN VDE 0250-602 / EN 50575 Eca 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/nsgafou-1-8-3kv-cpr-eca-converter-rubber-cable

Typical values for this cable type, based on DIN VDE 0250-602 NSGAFOU 1.8/3 kV Short-Circuit-Proof Converter Busbar Specification. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.