

NaxosCoils™



VALIADIS
HELLENIC MOTORS

NaxosCoils™

NaxosCoils™ is our advanced insulation system used in high-voltage applications such as transformers, motors, or generators, offering excellent mechanical and electrical performance.

- Uses B-stage resin-rich materials that require hot pressing and oven curing.
- Supports voltages up to 15,000V and offers corona protection for coils over 6,000V.
- Suitable for use in humid or tropical climates, with moisture-resistant capabilities.
- High flexibility insulation class, important for areas where the coil extends beyond the core.
- Undergoes strict testing, including AC flash testing, surge comparison, and moisture-proof validation.
- Meets thermal insulation classes up to 220°C (with a guaranteed rating of 155°C).
- The insulation is fully cured before installation and tested before shipping.

Insulation System: NaxosCoils™	
Description	Insulation contains a high amount of resin, which improves electrical insulation and mechanical strength. It undergoes a high-temperature pressing process to remove voids and improve its density. Parts of the coil, especially the extensions (ends), have B-stage material that requires final curing during assembly.
Up to 15,000V	This insulation system can handle voltages up to 15,000 volts, making it suitable for medium- and high-voltage electrical applications.
Guaranteed Flexibility	The insulation maintains flexibility in outhangs, such as end windings in motors or transformers, which is important to prevent cracking or mechanical failure due to thermal expansion and vibrations.
Full Corona Protection on Coils ≥ 6,000V	The system includes protection against corona discharge for coils operating at or above 6,000V.
Guaranteed Storage Life	Long shelf life as long as it is stored under specific approved conditions (dry, controlled temperature, etc.)
Optional Climate Protection	Extra protection against humidity, heat, and other environmental factors common in Mediterranean / tropical regions
Tan δ / Tip Up Integrity	Insulation ability to maintain its performance under increasing voltage stress, ensuring reliability.
Thermal Performance	Class F155°C is confirmed, while Class H180°C and Class C220°C may be optional or under different conditions.
Surge Comparison / Turk To Turn Tested	Ensures that individual turns of the coil do not short-circuit or break down under electrical stress.
AC Flash Tested	A high-voltage test involves applying an overvoltage (higher than normal operating voltage) to verify the integrity of the insulation.
Moisture Proof Capability	The insulation is designed to resist moisture absorption, reducing the risk of electrical failure due to humidity.
Fully Cured Before Insertion	Before being installed into the motor or transformer, the insulation is fully cured, ensuring its mechanical and electrical integrity.
Fully Tested Before Dispatch	Every unit undergoes quality testing before being shipped to ensure it meets the required specifications.

NaxosCoils™ is intended particularly in environments where humidity and heat are concerns. The focus on windability and flexibility ensures that it is easy to work with during manufacturing or rewinding operations. Rewinders or manufacturers in Mediterranean or tropical areas should consider the **NaxosCoils™** system.



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