Stators

LONG-LASTING PERFORMANCE DOWN TO THE CORE

- Optimal motor performance and extended motor lifetime
- Increased pump and mixer efficiency
- High safety margin
- Optimized heat transfer and tolerance of high operating temperatures
- Minimized risk of short circuits
- Reliable variable frequency drive (VFD) operation

FLYGT
a xylem brand

Stators KEY FEATURES

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Efficient slot liners

Provide solid insulation that withstands vibration.

High-quality copper wire insulation

Safeguards uptime by preventing short circuits through grade 2 (norm IEC-60317-13) magnet wires with a 12-layer insulation varnish.

Provides correct resistance and withstands voltage stress between turns in slots and coil ends.

Thermal switches

Provide reliable thermal protection of the motor by tripping at 125°C or 140°C, well below the class H temperature limit.

Stator core with correct magnetic properties

Prevents short-circuiting of the laminations, which may produce hot spots. No need to test the core magnetic loop.

Extensively tested components

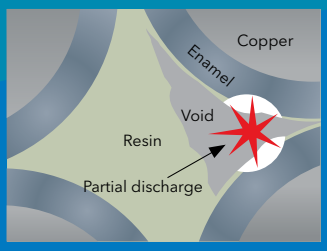
Winding resistance measurement tests, insulation tests and surge tests on all produced stators ensure correct winding properties. Coil end checks secure that dimensional tolerances are met.

Class H insulation

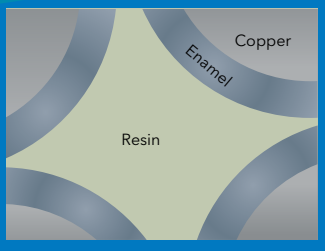
Highest temperature class available, which provides protection at temperatures up to 180°C and at temperature rises of max. 125°C. Provides high safety margin and improves the possibilities to extend motor lifetime.

Highly efficient impregnation

To achieve superior insulation, genuine Flygt stators are impregnated with an efficient environmentally friendly non-solvent resin that generates a solid resin fill. The compact and homogenous insulation that is formed eliminates air pockets around the windings, thus reducing the risk of partial discharges during variable frequency drive (VFD) operation. In addition, it minimizes the risk of heat buildup and short circuits in the windings.



A partial discharge can destroy all organic parts of the insulation and lead to premature stator breakdown.

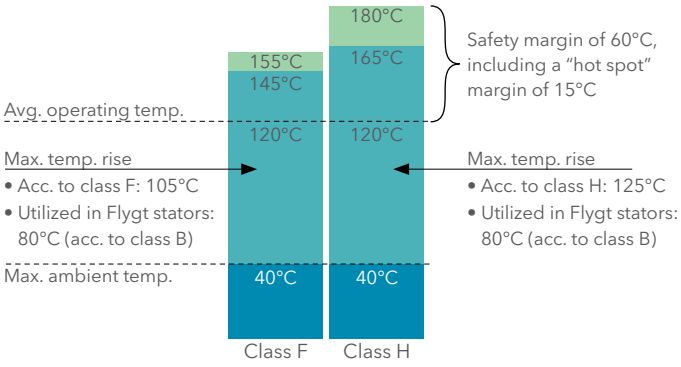


The impregnation techniques used in Flygt stators generate a solid resin fill.

Insulation classes

Different temperature tolerance classes are defined according to international norms for maximum allowable operating temperatures.

Class	Temperature limit	Max. temp. rise
Class A	105°C	60°C
Class E	120°C	75°C
Class B	130°C	80°C
Class F	155°C	105°C
Class H	**180°C**	**125°C**



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