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**The foundation for the dielectric design of TrafoStar is a complete set of common basic design rules. During the last ten years, large efforts have been made to verify and improve the basic rules by experiments on realistic models, which also included developments to achieve a more advanced physical breakdown model.**

## Insulation principles

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The insulation systems inside the transformer are built up by standardised modules that can be freely combined. This method makes it possible to effectively satisfy a large variety of customer demands, transformer layouts and technical standards. Advanced calculation tools, based on finite element methods, are used to verify the dielectric stresses of every possible combination of the modular design elements against the common basic rules.

