

## Thermal insulation classes

Thermal insulation classes rank insulation materials in relation to the maximum temperature they can withstand though time without affecting their mechanical and electrical characteristics.

Specific product standards define the maximum permissible temperatures in the maximum operating conditions for the various components in relation to the materials employed for construction of the transformer and the related insulation class. The classes are shown below (at 40°C ambient temperature):

Thermal insulation class	A	E	B	F	H
Temperature	100° C	115° C	120° C	140° C	165° C

The ambient temperature conditions in which a transformer is installed affect the maximum temperature that a transformer can reach at full power and hence the thermal insulation class must be updated. The transformer's thermal insulation class is shown on the rating plate.