

Klassificering Cx,Ex,Fx

Gjuthartsisolerade transformatorer kan klassificeras för olika brandklasser, miljöklasser samt klimatklasser.

Som standard tillverkas SEA:s transformatorer enligt C2–E2–F1.

Mot pristillägg kan transformatorerna göras enligt klass C5–E4–F1, certifikat finns utfärdat från externt laboratorium.

IEC 60076–11 föreskriver följande:

- Class C1: The transformer is suitable for operation at ambient temperature not below $-5\text{ }^{\circ}\text{C}$ but may be exposed during transport and storage to ambient temperatures down to $-25\text{ }^{\circ}\text{C}$.
- Class C2: The transformer is suitable for operation, transport and storage at ambient temperatures down to $-25\text{ }^{\circ}\text{C}$.
- Class C3: The transformer is suitable for transport and storage at $-40\text{ }^{\circ}\text{C}$ and operation at $-25\text{ }^{\circ}\text{C}$.
- Class C4: The transformer is suitable for transport and storage at $-50\text{ }^{\circ}\text{C}$ and operation at $-40\text{ }^{\circ}\text{C}$.
- Class C5: The transformer is suitable for transport and storage at $-60\text{ }^{\circ}\text{C}$ and operation at $-50\text{ }^{\circ}\text{C}$.
- Class E0: No condensation occurs on the transformers and pollution is negligible. This is commonly achieved in a clean, dry indoor installation
- Class E1: Occasional condensation can occur on the transformer (for example, when the transformer is de-energized). Limited pollution is possible.
- Class E2: Frequent condensation or light pollution or combination of both
- Class E3: Frequent condensation or medium pollution or combination of both
- Class E4: Frequent condensation or heavy pollution or combination of both
- Class F0: There is no special fire risk to consider. Except for the characteristics inherent in the design of the transformer, no special measures are taken to limit flammability. Nevertheless, the emission of toxic substances and opaque smoke shall be minimized.
- Class F1: Transformers subject to a fire hazard. Restricted flammability is required. The emission of toxic substances and opaque smokes shall be minimised.