

Trihal

Dry type cast resin transformer



guaranteed against fire hazards

- Self-extinguishing
- Not sensitive to pollution or condensation
- Optimum safety (E2, C2, F1 certification)

more than a guarantee, a commitment of quality

- Up to 5 years' guarantee by returning the properly completed commissioning check-list
- Minimum maintenance

the ecological solution for HV/LV transformers

- No liquid dielectric
- Product fully recyclable

the solution to the requirements of all sectors of activity

- Industry: food-processing, telecom, automotive, etc.
- Building: offices, shops, health premises, etc.
- Energy and infrastructures: wind turbines, transport, nuclear, etc.





Trihal, the guarantee of a top-of-the-range product

magnetic circuit "made in france transfo"

Cut-out and assembly rigorously checked.

LV winding in F class strips

- Excellent resistance to industrial atmospheric aggressions.
- Outstanding dielectric strength.
- Very good resistance to full short-circuit radial forces.

HV winding for Trihal optimum service life

In addition to the standard strip technology, **france transfo** offers a patented technology, i.e. a continuous winding with linear voltage gradient without interlayer, guaranteeing:

- A very small voltage gradient between turns.
- Enhanced dielectric features.
- A particularly low partial discharge level (guaranteed ≤ 10 pC).

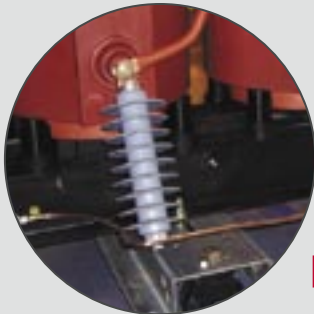
HV cast resin system for exceptional fire behaviour

Vacuum moulding with resin filled with trihydrated alumina and fire retardant (technique developed and patented by **france transfo**) ensures Trihal:

- Excellent dielectric qualities.
- Outstanding protection against industrial atmospheric aggressions.
- Self-extinguishing capacity.

processes control for optimum quality

- Trihal is strictly checked at each stage of its production (SPM: statistical process measurement).
- Processes analysis (manufacturing and design): FMECA.



Examples of optional equipment

The range of Trihal HV/LV distribution transformers extends from 160 to 2500 kVA through to 36 kV.

On consultation, **france transfo** also offers **Trihal HV/ MV power transformers up to 15 MVA and 36 kV.**

To date, more than **65000 Trihal** transformers have been installed in the world since 1983.

Trihal, for your peace of mind

Trihal always complies with the most recent standards

- CEI et NF EN 60076-1 to 5
- CEI et NF EN 60076-11
- CEI 60905

climatic test

Trihal certified C2 (CESI 2007, certificate A7011679):

- Operation, transport, storage up to -25°C.
- Outdoor installation with specific housing.
- Resistance to thermal shocks.

environmental test

Trihal certified E2 (CESI 2007, certificate A7011679):

- Resistance to pollution.
- Insensitive to condensation.
- Resistance to both simultaneously.

fire behaviour test

Trihal certified F1 (CNPP, 2007, certificate 077343):

- Immediate self-extinguishing upon extinction of the flames.
- Free of halogenated products.
- Emits no toxic or opaque smokes.

seismic test

Trihal's mechanical withstand certified (SOPEMEA, 2006, certificate EHL08515):

- Simulation of an earthquake marked 7 on the Richter scale for 4 times 20 seconds.
- Tests C2, E2 and F1 were conducted on a single coil as per standard IEC 60076-11.**

Trihal, the strength of serenity

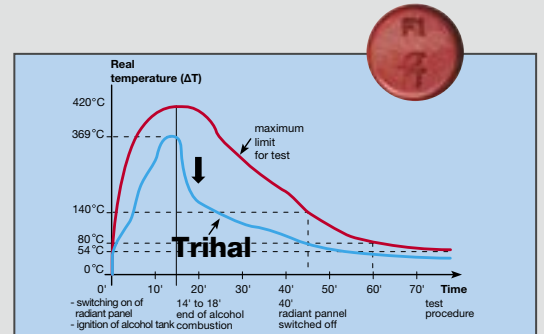
- Easy and quick to install.
- Minimum maintenance.



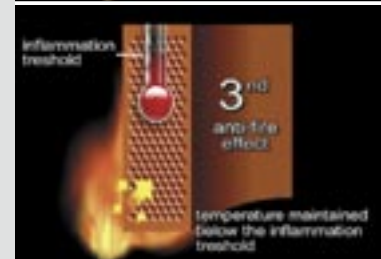
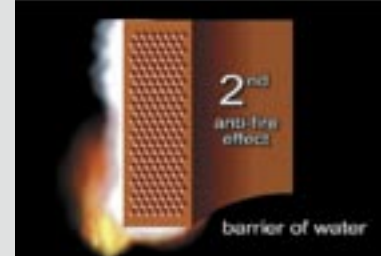
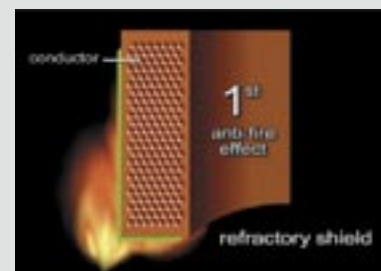
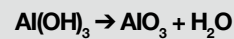
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- 1 IP31 panelling
- 2 BTS
- 3 Fans (AF)
- 4 Damping shoes
- 5 Surge arrester



Trihal's immediate self-extinguishing capacity





recognised experience and international renown

- Created in 1920
- More than **25 years' know-how** in dry type cast resin transformers

a genuine eco-citizen approach

- ISO 9001 (since 1994)
- ISO 14001 (since 2001)

available 7 days a week

- Hot-line 24h/24, 7 days/7
- Commissioning assistance
- Training
- Spare parts department
- Expert analysis

a dynamic web site

- A whole host of varying information
- Online requests (quotation, technical information, etc.)
- Dedicated Pro area

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