

Transorfilter

Insulating oil treatment unit
TF 100-C



Transorfilter

*Highly effective self-contained units for
treatment of insulating oil in transformers
and other electrical equipment.*

Based on 60 years of experience.

Transorfilter treatment units

Transorfilter treatment units give a dielectric strength that satisfies very high demands after only one passage through the filter.

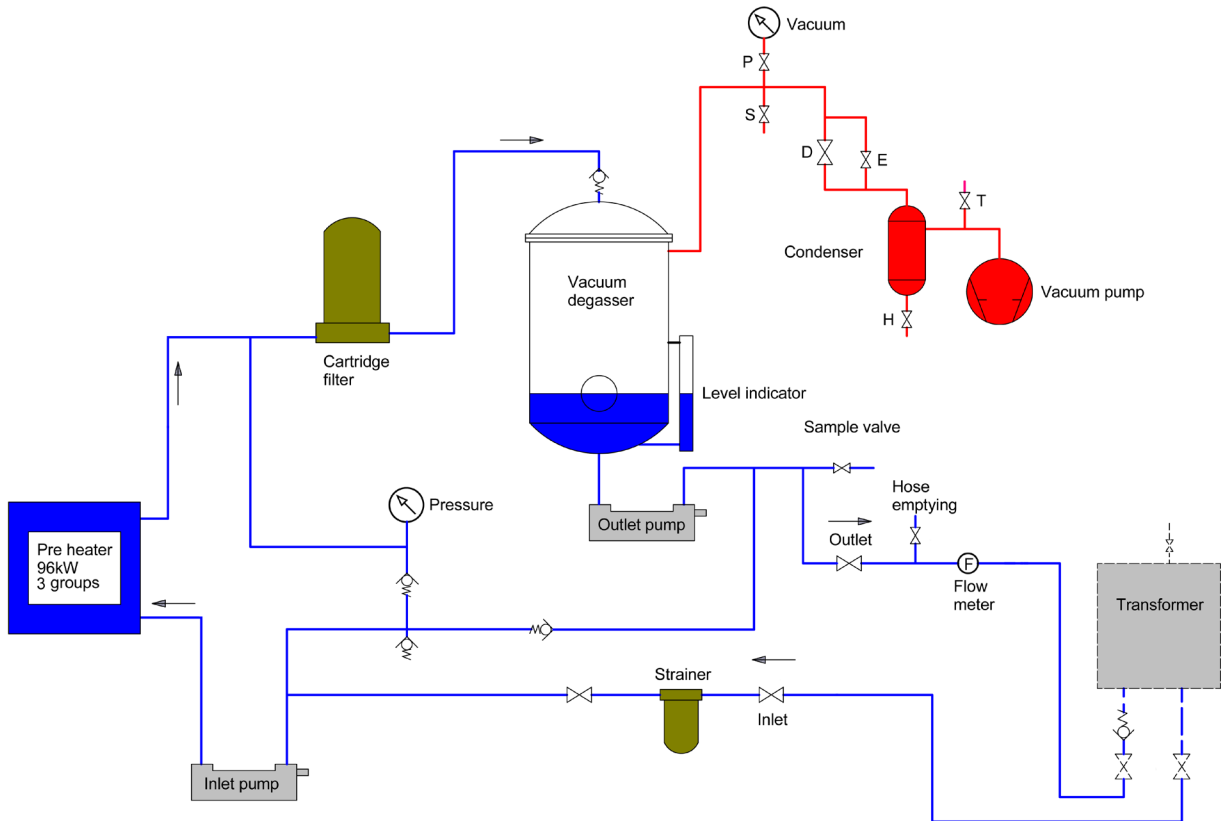
The treatment units are self-contained needing only electrical supply.

- Separate vacuum degasser of a patented very effective design with a large evaporation area.
- Cartridge filter.
- Electric hose reels for the inlet and outlet hoses.
- Air cooled pumps. No water supply needed.
- High capacity oil heaters with low power density (1.6 Watt/cm²) and individually thermostat controlled heating groups.
- All parts are easily accessible thus improving the reliability of service.
- The TF 100-CE is of stationary type without cover plates and TF 100-CL is mobile at site and has cover plates.



TF100-CL, mobile at site with cover plates, doors and castors.

Transorfilter, Operation



Description

The treatment units consist of a filtration part and a degasser part. The oil is first heated and filtered and then dehydrated and degassed. After passing the filter cartridge the oil enters the separate vacuum degasser which consists of a container with a number of plates spreading the oil into a thin layer on a large surface giving a very effective dehydration and degassing. The Transorfilter degasser is patented.

Applications and performance

The treatment units are suitable for most normal applications such as the treatment of oil in transformers in factories and substations. The filter cartridge has high particle removal efficiency. Theoretical filtration capacity of installed filter cartridge is according to ISO 4406, cleanliness code 08/04/01. The water content of the oil is reduced when the oil passes through the vacuum degasser. Gas content of the oil is also reduced in the same process. The vacuum degasser has a working pressure below 5 mbar.

Principle of operation

The oil is drawn in through the inlet valve, then passes a strainer, an inlet pump controlling the rate, an electric heater, the filter, the vacuum degasser with its outlet pump and level regulating sensor and comes out fully cleaned through the outlet valve. By throttling or shutting the outlet valve, the oil will recirculate inside the unit which is utilised while starting up and if the oil is very cold or contains free water. The temperature is controlled by thermostats and can be read on a digital thermometer. The rotary vane vacuum pump is air cooled. The vacuum can be read on the digital vacuum meter. A manometer connected across the filter shows if the pressure becomes too high, meaning that the filter is contaminated.

Basic forms

The standard voltage is 400 V 3-phase, 50 Hz. Other voltage specifications on request.

Transorfilter, Technical data

Measurements	TF 100-C
Length, mm:	2 300
Width, mm:	1 350
Height, mm:	2 330
Weight, kg:	2 000

Technical data	TF 100-C
Capacity, (approximately), L/min (L/h)	100 (6 000)
Heater (divided into 3 individual groups), kW	96 (48+24+24)
Vacuum pump capacity, m ³ /h	280
Vacuum pump final vacuum, mbar	0,1
Motor vacuum pump, kW	5,5
Motors oil pumps (2 pcs), kW/each	3
Inlet hose, dimension x L (inches x m)	1 ½" x 10m
Outlet hose, dimension x L (inches x m)	1 ½" x 10m
Hose reels for inlet (1 ½") and outlet (2") hoses	Included
Painting cover plates	RAL 7035 (light grey)
Painting chassis	RAL 5003 (dark blue)
Suction nozzle for oil barrels	Included
Flow meter	Included (0 – 100 L/min)

The TF100 unit is filled with transformer oil at delivery.

Subject to changes without notice.

