



Product Sheet

APPLICATION

The CJC™ Transformer Oil Unit 3R27/108 is used for drying insulating oil in transformers. The transformer insulation is dried indirectly via the insulating oil. The TFP 3R27/108 is ideal for removal of water, particles and degradation products (online operation).

ADVANTAGES

- Gentle, indirect drying of the cellulose insulation via the insulating oil
- Continuous operation at the transformer without downtime
- Continuously high dielectric strength and operation reliability

FUNCTION

The filter pump draws the humid insulating oil from the transformer and presses it through three filter housings (3-stage filtration).

In the first two filter housings only water is removed from the insulating oil. In the third filter housing are also removed solid particles and oil degradation products from the oil.

Dried and cleaned, the insulating oil is lead back to the transformer. There, it picks up further humidity from the paper insulation generated because of the age-related degradation (depolymerisation). By this means, gradually not only the insulating oil but also the transformer insulation is dried.

During operation the water content is measured by two sensors at the filter inlet and outlet. The difference of the measured values indicates the quantity of removed water.

Saturation of the filter inserts is shown in the SPS display.

FILTER INSERTS

The main components of the CJC™ Filter inserts are molecular sieve and cellulose. The molecular sieve inserts adsorb large amounts of water contained in the oil. The heat-treated cellulose filter insert of the CJC™ Filter insert BEJT not only adsorbs water but removes also particles and oil degradation products. All cellulose-based CJC™ Filter inserts have a filtration degree of 3 µm absolute. This means that 98.7 % of all solid particles larger than 3 µm and approx. 50 % of all solid particles larger than 1 µm are retained in each pass.



The CJC™ Transformer Oil Unit TFP 3R27/108

TECHNICAL DATA

Transformer Oil Unit TFP		3R27/108
Material (filter dome / base)		Steel
Pump flow	L/h	270
Pump type		Gear wheel pump with magnetic coupling
Power consumption	kW	0,18
Motor voltage		AC
Filter inserts	pieces piece	2 x Molecular sieve insert MS 27/108 1 x Filter insert BEJT 27/100
Dirt holding capacity, approx.	kg	4.4
Water holding capacity, approx.	L	12.3
Pressure drop, max.	bar	2
Viscosity range		ISO VG 20
Dry weight, approx.	kg	480
Operating weight, approx.	kg	693



CJC™ Transformer Oil Unit

TFP 3R27/108/S

Product Sheet

COMPONENTS	
Item	Part
1	Filter dome - upper part
1a	Filter dome - lower part
2	Filter base
8	Venting screw
9	Pressure gauge
11	Gear wheel pump
12	Motor
14	Drain valve
15	Pressure switch
16	Distributor block
17	Humidity sensor
18	Sampling point
20	Base plate 1,200 x 850 x 80 mm
21	Swivel castor
23	Control box
24	Humidity signal transducer
30	Leakage sensor
43	Frame for weatherproof cover
A	Suction pipe: Flange DIN 2566, DN20
B	Filter outlet: Flange DIN 2566, DN20

