TECHNICAL DATA n° F1331GL 00

Transfix groupe Cahors

"TOTEM" Transformer with built-in Inductance + "TPC" 3 phase protect. & trip. Device

phase number: **Three** | insulating liquid: **Oil**

INSTALLATION

Operation	**Step down**	type				installation	**under enclosure**
cooling	**ONAN**	max. sea level	**1 000 m**				
air ambient temperature	**-40 to +40 °C**	normative referencee	**IEC 60076-1 to 5**	**IEC 60076-6**		**IEC 60076-13**	

ELECTRICAL CHARACTERISTIC

rated power: **200 kVA**

sound power level: **57 dBA**

coordination diagram: **4080378**

frequency	**50 Hz**		
temperature rise	**60 K**		
no load losses	**430 W**	**+5%**	
load losses at 75°C	**2 580 W**	**+5%**	
total losses	**3 010 W**	**+5%**	

vector group: **ZN(d)yn11**

winding: **65 K**

	Primary	Secondary
voltage	**22 000 V**	**240 V**
Off-load tap changing (%)	**+2x2.5% -4x2.5%**	
Off-load tap changing (V)	**+2x550V -4x550V (+-0.4 %)**	
vector group	**ZN**	**yn**
Highest voltage for hte equipement	**24 kV**	**1.1 kV**
Power frequency whistand voltage	**50 kV**	**6 kV**
Rated lightning impulse voltage	**125 kV**	
Short-circuit impedance	**4.0 % (+-10%)**	
rated current	**5.25 A**	**481 A**
Winding conductor material	**Al**	**Al**

INDUCTANCE WINDING

voltage = **12 702 V** | Ix (inductive) = **15 A**

TIME FOR EARTH FAULT CURRENT

time = **300 s**

The criterion is a max. temperature rise of the windings 100K and oil 90 K (duration > 10s and < 2 hours), as per § 11.5 of the IEC 60289.

MAX. ACTIVE CURRENT

Ia = **< 2,5% Ix**

Linearity variation of tne total zero-sequence impedance < 2%
Linearity variation of the zero-sequence iductance alone < 1,5%

Steps % : 0,2 - 0,5 - 1,0 - 5 - 10 - 25 - 50 - 75 - 100 - 110

efficiency	Power factor = 1	Power factor = 0.8
Load =100%	**98.52%**	**98.15%**
75%	**98.76%**	**98.46%**
50%	**98.94%**	**98.67%**
25%	**98.83%**	**98.54%**

voltage drop	Power factor = 1	Power factor = 0.8
Load =100%	**1.36 %**	**3.33 %**
80%	**1.08 %**	**2.66 %**

DIMENSIONS

Drawing **4079907**

TANK PROTECTION

Sandblasting, zinc plating 60µ; finishing: polyester powder 40µ Color **RAL 7033**

TESTS

Routine tests systematically performed on each transformer and object of a certificate :

- Voltage ratio measurement
- Winding resistance measurement
- Short duration power withstand voltage on each winding
- Short-circuit characteristics measurement .
- Z_0 (earthing reactor + transformer)
- Max active current I_R
- Load losses, Short-circuit impedance
- No-load losses and current measurement
- Induced voltage withstand test at twice the rated voltage during 30 seconds at 200Hz

Type test :

- Linearity variation of zero-sequence impedance + inductance

Societe Nouvelle TRANSFIX Toulon

	Date	Author	Checked by
	19/04/2011	**DS**	**GM**