SOME APPLICATIONS FOR TRANSFORMERS

UP TO 17MVA

Thermic power stations - Hydraulic power stations - Photovoltaic power stations
Energy supply to static frequency converter - Rail ways – Marine – Electrolysis - Oil production
Feeding - Interconnection autotransformer - Motor starting autotransformer

THERMIC POWER STATIONS

The transformer steps up the generator voltage (400V or 690V for low power stations, 6.3kV or 11kV for higher power stations) in order to adapt it to the network voltage (generally 20kV)

12500kVA

5000kVA

Our references:
GAY
WARTSILA NSD
IMM
LITWIN
CLEMESSY

HYDRAULIC POWER STATIONS

The transformer steps up the generator voltage in order to fit the network one.

8000 kVA

Our references :
ALSTOM
EDF
GLASSEY / FMA
HYDROWATT

PHOTOVOLTAIC POWER STATIONS

The transformer steps up the low voltage at the converter output to network voltage

Our references :

CONVERTEAM

ENERGY SUPPLY TO SFC (STATIC FREQUENCY CONVERTER)

The transformer steps down the network voltage to supply a SFC which runs motors. The design of the transformer must take into account the harmonics caused by the converter. Several schemes allow to reduce the value of the harmonics which are sent back to the network (multi-winding transformers, special vector groups,…)

Metals

Feed of motors for rolling mills
Feed of furnaces

930 kVA

Our references :

ANSALDO
ARCELORMITTAL
CONVERTEAM
Otto JUNKER
ABP

5000 kVA

Our references:

ABB
ROCKWELL
SIEMENS
LAFARGE CIMENTS
SOCOCIM

Cement plants

Crusher feeding
Fan feeding

Mines
Crusher feeding

Our references :
ALSTOM
SAIT

Electric power stations
The generator can work as a motor. It can be used to start a gas turbine or only to reach its synchronism speed to couple it to the network (pumping in reversible hydraulic stations).

10000 kVA

Our references :
TRACTEBEL
ALSTOM
CONVERTEAM
GENERAL ELECTRIC

22000 kVA

RAIL WAYS
The transformer supplies a converter. Over load cycles shall be added to its rated power running, generally 1.5 times rated current during 2 hours, 3 times rated current during 1 minute.

5500 kVA

Our references :
ALSTOM / SANTIAGO subway
ALSTOM/ ATHENES subway
RATP
ONCF Maroc

MARINE

The transformer is integrated in the system: diesel engine – generator – transformer – SFC – motor. This transformer must be certified by a classification society such as BV, RINA, Lloyd's, DNV…

13700 kVA

Our references :

CONVERTEAM
SAM Electronics

- AKERS YARDS
- FINCANTIERI
- MEYER WERFT

14100 kVA

ELECTROLYSIS

The transformer steps down the network to a low voltage in order to have a high direct current.

Our references :

ALSTOM
SCHNEIDER ELECTRIC
BERNARD BONNEFOND

7060 kVA / 2x5000 kVA

OIL PRODUCTION

Oil pumping

The transformer, supplied by a SFC, allows to regulate the voltage at the input of the pump depending on the oil well parameters.

Our references:

LEROY SOMER
TOTAL

500 kVA

Offshore platform and FPSO

The transformer is used for the electric supply for platform auxiliaries or pumps. It must be specifically protected against corrosion and can also be designed to be settled in hazardous areas.

1000 kVA

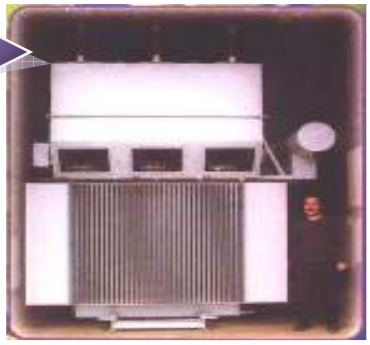
Our references :

TOTAL
TECHNIP
HYUNDAI

2000 kVA

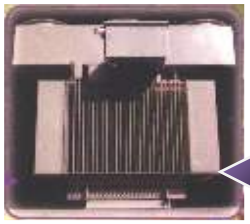
FEEDING
The transformer supplies auxiliaries from the main bus-bar of the power station. It must be adapted to high short-circuit power.

3300 kVA



Our references:

GENERAL ELECTRIC



1200 kVA

INTERCONNECTION AUTOTRANSFORMER
The autotransformer (cheaper than a transformer !) allows to connect networks with different voltages.

Our references :

EDF
RENAULT
CONVERTEAM Motors

MOTOR STARTING AUTOTRANSFORMER
The autotransformer allows to supply a motor under reduced voltage when starting it while reducing the absorbed current on the network

Our references :

CONVERTEAM Motors
ANSALDO
ABB

15000 kVA Intermittent duty