



TTO

High efficiency small and medium liquid immersed transformers with low losses design

ELECTRICAL DATA & DESIGN FEATURES

Rating Power:

Up to 30 MVA

Service:

- Network distribution
- Network transmission
- Solar
- Windmill
- Mining
- Off-Shore and On-Shore
- Oil & Gas
- Hydropower
- Step-up / Step-down
- Low temperatures installation
- High vibration conditions
- Mobile substations
- Rectifier multiple pulses
- Excitation
- Crane duty
- Traction
- Testing laboratories
- Magnetization equipment

Construction Type:

- Single, three phase design or Scott design
- Concentric structure, single or double tier
- Construction with or w/o intermediate joke

Cooling:

(K)ONAN - (K)ONAF - (K)OFAF - (K)ODAF - (K)OFWF

Frequency:

50, 60, 25, 16 2/3 Hz (fix or variable)

Standards:

Any Standard applicable

Primary Winding:

Single or multi-primary voltage design

Max Working Voltage (U_m):

Up to 72.5 kV

Voltage Regulation:

- No Load Tap Changer (NLTC)
- On Load Tap Changer (OLTC)

Secondary Winding:

Single or multi-secondary windings design

Insulating Level:

Up to L.I. 350 kV

Windingconductors:

Cu or Al

Ambient Temperature (MIN/MAX):

From (minus)-60°C to MAX required design

Altitude of installation:

Up to 4500 m

Installation:

- Arctic areas
- Desert conditions
- Off-Shore/Marine
- Seismic areas
- Heavy duty (Steel & metal process)
- Special environment (Painting process)
- Low noise areas

Painting Cycles:

Available Know-how in a wide range of environment conditions

Tank Execution:

- Corrugated waves standard or reinforced
- Detachable radiator type

Available Insulating Liquid:

Mineral oil, Silicon fluid, Synthetic or Vegetal Ester fluid (Bio)

ACCESSORIES ON REQUEST

A wide of state of the art accessories available for:

- Life safety equipments
- Fire detection
- Power quality integration
- Auxiliary boxes
- Liquid containerization (applicable for small size TTO)
- Life cycle monitor unit device
- Bushing cable boxes and cable glands
- Special bushings and cable termination
- Any other special needs if applicable

SPECIAL TECHNICAL REMARKS

- Suitable design with reinforced tank according to specific service conditions.
- Latest design and production technology checked by a fully equipped test lab and validated by a wide range of special and type test certification.

ALL KIND OF DESIGN IMPLEMENTATION AVAILABLE ON REQUEST (if applicable)



Rev.00 – September 15th, 2013