

## SHUNT REACTOR



Oil immersed shunt reactors Used in parallel with the power transmission system to minimize the reactive/ capacitive effects inherent to the transmission lines due to their long lengths.



### DESIGN FEATURES

- Shunt reactors control voltage and compensate reactive power, while series reactors change load flow and limit short-circuit currents.
- Largely reduce non-load losses by adopting high quality silicon steel core.
- Optimized tank designs , reducing the overall shipping dimensions and weight. easier installation.
- Low noise levels.
- Compact, robust design; stable performance over service life.
- Surface treatment C3, C4 , C5.
- Fluid options available, Mineral Oil - Natural Ester Fluid (FR3 fluid)- Silicone etc.
- All transformers can be designed, customized, and supplied with a wide variety of accessories, as required.



### TECHNICAL CHARACTERISTICS

#### Main Specification

Transformer Type	Oil immersed
Rated capacity	Up to 20MVar
Rated voltage	Up to 36kV
Frequency	50 or 60Hz
Phase	Single phase and three phase
Winding material	Copper or Aluminum
Tap changer	Off-load or on-load
Vector group	Dyn11, YNd1d1, Yyn0, YNd11 etc.
Cooling	ONAN , ONAF, KNAN, KNAF etc.
Ambient temperature	-45° C + 60° C
Insulation class	A, E, B
Dielectric fluids	Mineral oil , Silicone, FR3 oil , MIDEL 7131
Standard	IEC, AS, EN, IEEE/ANSI, GOST



### LINE CHOKE(VPI REACTORS)

- Line chokes provide input impedance which helps reduce harmonic distortion and increase VFD component lifetimes. reactors help reduce dV/dT switching peaks and increase motor life.
- By use of liquid cooling, the temperatures in the components can be reduced greatly-ie less stress for the insulation materials and longer life.
- Reduced increase of the coolant temperature and lower required flow rates.
- Water cooled reactor for wind frequency converter.
- Three phase line choke is used for converter in wind application. On the one hand the choke has to smooth the current and on the other hand the choke is part of the line side filter to meet the power quality.
- Maintenance-free (non-hygroscopic).

