saitech

ELECTRIC INTEGRATED INC.

500 kVA UP TO 5000 kVA
CABINET TYPE
POWER TRANSFORMER

TECHNICAL SPECIFICATIONS

General Specification		
Make & Type		iPOWER Electric Company
		3-ph, Cabinet Type Power Transformer
Reference Standard		IEC:60076
Rated Power		500 kVA to 5000 kVA
Rated Voltage	[H.V. Winding]	2.4 kV to 40.5 kV
	[L.V. Winding]	220V / 380V / 400V/ 440V
Voltage Ratio		As per rating
Frequency		60
Type of Cooling		ONAN/ONAF
Rated Power	[H.V. Winding]	As per Rating
w.r.t. cooling	[L.V. Winding]	As per Rating
Rated Current	[H.V. Winding]	As per Rating
w.r.t. cooling	[L.V. Winding]	As per Rating
Temperature rise over ambient of 45°C		
a) Winding	[By Resistance]	55 °C
b) Top Oil	[By Thermometer]	50 °C
Winding Connection	[H.V. Winding]	Delta / Star
	[L.V. Winding]	Delta / Star
	[Vector Group]	Dyn11 /Yd11 /Dd0 /Dy1 / Yd5 /Yy6 /Dd6 /Yd1 / Dy5
Technical Characteristics		
No Load Loss at rated Voltage and Frequency		As per Rating
Load Loss at rated current at 75°C at 100% Load		As per Rating
Impedance at rated voltage and frequency		6.25 % (IEC Tol)
Tolerance of Impedance & Losses		As Per IEC: 60076
Tapping Detail	Range Type	+5% to -15% with OLTC
	Taping Steps	5 of 1. 25%
No Load Current as % of full load current		≤ 2%
Regulation in % of no load voltage		
a) At 1.0 p.f	100% Load	1.256 %
b) At 0.8 p.f. (lg)	100% Load	4.640 %
Efficiency in percentage at 75°C		
a) At 1.0 p.f.	1.00 Load	98.814
b) At 1.0 p.f.	0.75 Load	99.032
c) At 1.0 p.f.	0.50 Load	99.206
d) At 1.0 p.f.	0.25 Load	99.206
Basic Insulation Level withstand		
a) H.V. Winding	[Lightning Impulse]	95 kVp
	[Power Frequency]	38 kVrms
b) L.V. Winding	[Lightning Impulse]	- kVp
	[Power Frequency]	3 kVrms
Overall Dimensions		
Approx. Mass	[Core & Winding]	As per Rating
	[Tank & Fittings]	As per Rating
	[Oil]	As per Rating
	[Total]	As per Rating
	[Volume of Oil]	As per Rating
H.V. Terminal Arrangement		Cable Box
L.V. Terminal Arrangement		Busduct

List of Fittings and Accessories
a) NLTC
b) Rating & Ter. Marking Plate/ Monogram etc.
c) Earthing Terminals
d) Lifting Lugs for Transformer Tank & Cover
e) Air release plugs
f) Thermometer pocket (without Thermometer)
g) Valves (Filter/ Drain)
h) Plain oil level Indicator
i) Pressure relief device with trip contact
j) Weather proof Marshalling Box
k) Silica gel Breather
l) Bi directional Roller
m) Detachable Radiators
n) Magnetic oil level gauge
o) Elbow terminals are included, arresters are included