

Customer Name	First Line
Place	
Design Ref: 100k-64212	KVA: 100



Frame: 100/203/221	Core Factor	Core Type: PRIME	Grade: NipM4
Area:	Weight: 90kg	Flux Density: 1.733T	Frequency: 50Hz
Volts/Turn: 5.209	Temperature: 55/50	Cooling: ONAN	Vector Group: Dyn11

Winding Type	HELICAL	HELICAL
Voltage (V)	433	11000
Current (A)	133.34	3.04
No. of Limbs	3	3
Turns/Limb	48	2112
Coils / Discs	1	1
Turns/Coil Disc	48	2112
No. of Layers	4	16.63
Turns/Layer	12	127
Insu. b/w layer (mm)	0.1	0.21
Oil Duct (mm)	2 x 3 oil	2 x 3 oil
Conductor (mm)	13.8 X 2.4P 0.3	Ø 1.0P 0.21
Parallels	1	1
Cond Cross Sec (mm)	32.58	0.79
Current Dens. (A/mm²)	4.094	3.849
Radial Thick. (mm)	19	29
Wire Length (m)	57	3720
Resist. @ 75°C	0.012115	33.064355
Resist. @ 26°C	0.010201	27.838054
Wt – Bare/Ins. (kg)	16.2 / 16.5	25.9 / 27.3
Stray Loss (%)	0.48	0.0862
Load Loss (W)	655	925
Gradient (°C)	11.4	12.1
Transpose (mm)	0	0
Wdg Length (mm)	184	155
End Clearance (mm)	19	48
Window Ht. (mm)	203	203
Ampere Turns (A)	6401	6401
Terminals	0	0

Coil Dimensions:
Core Dia: 100
Core-LV gap:2
LV ID: 104
LV Rad. Thick.: 19
LV OD: 142
LV-HV gap: 7
HV ID: 156
HV Rad. Thick.: 29
HV OD: 142
HV-HV gap: 7
Cen. Dist.: 221
Active Part Size:656 L X 214 W X 403 H mm

Impedance:
Ls: 161.29,54.75,0.892-->180.819
"' : 2 2 . 3 7 2 5 - - > 2 2 . 3 7 2 5
D s : L v O d + " + (h 2 - h 1) / 3 ! ' D s
(H): V/T:
e x = (1 . 2 4 * (H) * "' * D s * 1 0 ^ - 4) / (V / T * I s)
er:
ex:
eZ:

Insulation Clearances:
Insu. Core-LV:2
Insu. LV-HV:7
Insu. HV-HV:7

Tank Clearances:
Yoke- Cover: 60
Wdg-Tank: 25
Wdg-Leads: 20

Side sheet: 3.15	Bot. Sheet: 5	Lid Sheet: 5	Frame: 6
Tank Size	Length: 710	Width: 285	Height: 465
Radiator	Length: 500	Width: 300	Sections:
Conservator	Dia: 155	Length: 460	Volume: 8.6

Generals		Performance
Weights	Cost (Total:)	
Core & Wdg: 171	Oil: 86	No Load Loss: 165
Tank & Fitting: 658	Cond: 46	Load Loss: 1665
Oil: 199	Core: 90	Tank Stray Loss: 85
Total: 1028	Insulation: 11	Resistance: 1.68
Over-all Dimensions: 2.00L x 0.69B x 1.30H	Steel: 170	Reactance: 2.85
	Radiators: 39	Impedance: 3.31
		No Load Current (%):

Tapping:	
Taps:	8 Taps, +5% to -15% @ 2.5%, HV, 30 Turns/Step ! OLTC
Turns:	0 – HV Tapping turns.

Date: _____

Designed By: _____

Verified By: _____