



THREE-PHASE SYNCHRONOUS HIGH VOLTAGE GENERATOR

TH468GL

Datasheet For 4 Poles - 50Hz @ 1500rpm

Ambient Temperature	40°C	Excitation	Brushless	Short Circuit Current Capacity (with PMG)	≥300%
Temperature Rise	125K	Winding Pitch	5 / 6	Method of Cooling	IC01
Service Duty	Continuous	Power Factor	0.8	Direction of Rotation	CW
Phase	3	Insulation Class	Class H	Maximum Over-speed	1800 rpm
Pole	4	Waveform : TIF	<50	Degree of Protection	IP23
Voltage Regulation	+/- 0.5%	Waveform : THF	<2%	Radio interference	Class B Group 1
AVR Model	AVC125-10A1	Altitude	≤1000 m.a.s.l	Total Harmonic Content	< 2% - At no load

Electrical and Mechanical Characteristic

Frequency	Hz	50
Round per minute	rpm	1500
Voltage (Y Connection) - Star	V	6300
Rated power at Class H (125K) temperature rise	kVA	1400.0
	kW	1120
Rated current	A	128.3
Efficiency at Class H (P.F.=0.8)	100%	95.6
	75%	95.7
	50%	95.3
Efficiency at Class H (P.F.=1.0)	100%	96.6
	75%	96.7
	50%	96.3

Short-circuit ratio	Kcc	0.5700
Direct axis synchronous reactance unsaturated	Xd	2.1070
Quadrature axis synchronous reactance unsaturated	Xq	1.0810
Direct axis transient reactance saturated	X'd	0.1610
Direct axis subtransient reactance saturated	X''d	0.1480
Quadrature axis subtransient reactance saturated	X''q	0.1620
Zero sequence reactance unsaturated	X0	0.0780
Leakage reactance	X _L	0.0960
Negative sequence reactance saturated	X2	0.1550

Open circuit time constant (sec.)	T'do	3.3010
Short-circuit transient time constant (sec.)	T'd	0.2780
Subtransient time constant (sec.)	T''d	0.0017
Armature time constant (sec.)	T _a	0.0360
No load excitation current	io(A)	1.9
Full load excitation current	ic(A)	4.6
Full load excitation voltage	uc(V)	48
Stator Winding Resistance (20°C)	ohm	0.32
Rotor Winding Resistance (20°C)	ohm	0.8476
Exciter Stator Resistance (20°C)	ohm	7.236
Exciter Rotor Phase resistance	ohm	0.0336
Cooling air requirement	m ³ /sec	1.25

Configuration	Single Bearing
Type of Construction	B2 - SAE
Inertia (J) [kgm2]	45.2
Total Weight	3750
Drive end bearing / Lubrication	Not supply
Non-drive end bearing / Lubrication	6322 C3 / With grease nipple
Recovery time - sec.	1.5
Stator winding	DOUBLE LAYER LAP
Number of Terminal	6
Rotor	with damping cage
Overload	110% rated load for 1 hour

STANDARD COMPLIANCE - IEC 60034-1; CEI 2-3; BS 4999-5000; VDE 0530; NF 51-100,111; OVE M-10, NEMA MG 1.22.

Data and Technical Specification are subject to change in order to update or improve the products, without prior notice