



# GENERATOR TYPE HCP 34-1SN/24

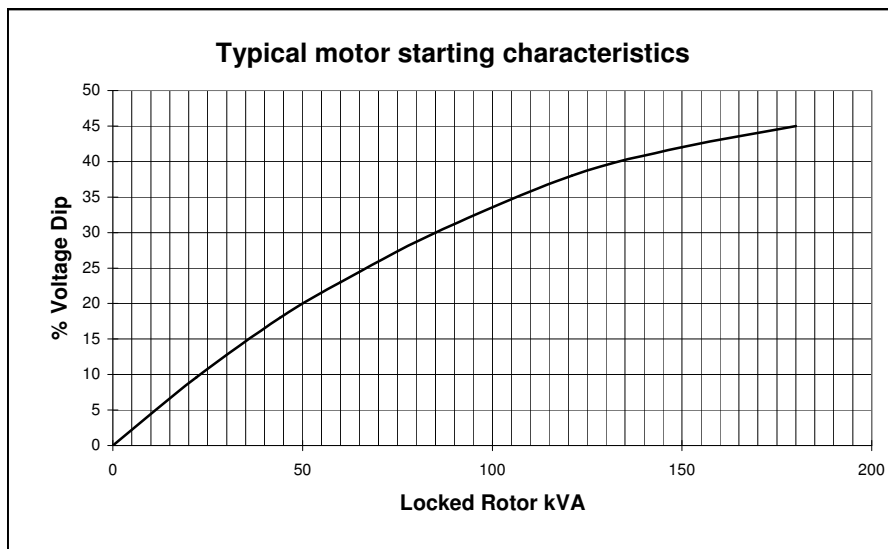
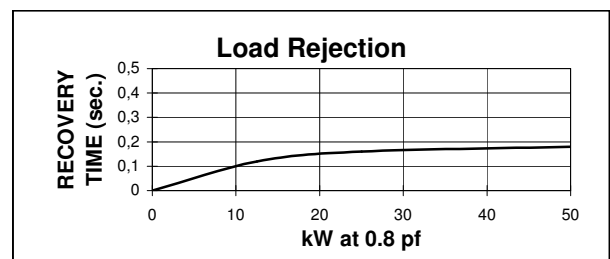
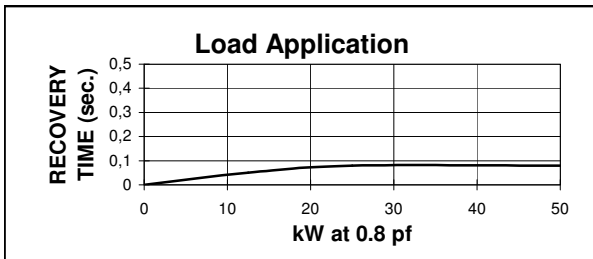
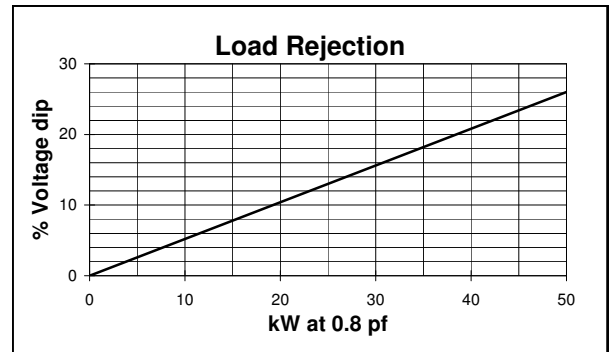
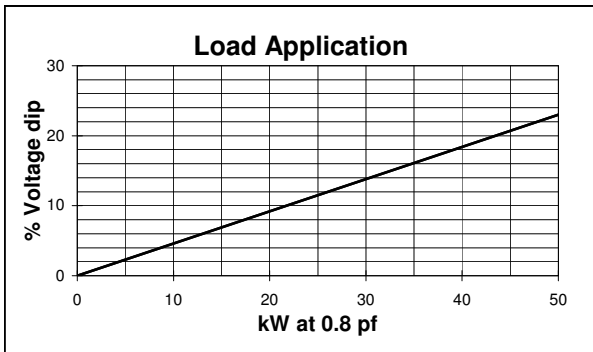
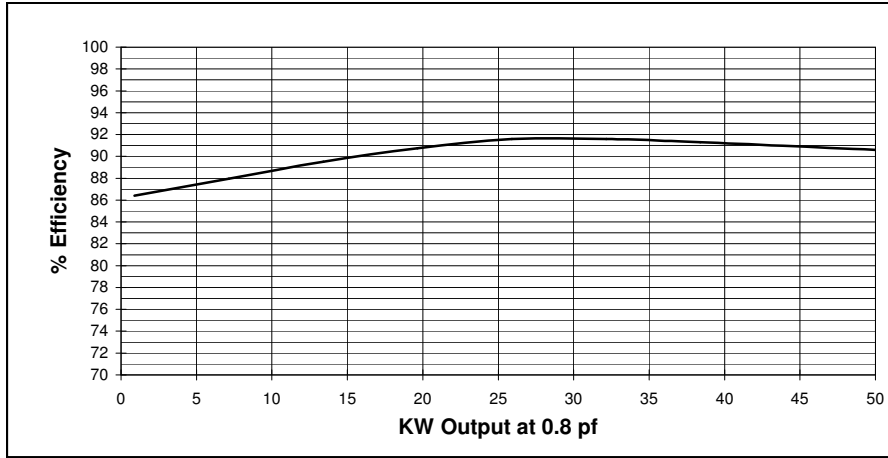
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Electrical Characteristics			
Frequency	Hz		400
Voltage (star)	V		208
Rated power class H (125 °C)	kVA		60
	kW		48
Rated power class F (105 °C)	kVA		55
	kW		44
Rated power class B (80 °C)	kVA		48
	kW		38,4
Regulation with	UVR6/1-H400B	±1% with any power factor and speed variations between -5% +30%	
Insulation class		H	
Execution		Brushless	
Stator winding		12 ends	
Submittal Data : 208V, 48KVA, 2000RPM, 400Hz, 3 Phase			MIL-STD-705B
Efficiencies	4/4	%	91,3
(see graph. for details)	3/4	%	91,6
	2/4	%	89,5
	1/4	%	86,4
Reactances	Xd	p.u.	1,38
	Xd'	p.u.	0,16
	Xd''	p.u.	0,10
	Xq	p.u.	1,20
	Xq'	p.u.	1,20
	Xq''	p.u.	0,27
	X <sub>2</sub>	p.u.	0,16
	X <sub>0</sub>	p.u.	0,05
Short Circuit Ratio	Kcc		0,40
Time Constants	Td'	sec.	0,05
	Td''	sec.	0,1
	Tdo'	sec.	1,30
	Tα	sec.	0,85
Short Circuit Current Capacity		%	>300
Excitation at no load		Amp.	0,6
Excitation at full load		Amp.	2,4
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load
Overload per 20 sec.		%	300
Stator Winding Resistance (20 °C)		Ω	0,0118
Rotor Winding Resistance (20 °C)		Ω	6,449
Exciter Resistance (20 °C)		Ω	Rotor : 0,65 Stator : 15,28
Heat dissipation		W	3659
Telephone Interference			FHT < 2% ; TIF < 100
Radio interference			EN61000-6-3 EN61000-6-1. For others standards apply to factory
Waveform Distors.(THD) at f. load		% LL	2,1
Individual harmonic max. at f. load		% LL	1,2
Insulation resistance		MΩ	> 2
High Potential Test		Volts	Main Stator : 2000 Main Rotor : 1500
		Volts	Exciter Stator : 1500 Exciter Rotor : 1500
Phase sequence			1 - 5 - 9
Mechanical characteristics			
Protection			IP 21 (other protection on request)
DE bearing			6314.2RS
NDE bearing			6311.2RS
Weight of complete generator		kg	346
Synchronous Speed		rpm	2000
Maximun overspeed		rpm	2500
Cooling air requirement		m <sup>3</sup> /min	25,5
Noise level at 1m/7m		dB(A)	85 / 71

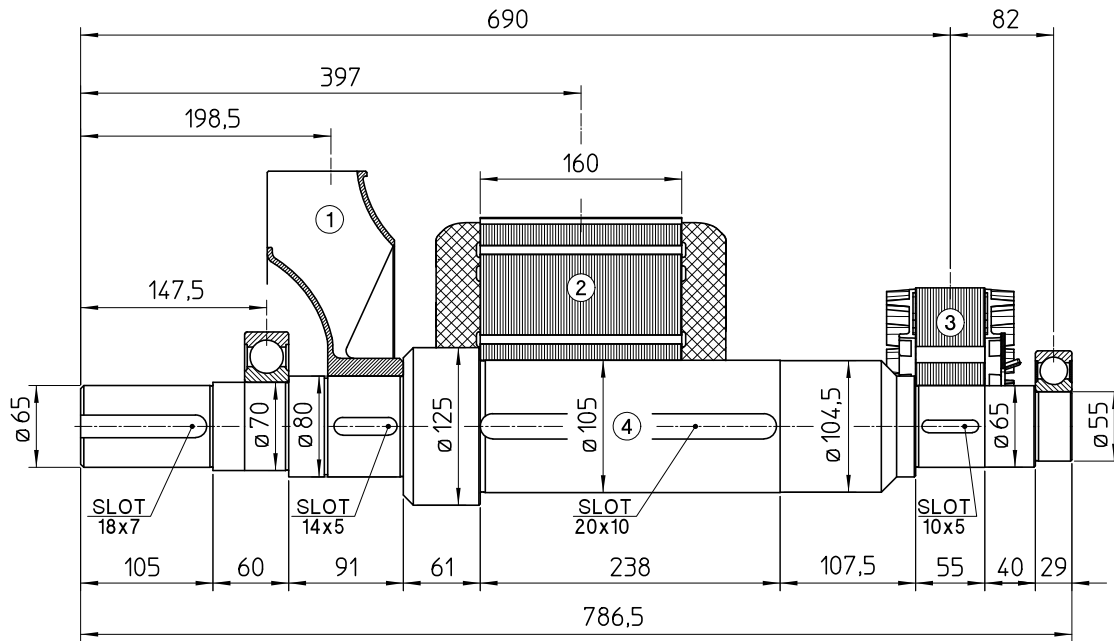
All technical data are to be considered as a reference and they can be modified without any notice.

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**208V - 400Hz**

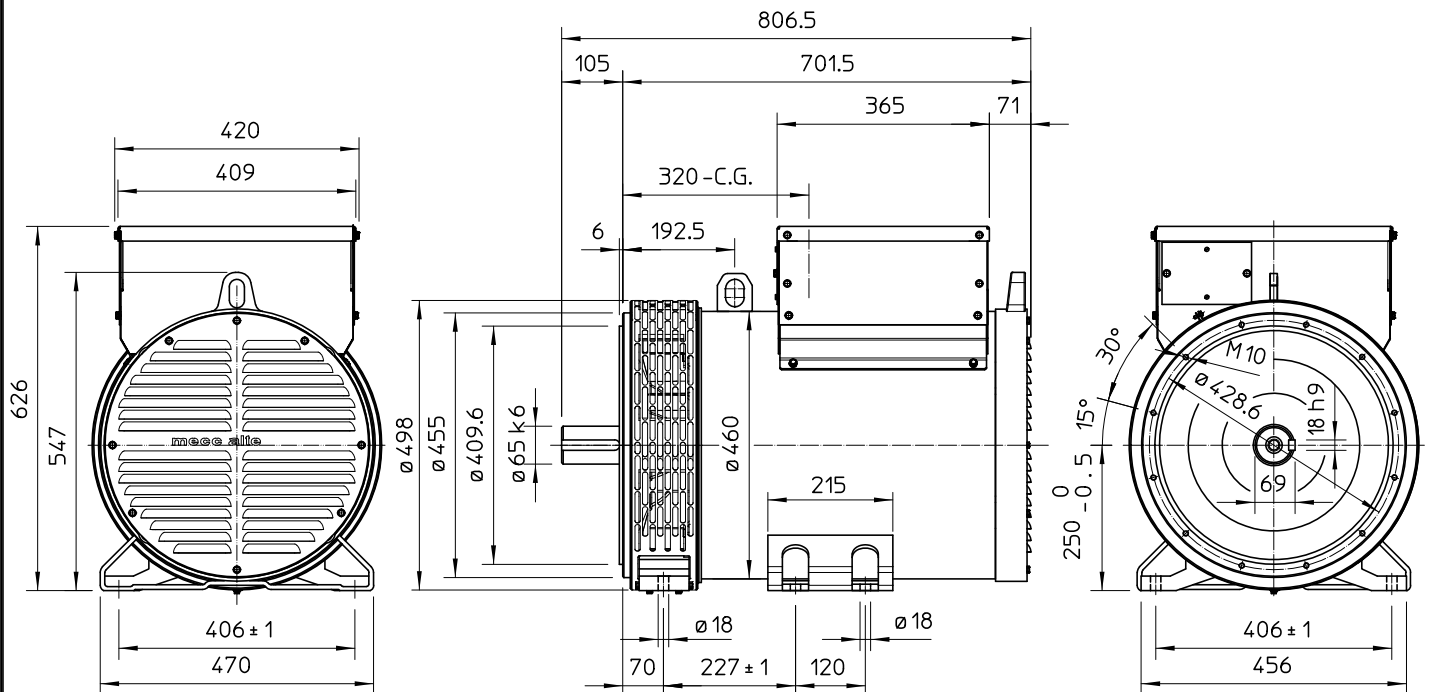


### TWO BEARING MOMENTS OF INERTIA

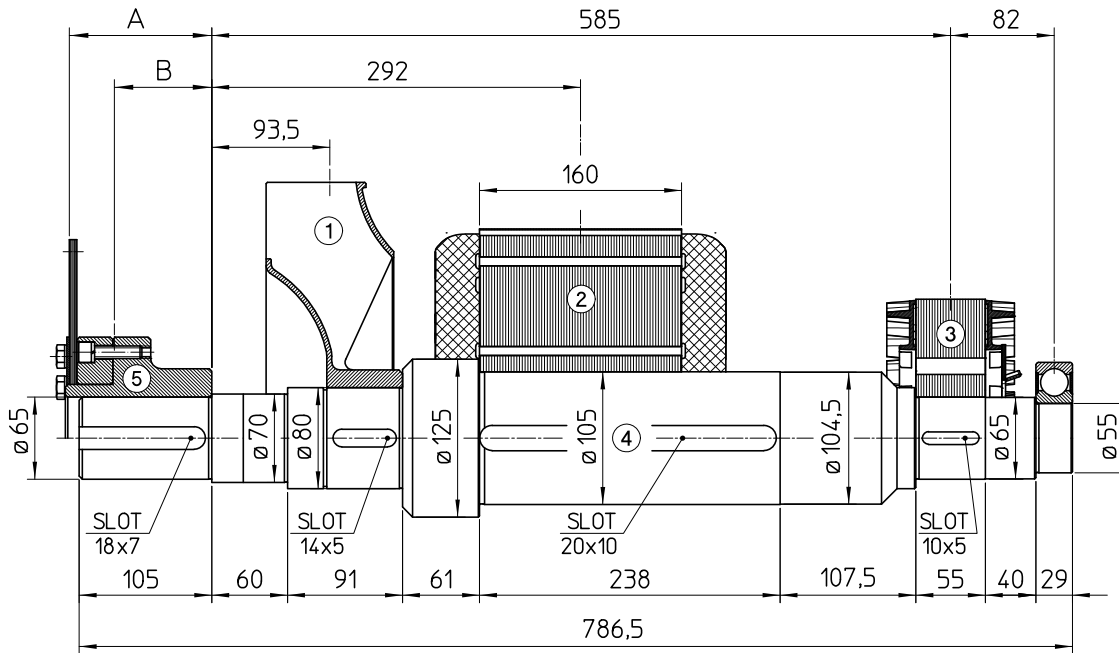


POS.	COMPONENT	WEIGHT (kg)	J (kgm <sup>2</sup> )
1	FAN	3.6	0.0621
2	MAIN ROTOR	84.7	1.2912
3	EX. ROTOR	14.5	0.0874
4	SHAFT	38.8	0.0476
TOTAL		141.6	1.4883

### TWO BEARING DIMENSIONS



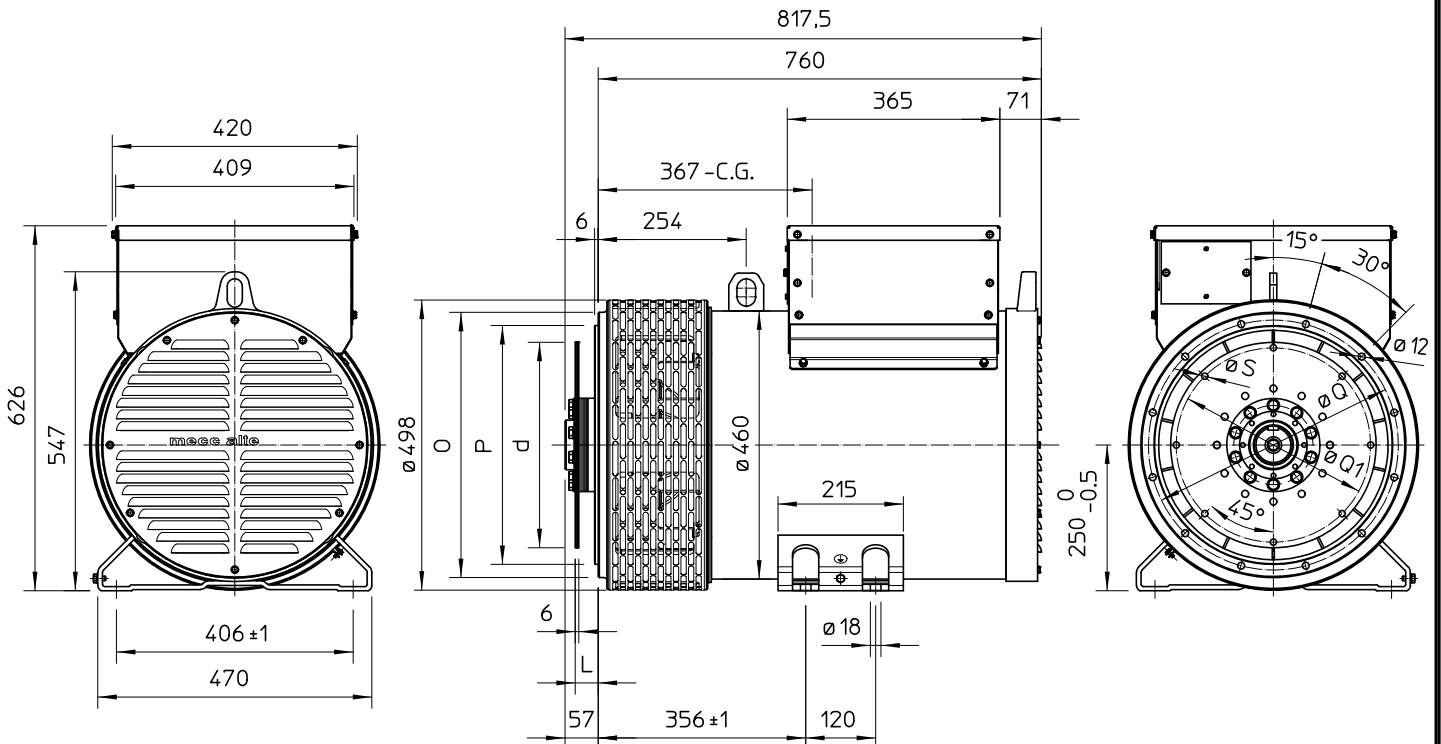
### SINGLE BEARING MOMENTS OF INERTIA



POS.	COMPONENT	WEIGHT (kg)	J (kgm <sup>2</sup> )
1	FAN	3.6	0.0621
2	MAIN ROTOR	84.7	1.2912
3	EX. ROTOR	14.5	0.0874
4	SHAFT	38.8	0.0476
TOTAL		141.6	1.4883

POS.	COMPONENT	SAE N°	A	B	WEIGHT (kg)	J (kgm <sup>2</sup> )
5	SHAFTS COUPLING FLEX PLATE	10	112.8	77.2	13.5	0.0770
		11 1/2	98.4	71.5	12.4	0.0956
		14	84.4	68.6	14.8	0.2360

### SINGLE BEARING DIMENSIONS



SAE N°	FLANGE		
	O	P	Q
3	451	409.6	428.6
2	489	447.7	466.7
1	552	511.2	530.2

SAE N°	DISC COUPLING			
	L	d	Q1	S
10	53.8	314.32	295.27	11
11 1/2	39.6	352.42	333.37	11
14	25.4	466.72	438.15	14

C.G.= GRAVITY CENTER