



# GENERATOR TYPE HCO 38-3L/24

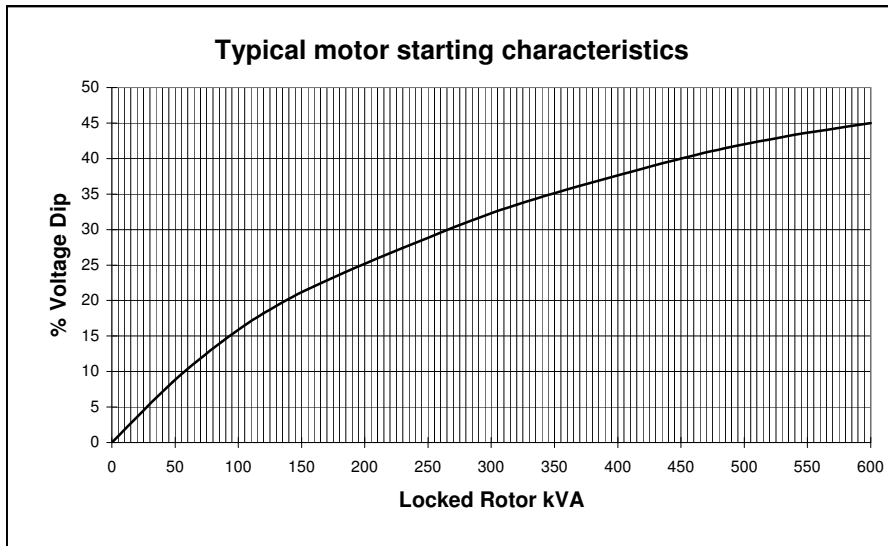
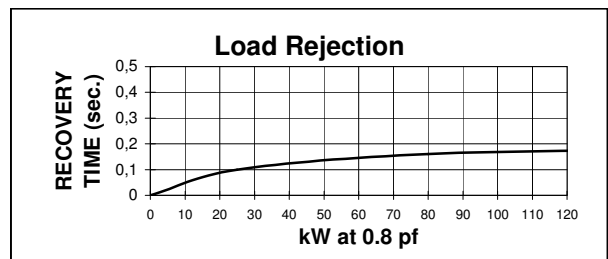
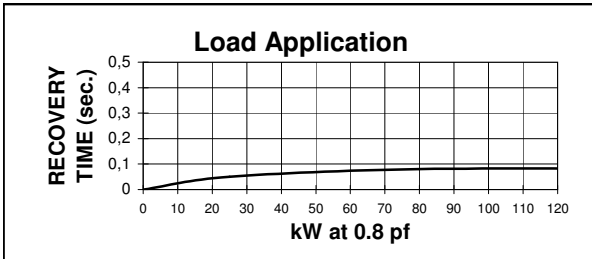
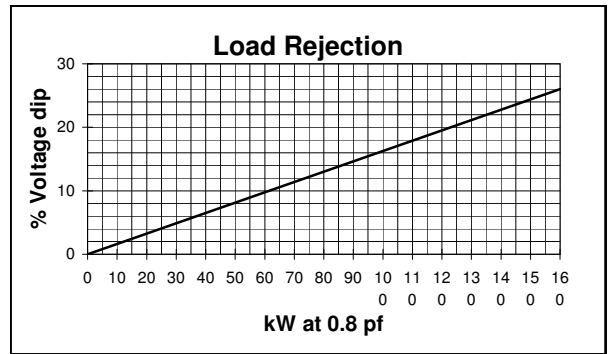
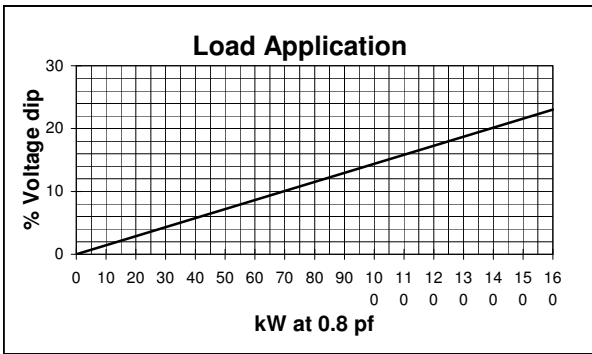
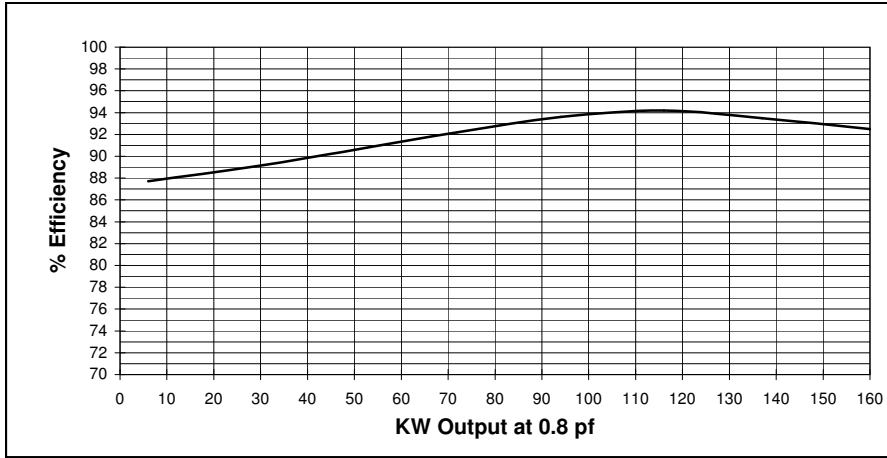
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<b>Electrical Characteristics</b>			
Frequency	Hz		400
Voltage (star)	V		208
Rated power class H (125 °C)	kVA		200
	kW		160
Rated power class F (105 °C)	kVA		180
	kW		144
Rated power class B (80 °C)	kVA		160
	kW		128
Regulation with	UVR6/1-H400B	±1% with any power factor and speed variations between -5% +30%	
Insulation class		H	
Execution		Brushless	
Stator winding		12 ends	
<b>Submittal Data : 208V, 160KVA, 2000RPM, 400Hz, 3 Phase</b>			<b>MIL-STD-705B</b>
Efficiencies	4/4	%	93,4
(see graph. for details)	3/4	%	93,6
	2/4	%	90,6
	1/4	%	87,7
Reactances	Xd	p.u.	1,52
	Xd'	p.u.	0,18
	Xd''	p.u.	0,11
	Xq	p.u.	1,15
	Xq'	p.u.	1,15
	Xq''	p.u.	0,22
	X <sub>2</sub>	p.u.	0,13
	X <sub>0</sub>	p.u.	0,04
Short Circuit Ratio	Kcc		0,34
Time Constants	Td'	sec.	0,03
	Td''	sec.	0,10
	Tdo'	sec.	0,12
	Tα	sec.	0,10
Short Circuit Current Capacity		%	>300
Excitation at no load		Amp.	1,2
Excitation at full load		Amp.	2,6
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load
Overload per 20 sec.		%	300
Stator Winding Resistance (20 °C)		Ω	0,00189
Rotor Winding Resistance (20 °C)		Ω	6,67
Exciter Resistance (20 °C)		Ω	Rotor : 0,682 Stator : 14,40
Heat dissipation		W	11306
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	1,4
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
<b>Mechanical characteristics</b>			
Protection			IP 21 (other protection on request)
DE bearing			6318.2RS
NDE bearing			6314.2RS
Weight of complete generator		kg	932
Synchronous Speed		rpm	2000
Maximun overspeed		rpm	2500
Cooling air requirement		m <sup>3</sup> /min	41,5
Noise level at 1m/7m		dB(A)	87,5 / 74,5

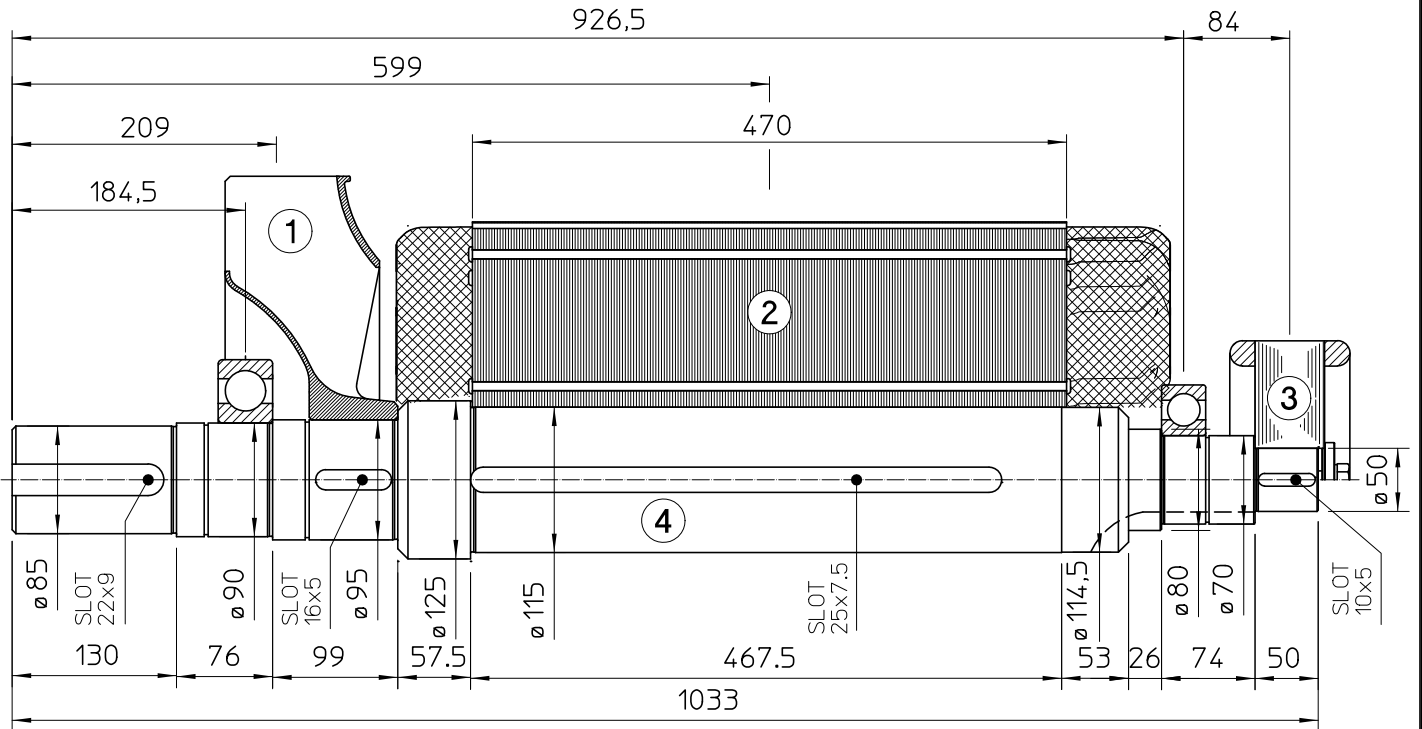
All technical data are to be considered as a reference and they can be modified without any notice.

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**208V - 400Hz**

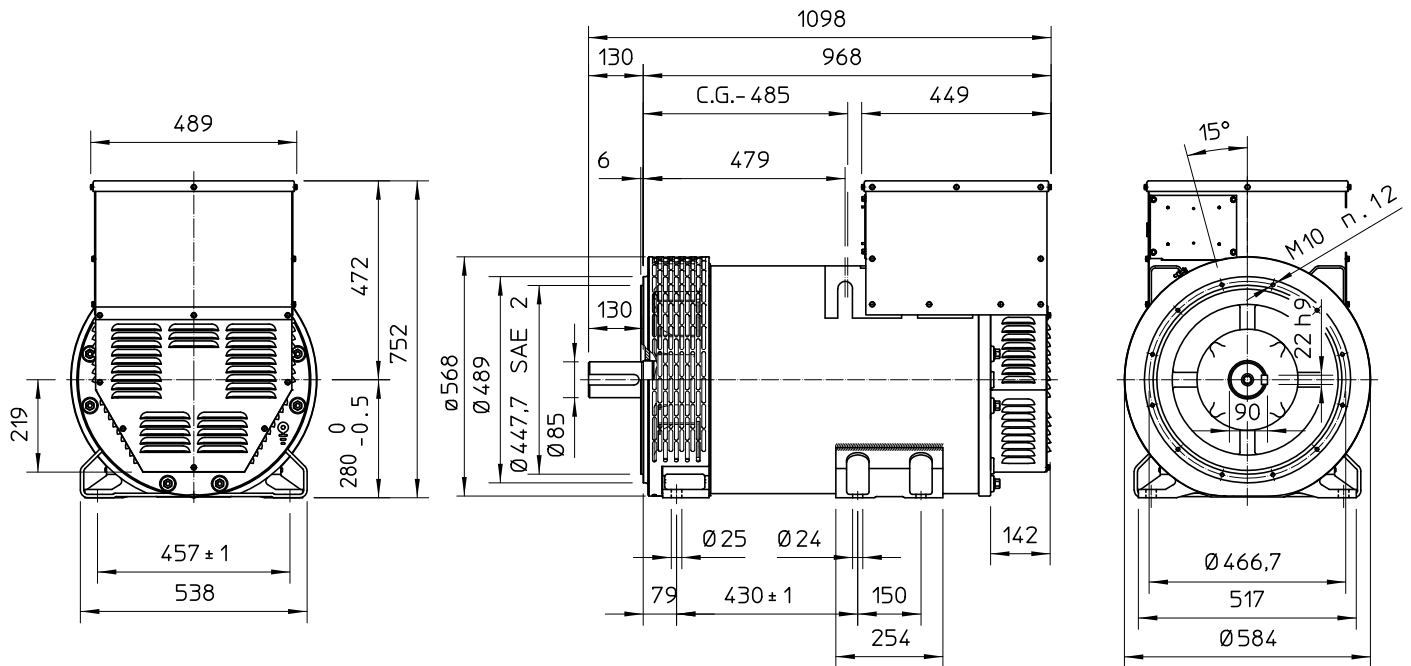


### TWO BEARING MOMENTS OF INERTIA

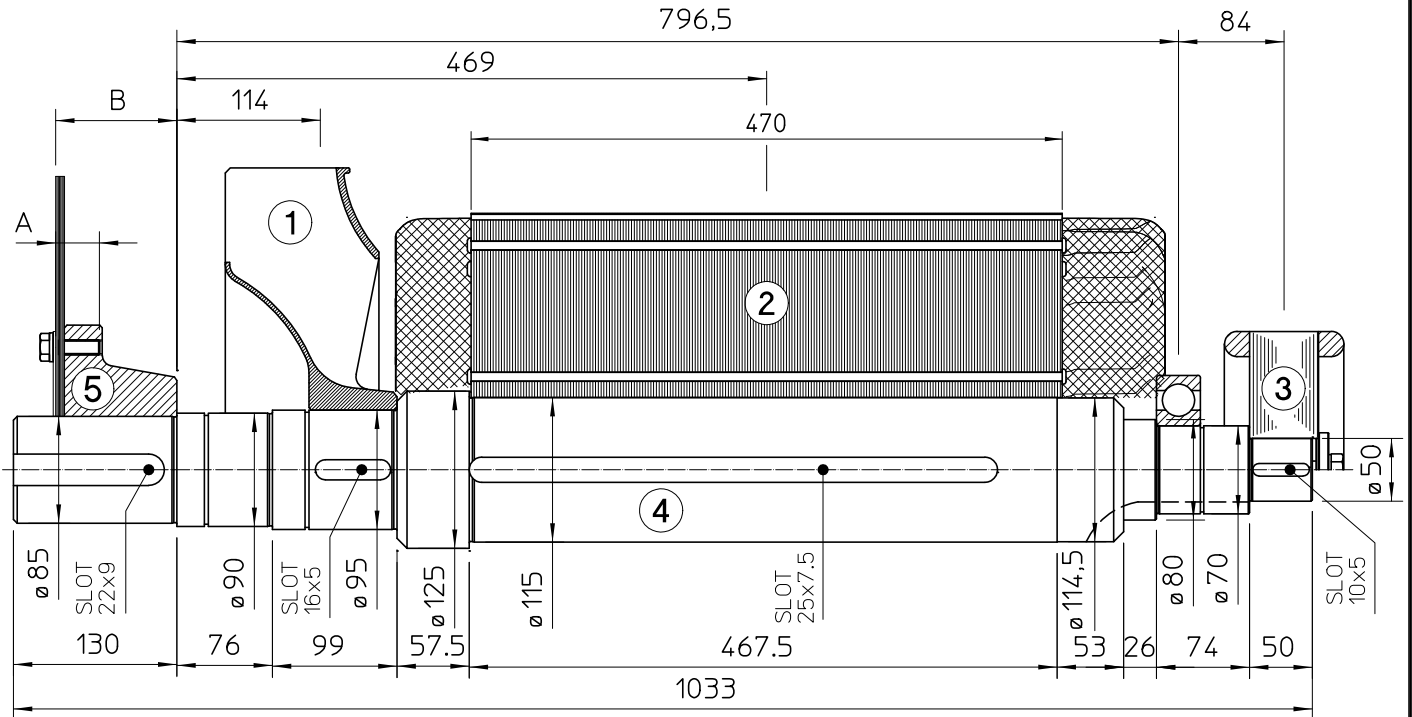


POS.	COMPONENT	WEIGHT (kg)	J (kgm <sup>2</sup> )
1	FAN	6.1	0.1887
2	MAIN ROTOR	398.5	9.2079
3	EX. ROTOR	14.5	0.0874
4	SHAFT	66.3	0.0962
TOTAL		485.4	9.5802

### TWO BEARING DIMENSIONS



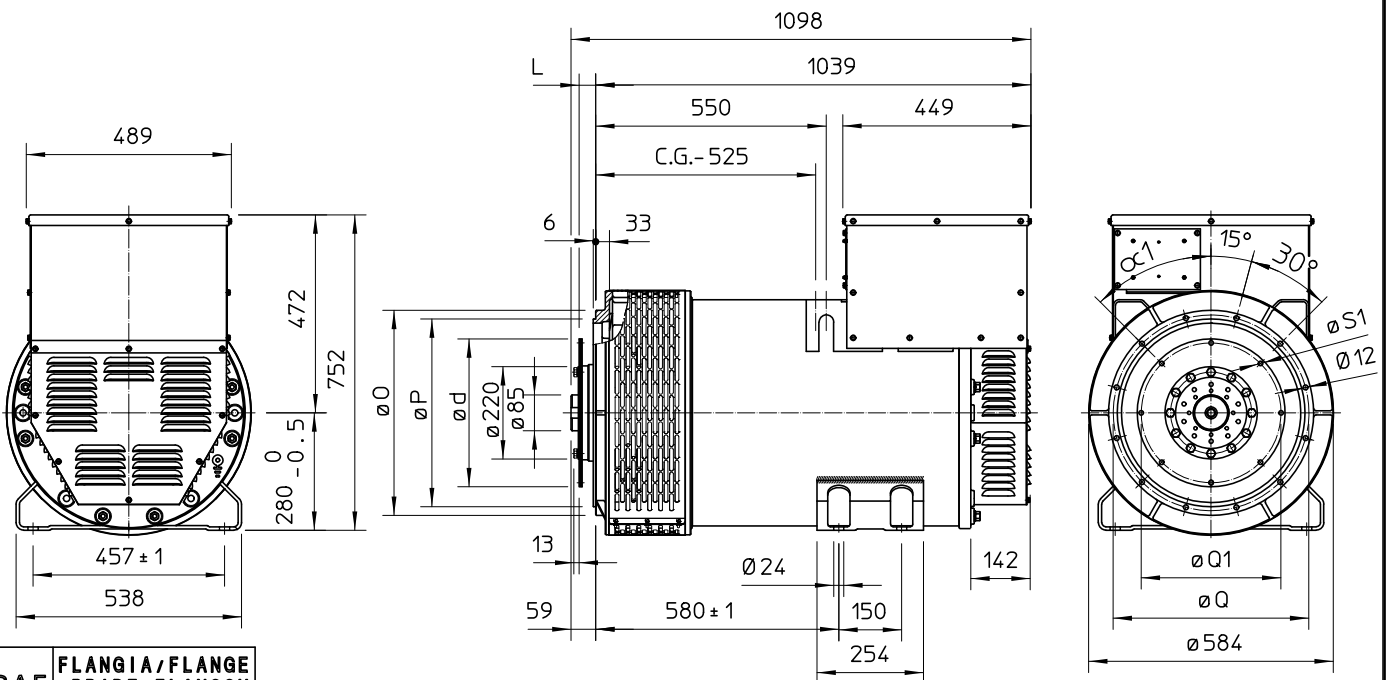
### SINGLE BEARING MOMENTS OF INERTIA



POS.	COMPONENT	WEIGHT (kg)	J (kgm <sup>2</sup> )
1	FAN	6.1	0.1887
2	MAIN ROTOR	398.5	9.2079
3	EX. ROTOR	14.5	0.0874
4	SHAFT	66.3	0.0962
TOTAL		485.4	9.5802

SAE N°	SHAFTS COUPLING FLEX PLATE			
	A	B	WEIGHT kg	J kgm <sup>2</sup>
11.5	41.1	110.4	20.5	0.174
14	34.7	96.4	23.5	0.275

### SINGLE BEARING DIMENSIONS



SAE N.	FLANGIA/FLANGE BRIDE/FLANSCH		
	O	P	Q
3	451	409,6	428,6
2	489	447,7	466,7
1	552	511,2	530,2
1/2	648	584,2	619,1

SAE N.	GIUNTI A DISCHI DISC COUPLING DISQUE DE MONOPALIER SCHEIBENKUPPLUNG				
	L	d	Q1	n. fori	α1
11 1/2	39,6	352,42	333,37	8	11 45°
14	25,4	466,72	438,15	8	14 45°

C.G.= GRAVITY CENTER