GENERATOR TYPE ECP 34-2L/4

Dedicated Winding

Document : **DS264A/1**

issue 000 date 21/06/2013

Electrical Characteristics			
Frequency		Hz	60
Voltage (parallel star)		V	600
Rated power class H		kVA	180
		kW	144
Rated power class F		kVA	163
		kW	130
Regulation with		DSR	±1% with any power factor and speed variations between -5% +30%
Insulation class			H
Execution			Brushless
Stator winding			12 ends
Rotor			with damping cage
Efficiencies class H	4/4	%	95
(see graph. for details)	3/4	%	95,2
	2/4	%	93,8
	1/4	%	90
Reactances (f. l.cl. F)	Xd	%	240,0
	Xd'	%	14,8
	Xd"	%	6,2
	Xq	%	122,1
	Xq'	%	122,1
	Xq"	%	26,5
	X_2	%	16,5
	X_0	%	2,5
Short Circuit Ratio	Kcc		0,48
Time Constants	Td'	sec.	0,0401
	Td"	sec.	0,0095
	Tdo'	sec.	1,90
	Tα	sec.	0,017
Short Circuit Current Capacity		%	>350
Excitation at no load		Amp.	0,5
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	0,015
Rotor Winding Resistance (20°C)		Ω	3,577
Exciter Resistance (20 °C)		Ω	Rotor : 0,410 Stator : 15,28
Heat dissipation at f.l.cl.H		W	7579
Telephone Interference			THF < 2% TIF < 40
Radio interference			EN61000-6-3, EN61000-6-1. For others standards apply to factory
Waveform Distors.(THD) at f. load		LL/LN %	1,7 / 1,8
Waveform Distors.(THD) at no load		LL/LN %	2,3 / 2,4
Mechanical characteristics			
Protection			IP 21 (other protection on request)
DE bearing			6314.2RS
NDE bearing			6311.2RS
Weight of wound stator assembly		kg	168
Weight of wound rotor assembly		kg	106
Weight of complete generator		kg	491
Maximun overspeed		rpm	2250
Unbalanced magnetic pull at f.l.cl.F		kN/mm	5,6
Cooling air requirement		m^3/min	23
Inertia Constant (H)		sec.	0,117
Noise level at 1m/7m		dB(A)	83 / 69

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

GENERATOR TYPE ECP 34-2L/4

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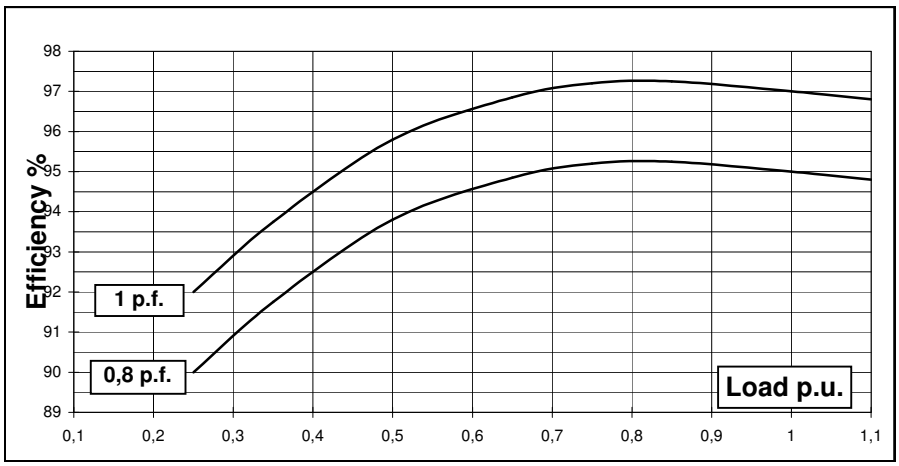
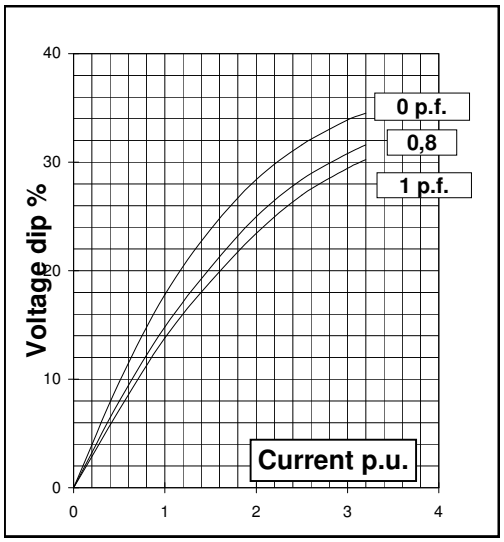
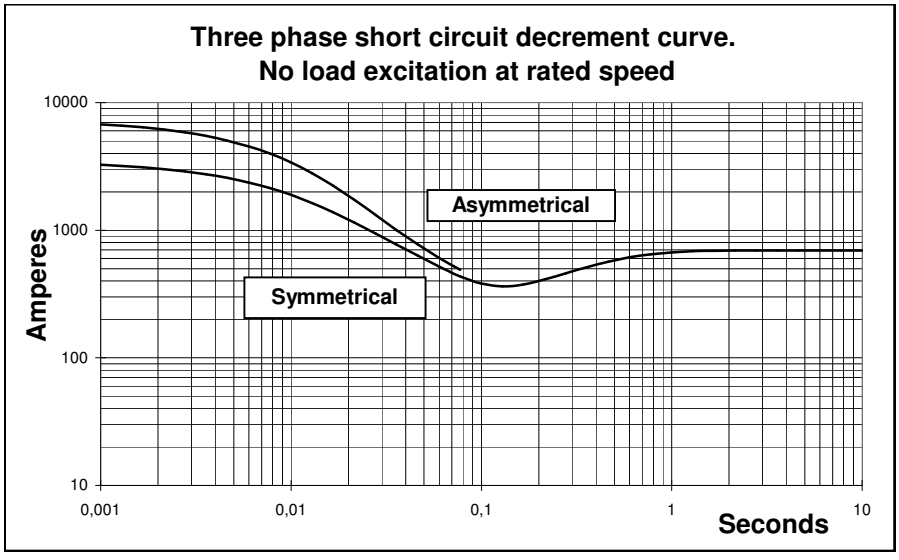
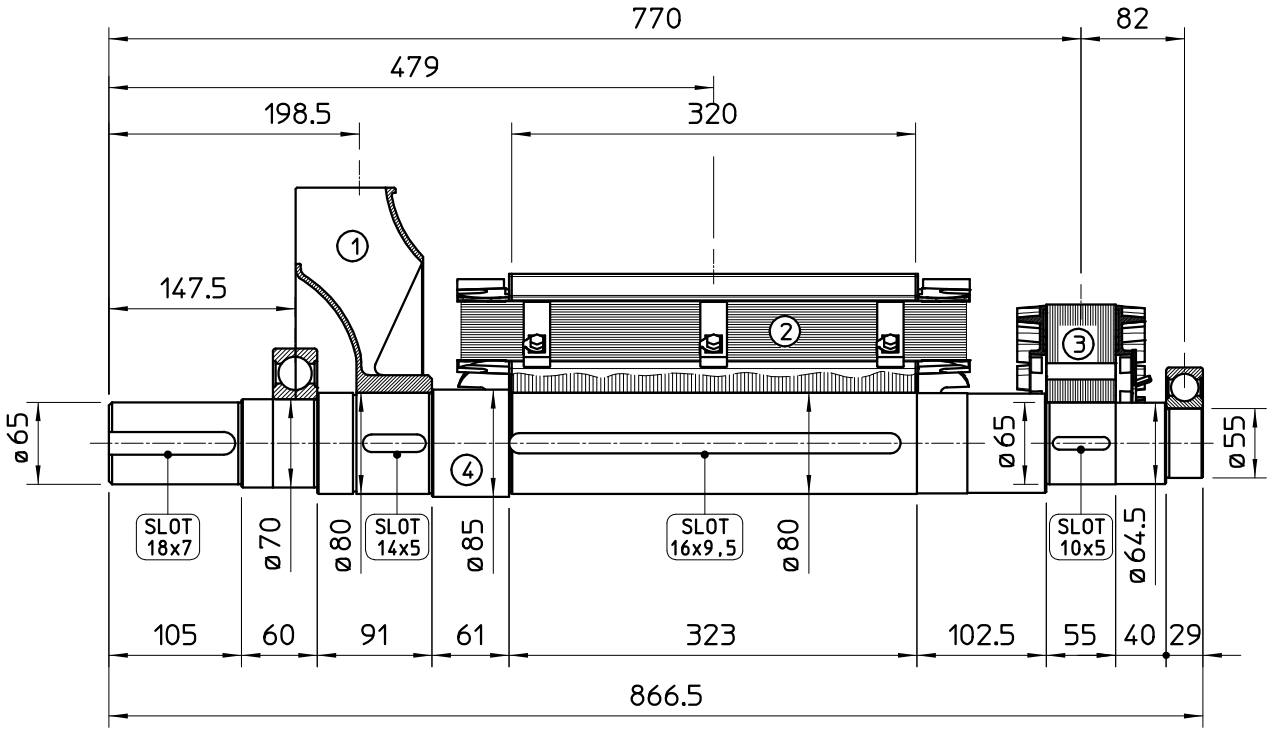
600V - 60Hz





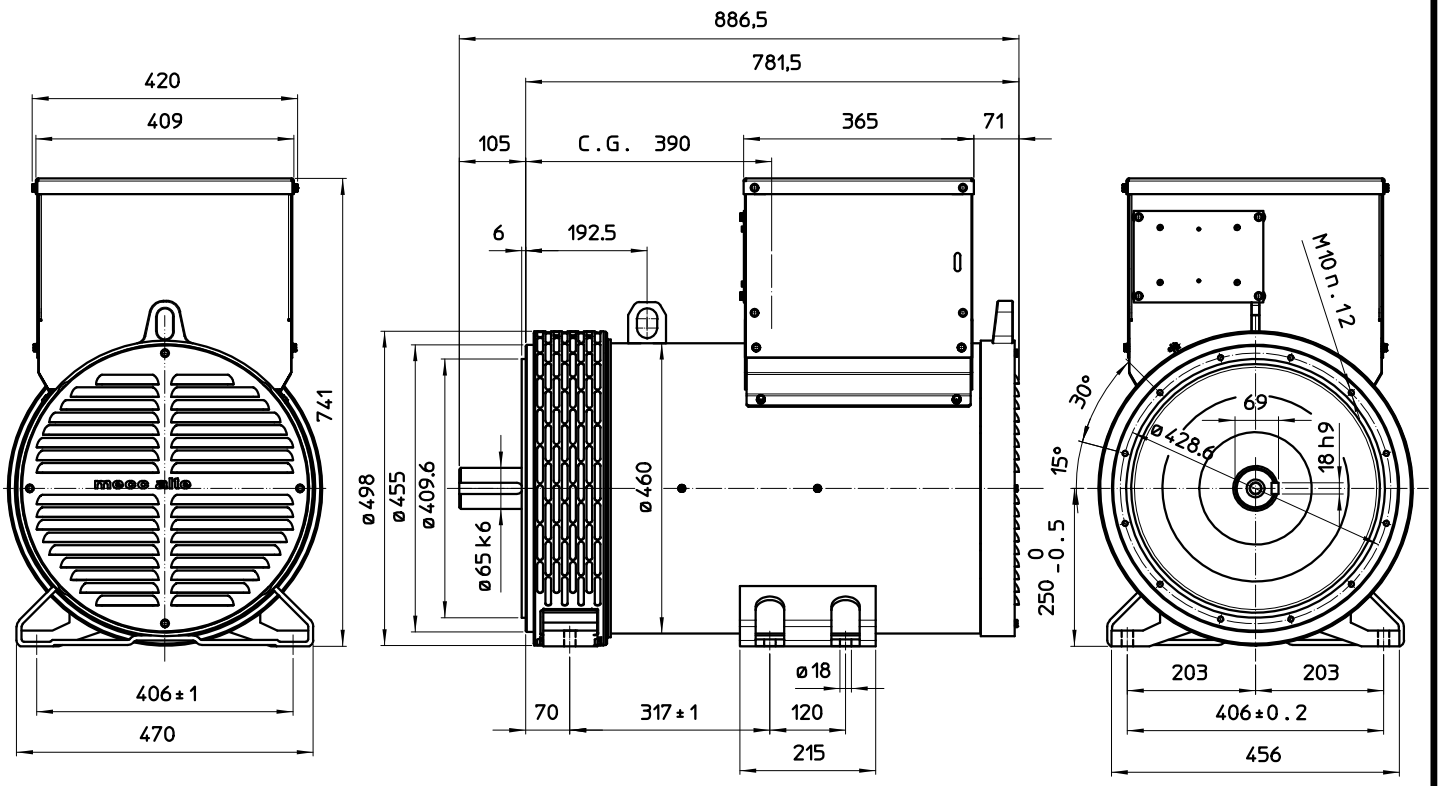


TWO BEARING MOMENTS OF INERTIA



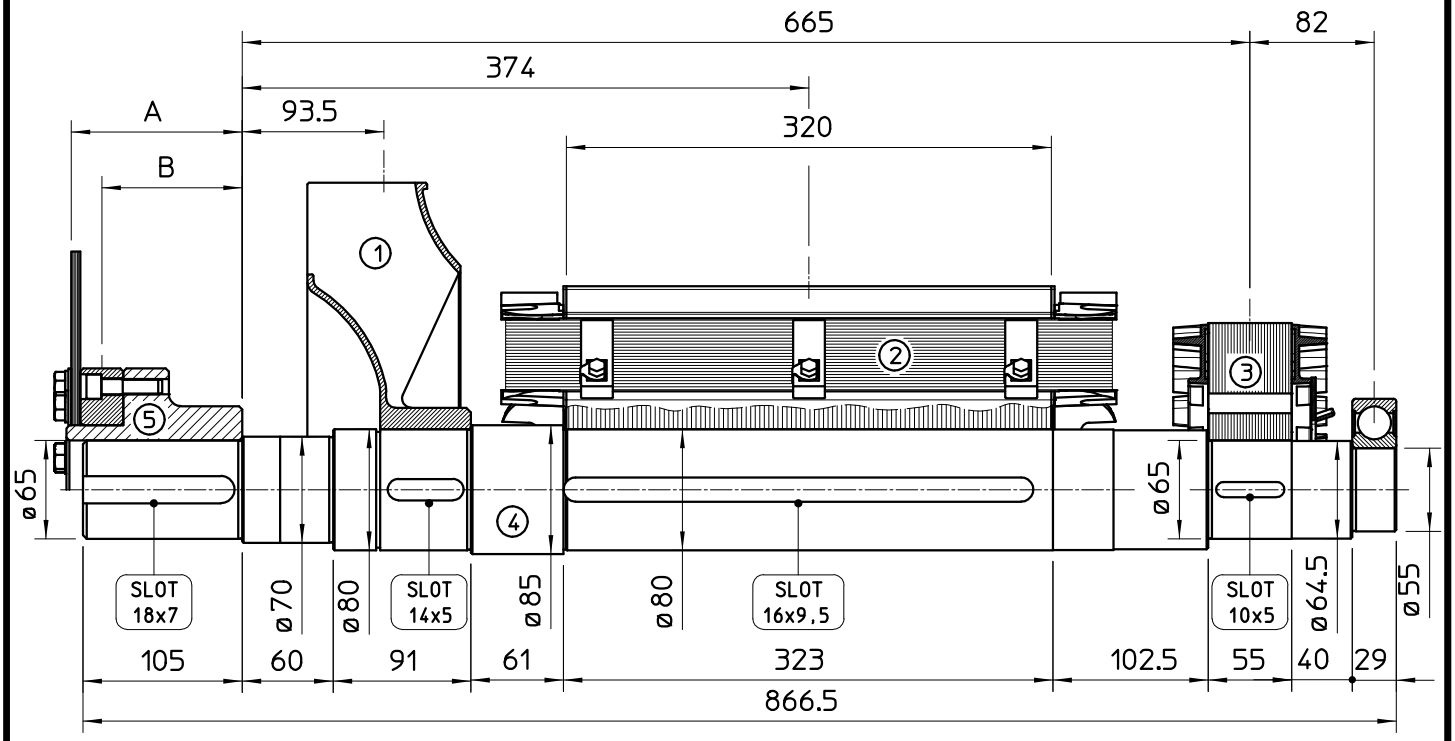
POS.	COMPONENT	WEIGHT (kg)	J (kgm^2)
1	FAN	3.3	0.0451
2	MAIN ROTOR	107.3	0.9647
3	EX. ROTOR	14.5	0.0874
4	SHAFT	29.6	0.0218
TOTAL		154.7	1.119

TWO BEARING DIMENSIONS



C.G.= GRAVITY CENTER

SINGLE BEARING MOMENTS OF INERTIA



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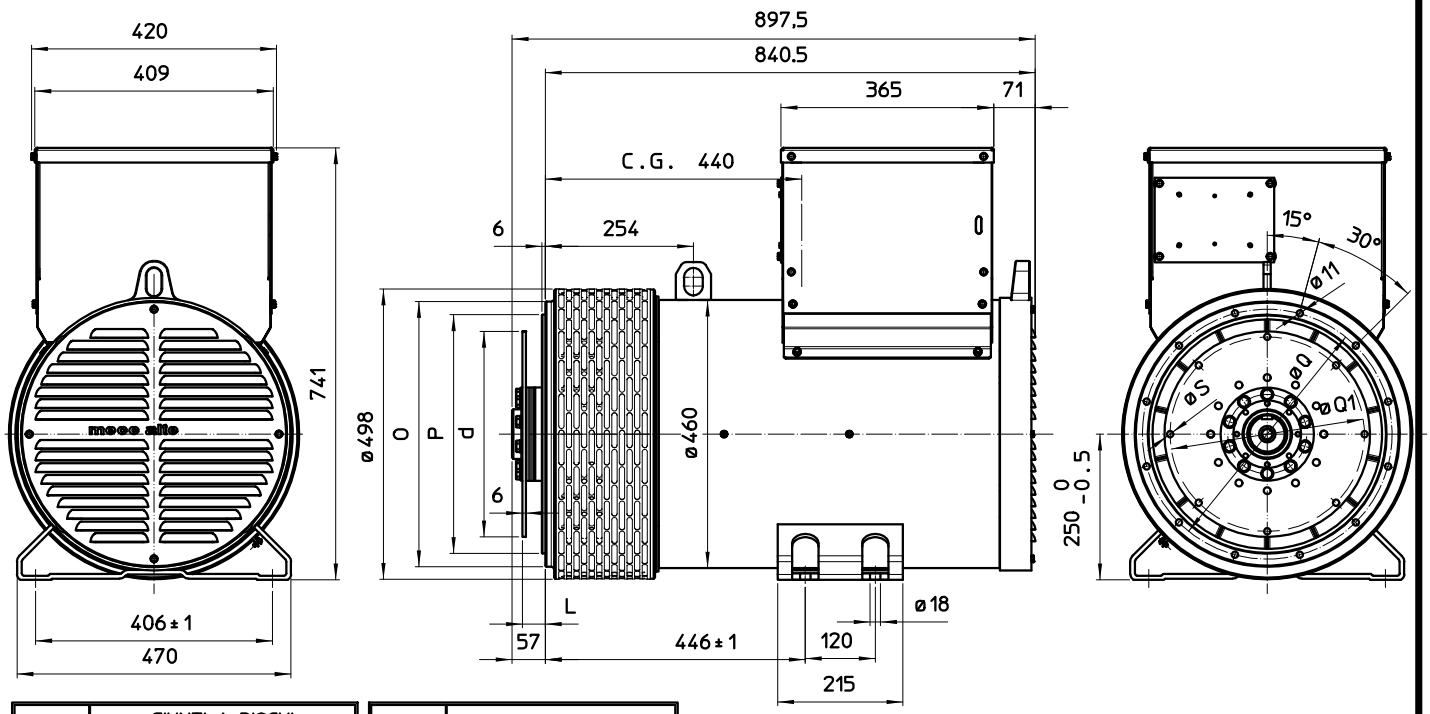
TOTAL		154.7	1.119

SAE N°	5 SHAFTS COUPLING FLEX PLATE			
	A	B	WEIGHT kg	J kgm^2
10	112.8	35.6	13.5	0.0770
11 1/2	98.6	71.5	12.4	0.0956
14	84.4	68.6	14.8	0.2360

SINGLE BEARING DIMENSIONS



SAE N.	GIUNTI A DISCHI DISC COUPLING DISQUE DE MONOPALIER SCHEIBENKUPPLUNG				
	L	d	Q1	N. fori	S
10	53,8	314,32	295,27	8	11
11 1/2	39,6	352,42	333,37	8	11
14	25,4	466,72	438,15	8	14

SAE N.	FLANGIA/FLANGE BRIDE/FLANSCH			
	O	P	Q	N. fori
3	451	409,6	428,6	12
2	489	447,7	466,7	12
1	552	511,2	530,2	12

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