

Electrical Characteristics										
Frequency	Hz	50				60				
Voltage (parallel star)	V	380	400	415	440	415	440	460	480	
Rated power class H	kVA	680	680	680	630	720	780	816	816	
	kW	544	544	544	504	576	624	653	653	
Rated power class F	kVA	630	630	630	585	665	720	756	756	
	kW	504	504	504	468	532	576	605	605	
Regulation with	DER1	±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	%	94,8	95	94,7	94,4	95,7	96	96,2	96,4
(see graph. for details)	3/4	%	95	95,2	95	94,6	95,8	96,1	96,4	96,6
	2/4	%	94,1	94,3	94,2	94	94,8	95	95,2	95,5
	1/4	%	91,4	91,5	91,3	91	91,4	91,5	91,7	92,1
Reactances (f. l.cl. F)										
	Xd	%	312	227	150	97	410	355	312	227
	Xd'	%	19,4	18,1	17,2	16,4	21,8	20,6	19,4	18,1
	Xd''	%	10,6	9,2	8,7	8,1	11,9	11,1	10,6	9,2
	Xq	%	165	141	133	127	194	181	165	141
	Xq'	%	165	141	133	127	194	181	165	141
	Xq''	%	17,1	16,2	14,7	12,5	19,6	18,2	17,1	16,2
	X ₂	%	15,2	14,1	12,5	11,2	17,4	16,6	15,2	14,1
	X ₀	%	2,60	2,4	2,20	2,10	3,20	2,90	2,6	2,4
Short Circuit Ratio	Kcc		0,32	0,44	0,67	1,10	0,24	0,28	0,32	0,44
Time Constants	Td'	sec.	0,18							
	Td''	sec.	0,019							
	Tdo'	sec.	3,10							
	Tα	sec.	0,052							
Short Circuit Current Capacity		%	>300				>350			
Excitation at no load	Amp.		0,6	0,7	1	1,2	0,4	0,5	0,6	0,7
Excitation at full load	Amp.		4,3	4,4	4,7	4,9	3,5	3,6	3,7	3,9
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load							
Overload per 20 sec.		%	300							
Stator Winding Resistance (20°C)	Ω		0,013							
Rotor Winding Resistance (20°C)	Ω		1,5							
Exciter Resistance (20 °C)	Ω		Rotor : 0,050				Stator : 8,85			
Heat dissipation at f.l.cl.H	W		29840	28632	30446	29898	25881	26000	25786	24378
Telephone Interference			THF < 2%				TIF < 40			
Radio interference			EN61000-6-3, EN61000-6-2. For others standards apply to factory							
Waveform Distors.(THD) at f. load	LL/LN %		2,1 / 2,1							
Waveform Distors.(THD) at no load	LL/LN %		2,4 / 2,4							
Mechanical characteristics										
Protection			IP 21 (other protection on request)							
DE bearing			6322							
NDE bearing			6318.2RS							
Weight of wound stator assembly	kg		641							
Weight of wound rotor assembly	kg		386,7							
Weight of complete generator	kg		1586							
Maximun overspeed	rpm		2250							
Unbalanced magnetic pull at f.l.cl.F	kN/mm		6,8							
Cooling air requirement	m ³ /min		54				64,8			
Inertia Constant (H)	sec.		0,172				0,207			
Noise level at 1m/7m	dB(A)		94 / 82				98 / 88			

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

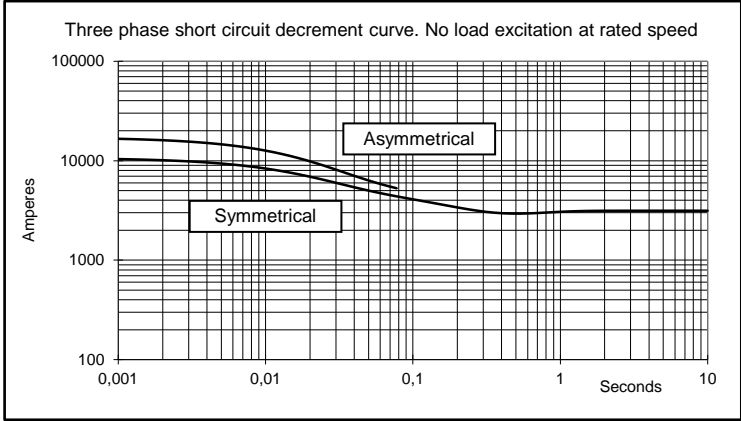
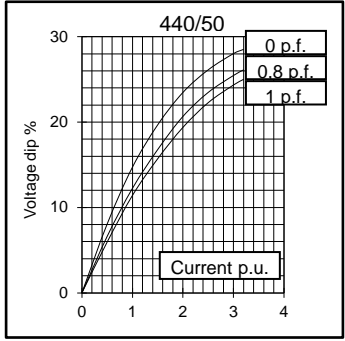
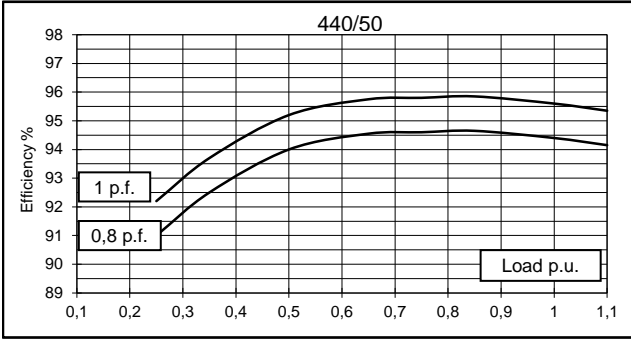
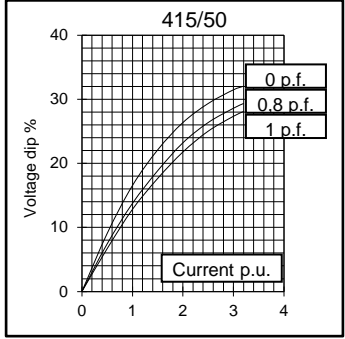
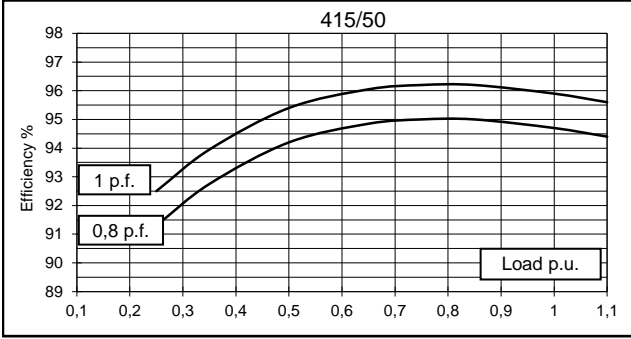
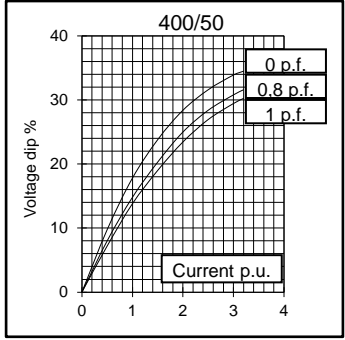
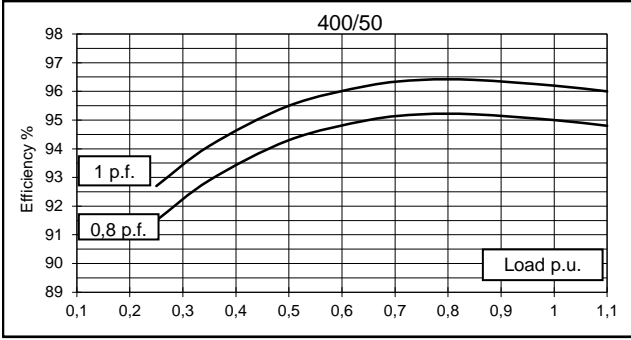
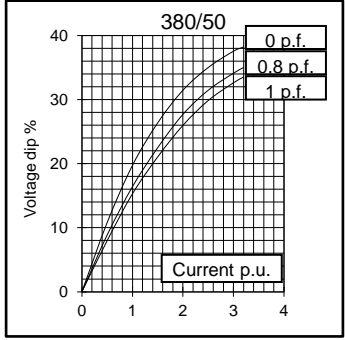
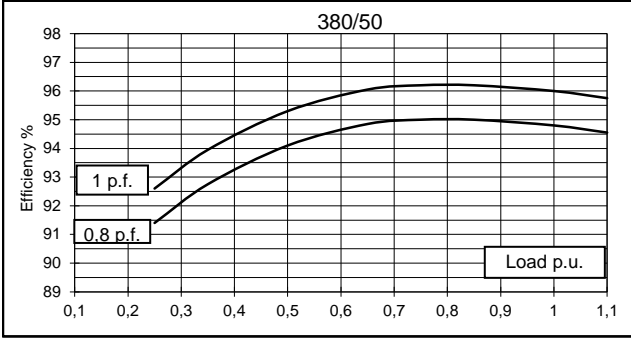
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GENERATOR TYPE ECO 40-2L/4

Document : DS026A/2
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50 Hz

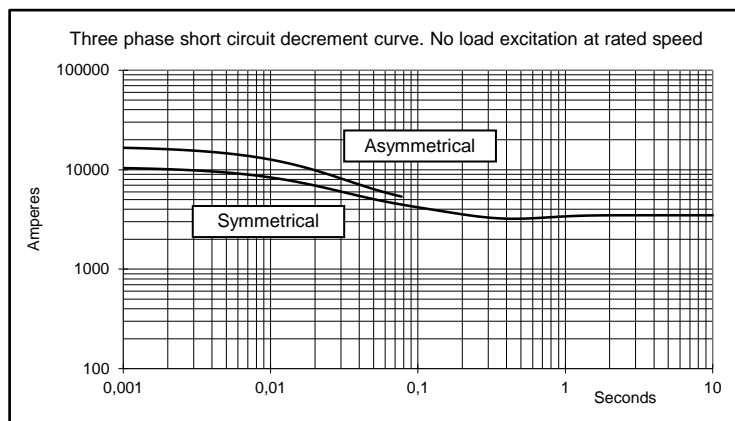
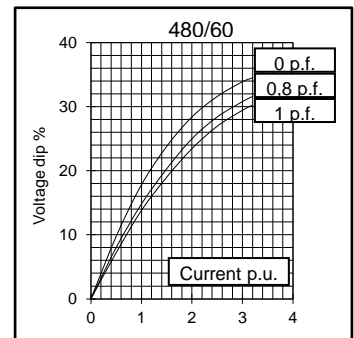
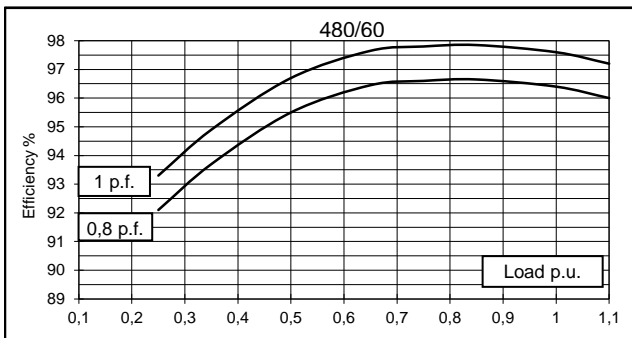
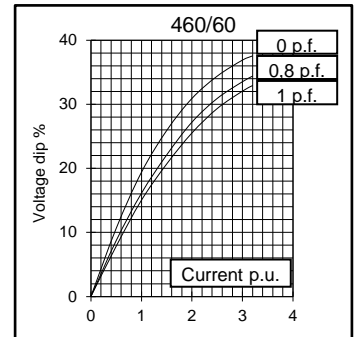
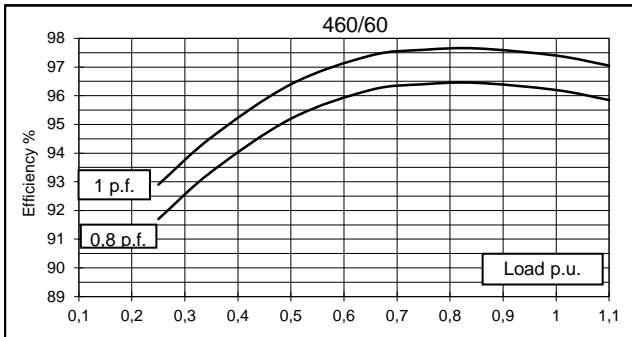
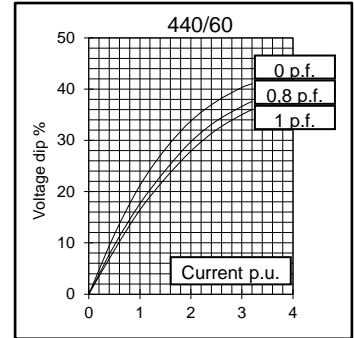
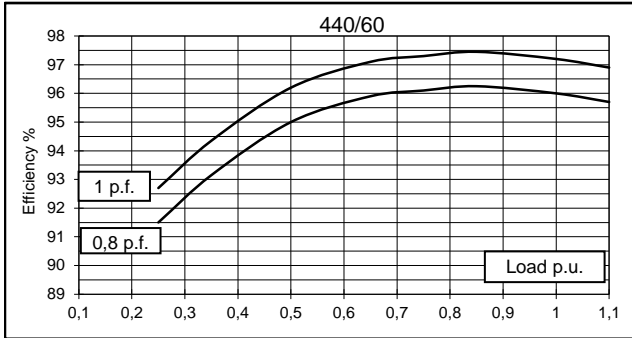
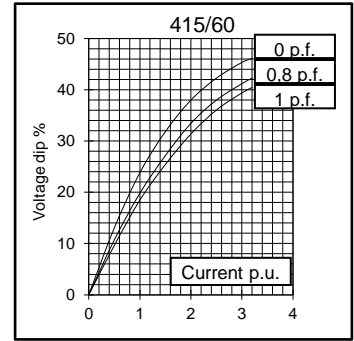
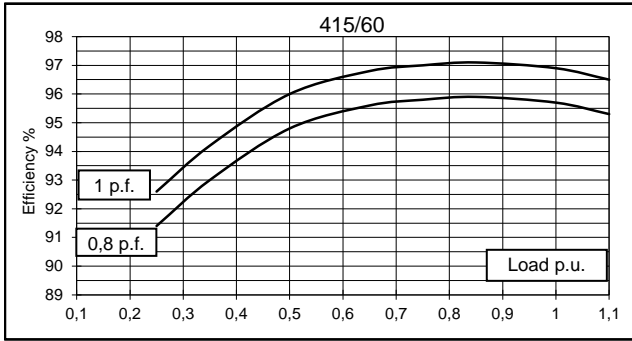




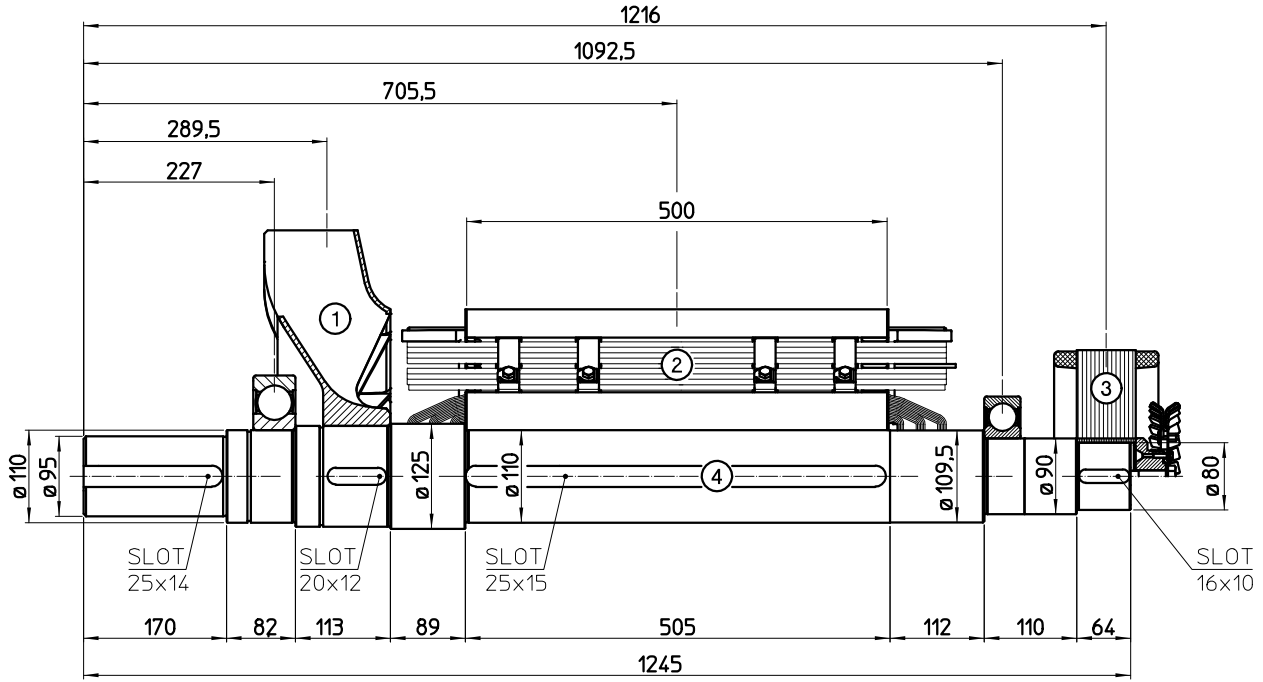
GENERATOR TYPE ECO 40-2L/4

Document : DS026A/3
 issue 009 date : 21/03/2014

60 Hz

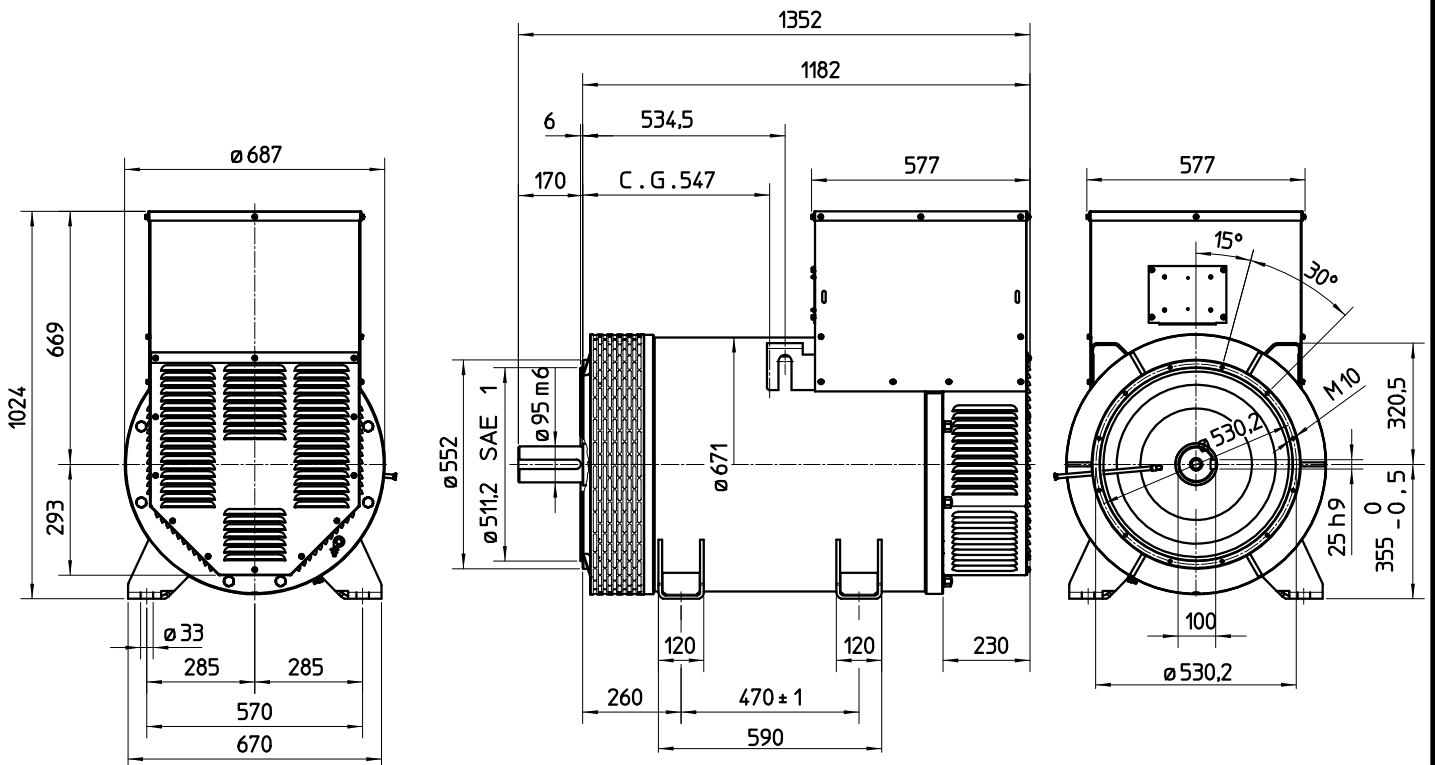


TWO BEARING MOMENTS OF INERTIA

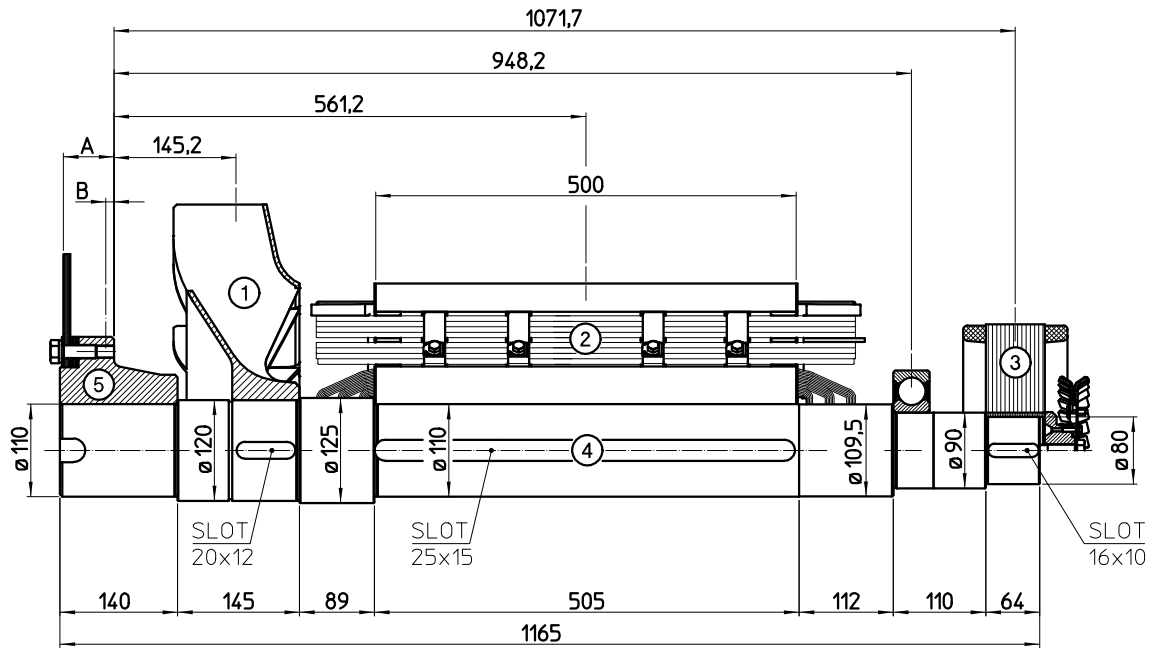


COMPONENT	WEIGHT kg	J kgm ²
1 FAN	10,2	0,335
2 MAIN ROTOR	386,7	8,234
3 EX. ROTOR	35	0,562
4 SHAFT	85,7	0,127
TOTAL	517,6	9,258

TWO BEARING DIMENSIONS



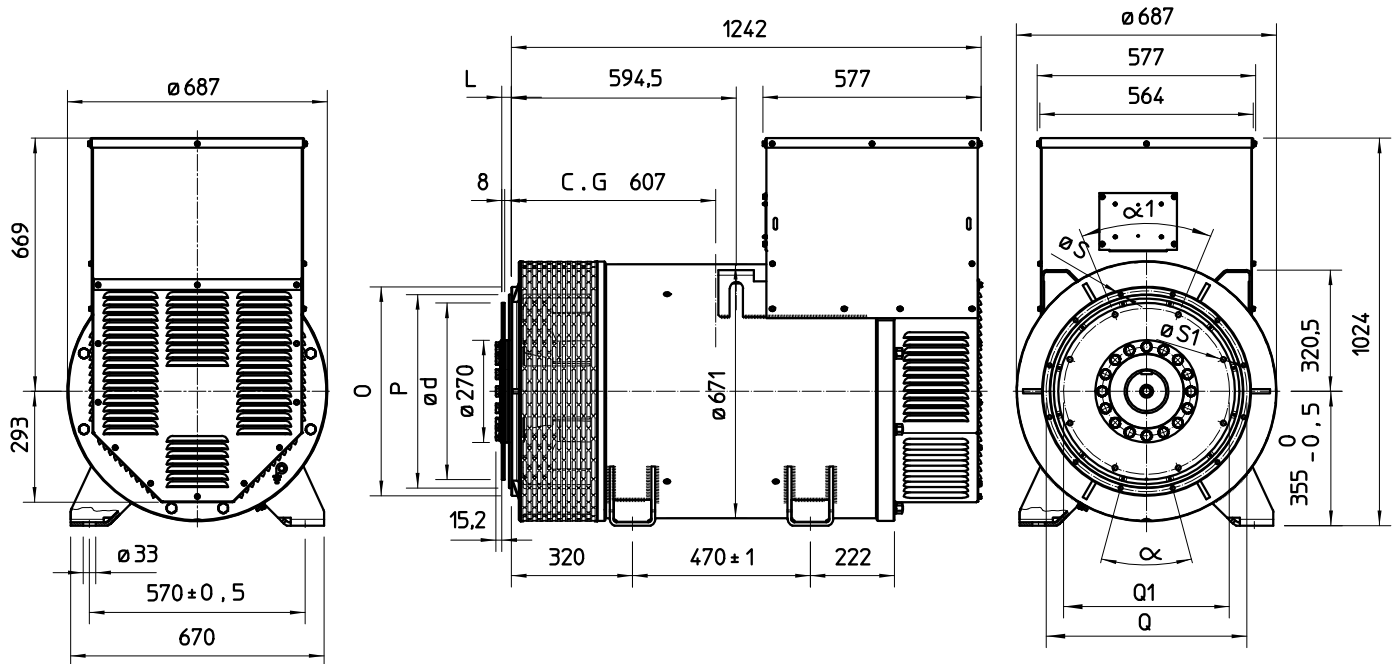
SINGLE BEARING MOMENTS OF INERTIA



COMPONENT	WEIGHT kg	J kgm ²
1 FAN	10,2	0,335
2 MAIN ROTOR	386,7	8,234
3 EX. ROTOR	35	0,562
4 SHAFT	84,2	0,129
TOTAL	516,1	9,26

Sae No	SHAFTS COUPLING FLEX PLATE			
	A	B	WEIGHT kg	J kgm ²
14	60	9,6	41,4	0,511
18	50	6,6	45,1	0,858

SINGLE BEARING DIMENSIONS



SAE N.	FLANGIA / FLANGE BRIDE / FLANSCH					
	O	P	Q	N. FORI	S	α
1	552	511,2	530,2	12	11	30°
1/2	648	584,2	619,1	12	14	30°
0	711	647,7	679,5	16	14	22,5°
00	883	787,4	850,9	16	14	22,5°

VOL. N.	GIUNTI A DISCHI / DISC COUPLING DISQUE DE MONOPALIER / SCHEIBENKUPPLUNG					
	L	d	Q1	N. FORI	S1	α1
14	25,4	466,72	438,15	8	14	45°
18	15,7	571,5	542,92	6	17	60°

C.G.= GRAVITY CENTER