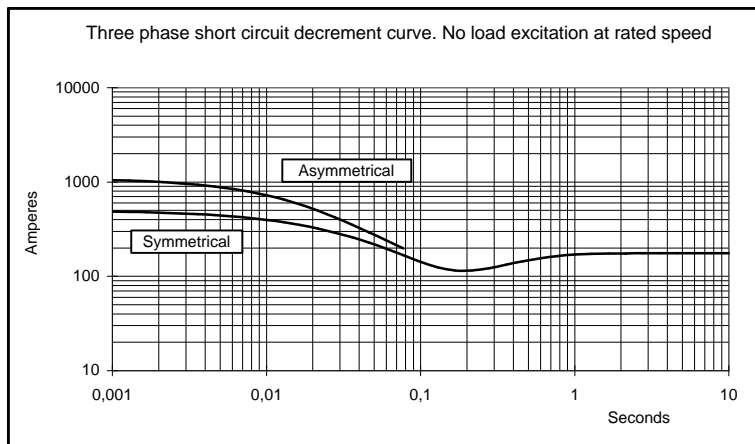
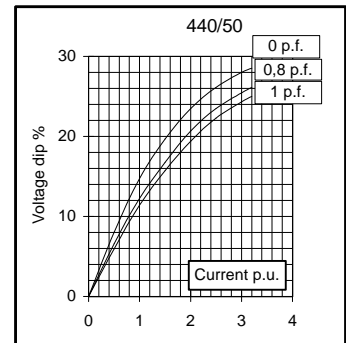
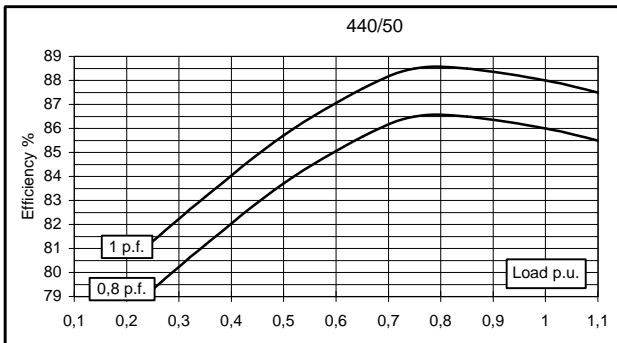
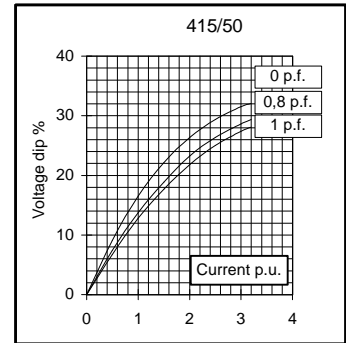
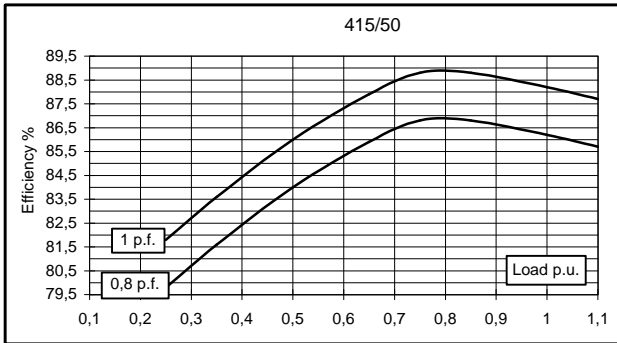
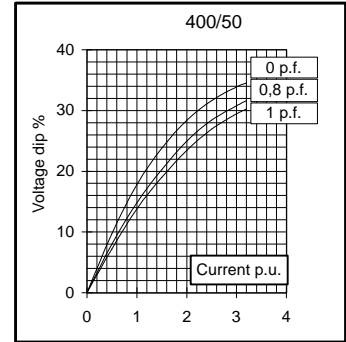
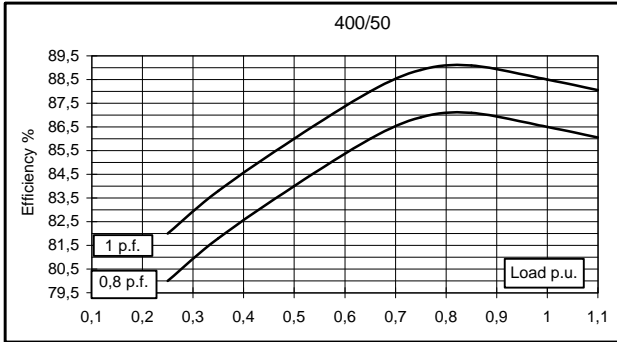
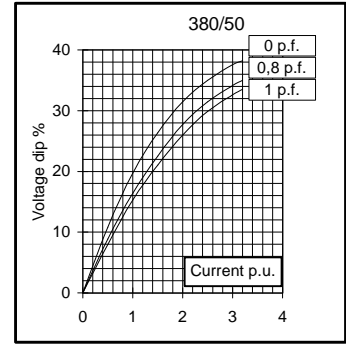
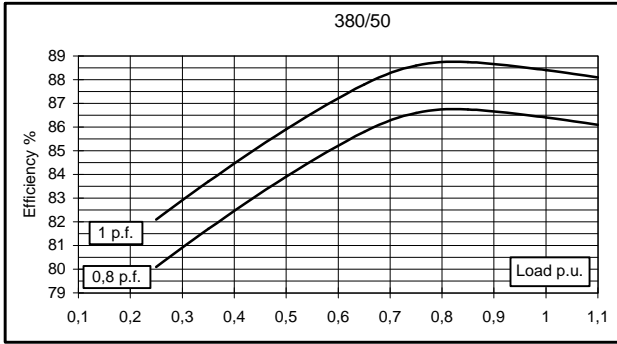
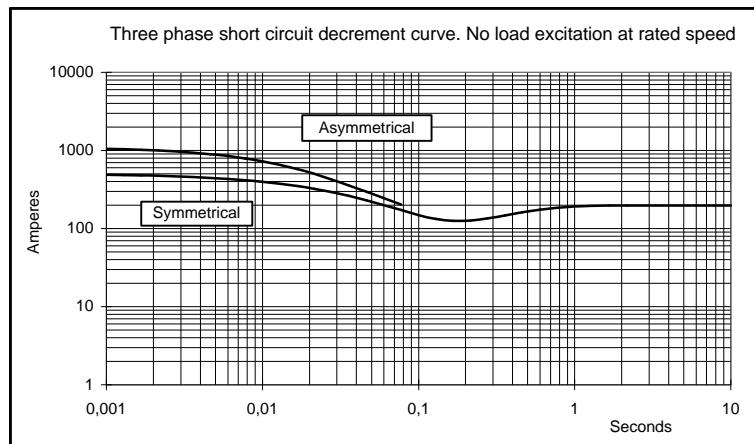
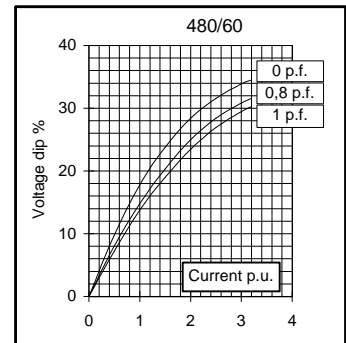
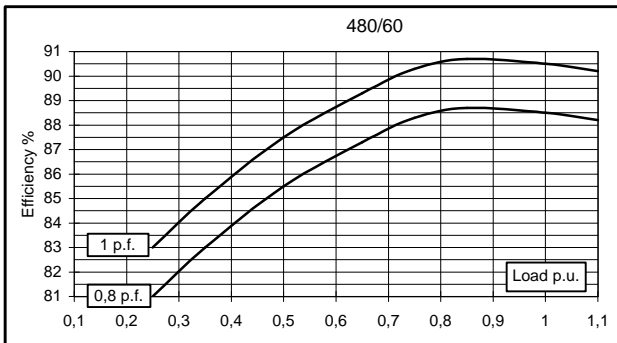
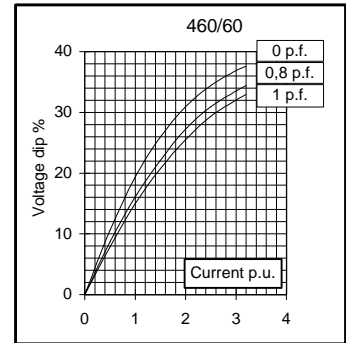
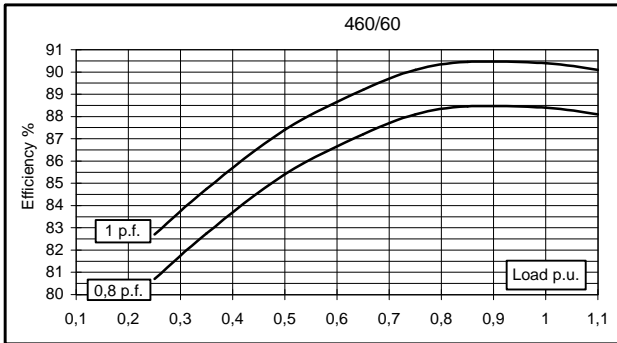
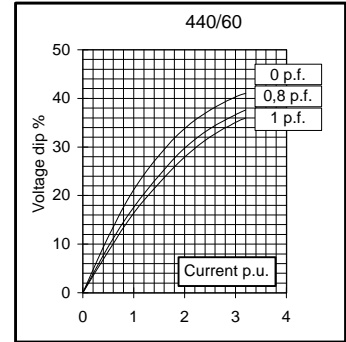
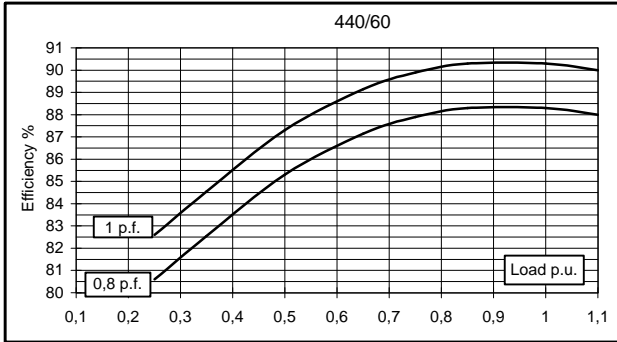
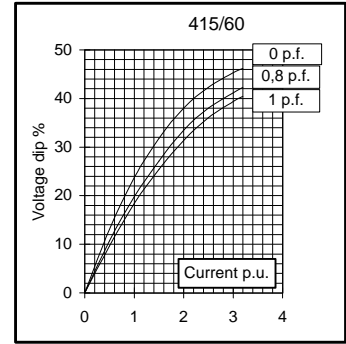
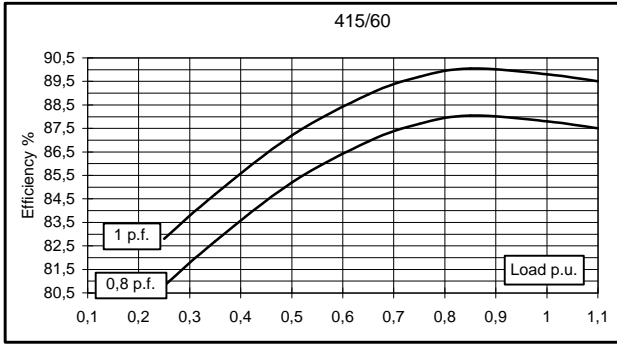


<b>Electrical Characteristics</b>										
Frequency	Hz	50				60				
Voltage (star)	V	380	400	415	440	415	440	460	480	
Rated power class H	kVA	38	38	38	32	40	44	46	46	
	kW	30,4	30,4	30,4	25,6	32	35,2	36,8	36,8	
Rated power class F	kVA	35	35	35	29	36	40	42	42	
	kW	28	28	28	23,2	28,8	32	33,6	33,6	
Regulation with	SR7/2	±1,5 % 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 (see graph. for details)	4/4	%	86,4	86,5	86,2	86	87,8	88,3	88,4	88,5
	3/4	%	86,6	86,9	86,8	86,5	87,7	87,9	88,1	88,3
	2/4	%	83,9	84	84	83,7	85,2	85,3	85,4	85,5
	1/4	%	80,1	80	79,8	79,3	80,8	80,6	80,7	81
Reactances (f. l.cl. F)	Xd	%	416	375	348	261	436	427	408	375
	Xd'	%	15,2	13,7	12,7	9,5	15,9	15,6	14,9	13,7
	Xd''	%	8	7,2	6,7	5	8,4	8,2	7,8	7,2
	Xq	%	235	212	197	148	247	241	231	212
	Xq'	%	235	212	197	148	247	241	231	212
	Xq''	%	31,5	28,4	26,4	19,8	33,0	32,3	30,9	28,4
	X <sub>2</sub>	%	20,4	18,4	17,1	12,8	21,4	20,9	20,0	18,4
	X <sub>0</sub>	%	3,8	3,4	3,2	2,4	4,0	3,9	3,7	3,4
Short Circuit Ratio	Kcc		0,47	0,54	0,60	1,04	0,30	0,36	0,47	0,54
Time Constants	Td'	sec.	0,061							
	Td''	sec.	0,014							
	Tdo'	sec.	0,97							
	Tα	sec.	0,012							
Short Circuit Current Capacity	%	>300				>320				
Excitation at no load	Amp.	0,4	0,5	0,6	0,7	0,25	0,3	0,4	0,45	
Excitation at full load	Amp.	1,6	1,8	1,9	2	1,4	1,5	1,6	1,7	
Overload (long-term)	%	1 hour in a 6 hours period 110% rated load								
Overload per 20 sec.	%	300								
Stator Winding Resistance (20°C)	Ω	0,113								
Rotor Winding Resistance (20°C)	Ω	3,302								
Exciter Resistance (20 °C)	Ω	Rotor : 0,640				Stator : 10,60				
Heat dissipation at f.l.cl.H	W	4785	4745	4867	4167	4446	4664	4829	4782	
Telephone Interference		THF < 2%				TIF < 50				
Radio interference		EN50081-1, EN50082-1, VDE0875K. For others standards apply to factory								
Waveform Distors.(THD) at f. load	LL/LN %	3,8 / 3,5								
Waveform Distors.(THD) at no load	LL/LN %	4,5 / 4								
<b>Mechanical characteristics</b>										
Protection		IP 21 (other protection on request)								
DE bearing		6312-2RS								
NDE bearing		6309-2RS								
Weight of wound stator assembly	kg	45,3								
Weight of wound rotor assembly	kg	31,4								
Weight of complete generator	kg	171								
Maximun overspeed	rpm	4320								
Unbalanced magnetic pull at f.l.cl.F	kN/mm	3,5								
Cooling air requirement	m³/min	22,4				27				
Inertia Constant (H)	sec.	0,395				0,47				
Noise level at 1m/7m	dB(A)	88 / 77				93 / 80				

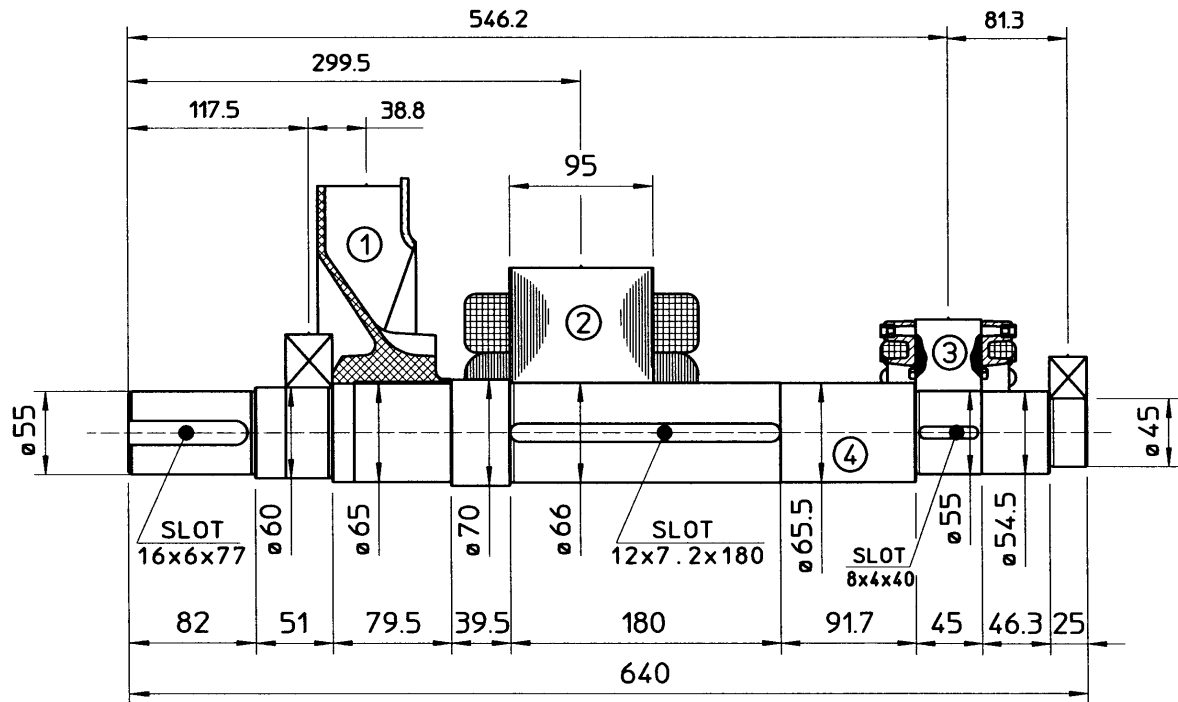
**50 Hz**



**60 Hz**

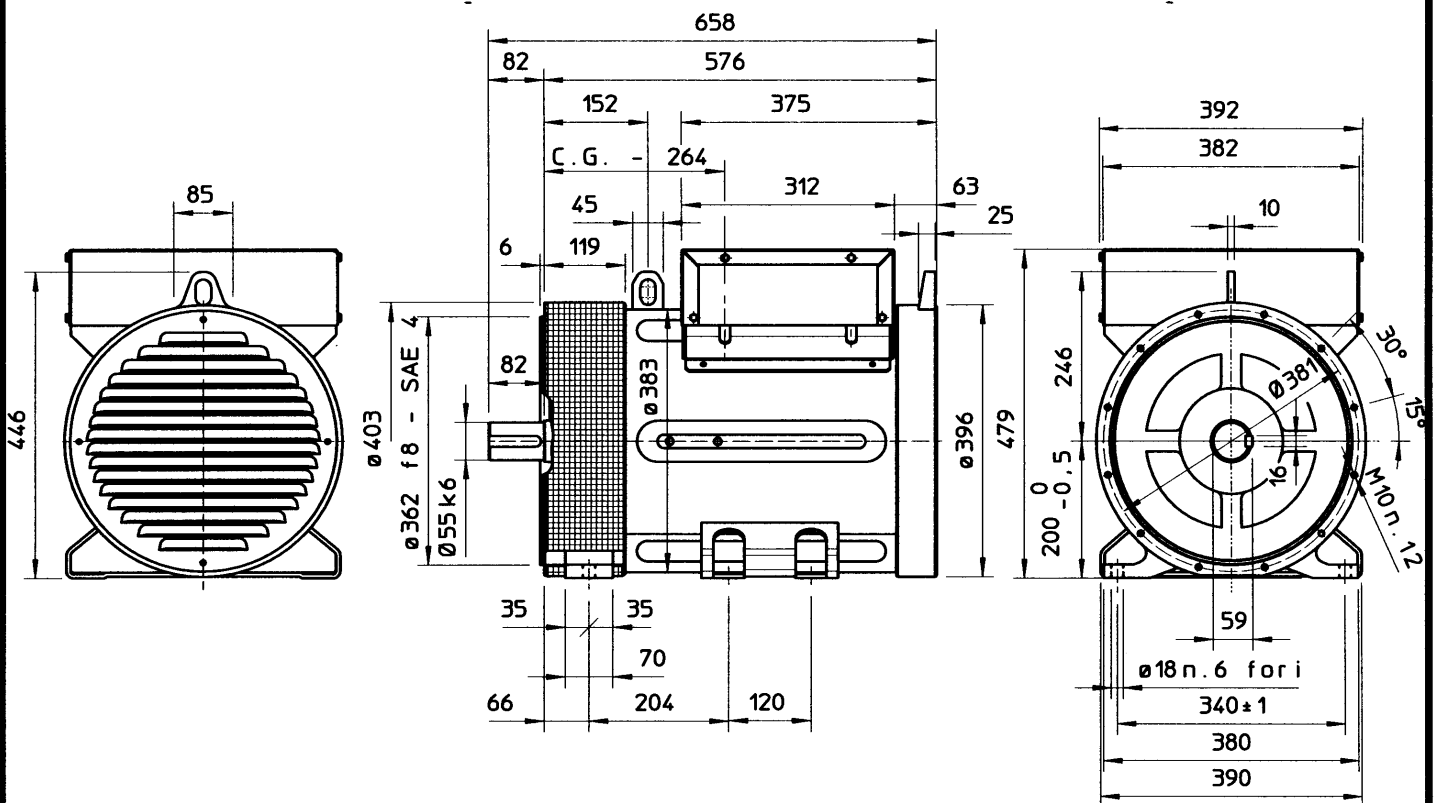


## TWO BEARING MOMENTS OF INERTIA



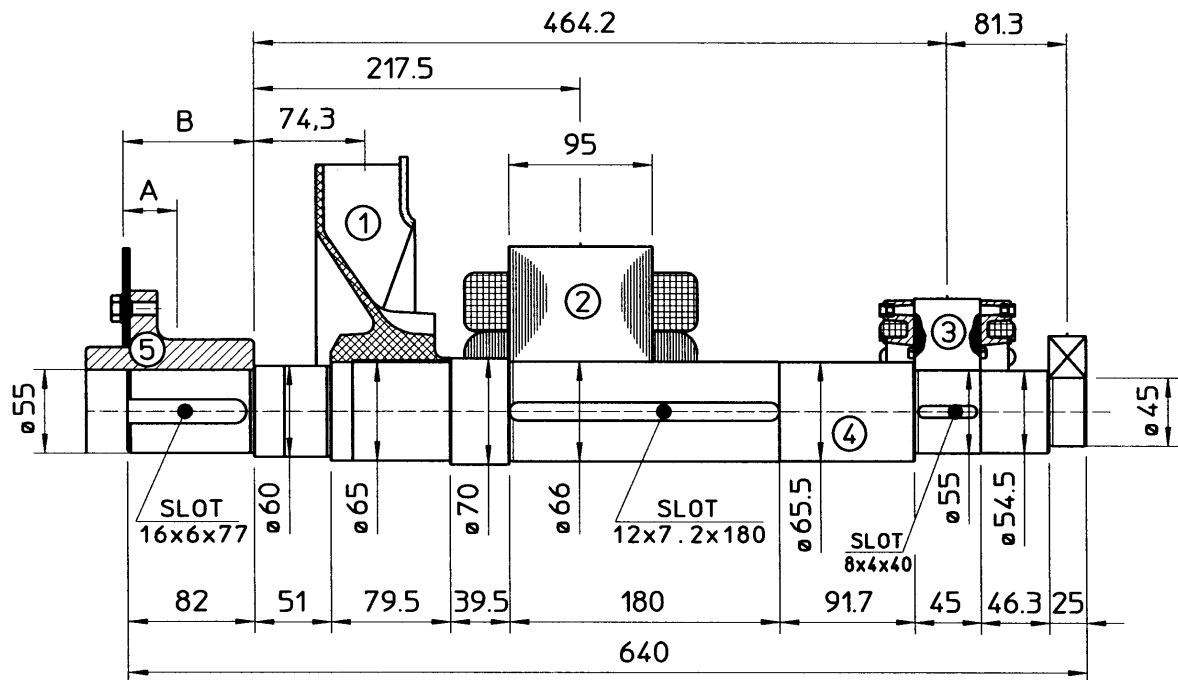
COMPONENT	WEIGHT kg	J kgm <sup>2</sup>
1 FAN	2.3	0.0224
2 MAIN ROTOR	22.56	0.085
3 EX. ROTOR	5.4	0.012
4 SHAFT	15.1	0.007
TOTAL	45.36	0.1264

## TWO BEARING DIMENSIONS



C.G. - GRAVITY CENTER

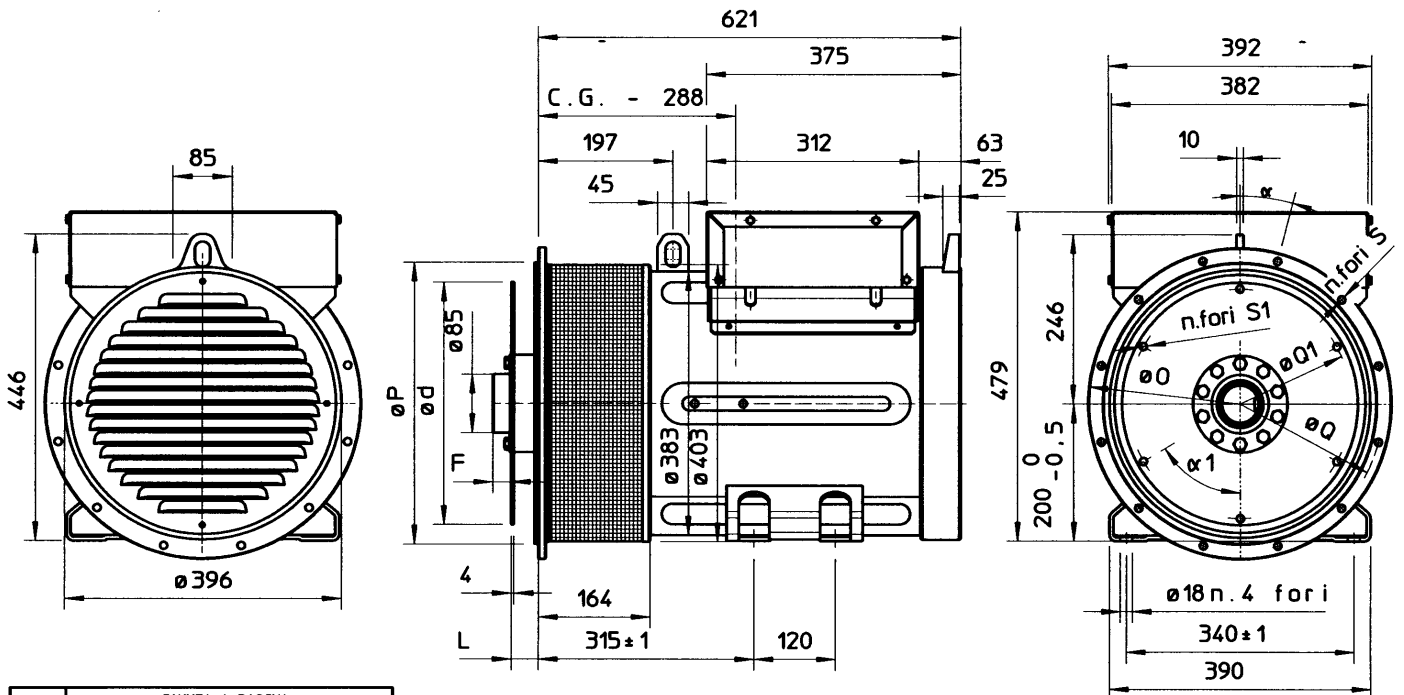
# SINGLE BEARING MOMENTS OF INERTIA



COMPONENT	WEIGHT kg	J kgm <sup>2</sup>
1 FAN	2.3	0.0224
2 MAIN ROTOR	22.56	0.085
3 EX. ROTOR	5.4	0.012
4 SHAFT	15.1	0.007
TOTAL	45.36	0.1264

SAE No	SHAFTS COUPLING FLEX PLATE			
	A	B	WEIGHT kg	J kgm <sup>2</sup>
5	26.1	75.2	4.2	0.0225
6.5	25.7	75.2	4.4	0.0256
8	38.25	106.9	7.2	0.0314
10	32.7	98.7	8.7	0.0485
11.5	24	84.5	8.3	0.0372

# SINGLE BEARING DIMENSIONS



SAE N.	GIUNTI A DISCHI DISC COUPLING DISQUE DE MONOPALIER SCHEIBENKUPPLUNG						
	L	d	Q1	N. FORI	S1	α1	F
6 1/2	30.2	215.9	200	6	9	60°	7
7 1/2	30.2	241.3	222.25	8	9	45°	7
8	62	263.52	244.47	6	11	60°	2
10	53.8	314.32	295.27	8	11	45°	10
11 1/2	39.6	352.42	333.37	8	11	45°	24

SAE N.	FLANGIA / FLANGE BRIDE / FLANSCH					
	O	P	Q	N. FORI	S	α
5	356	314.3	333.4	8	11	22°30'
4	403	362	381	12	11	15°
3	451	409.6	428.6	12	11	15°
2	489	447.7	466.7	12	11	15°
1	552	511.2	530.2	12	11	15°

C.G. = GRAVITY CENTER