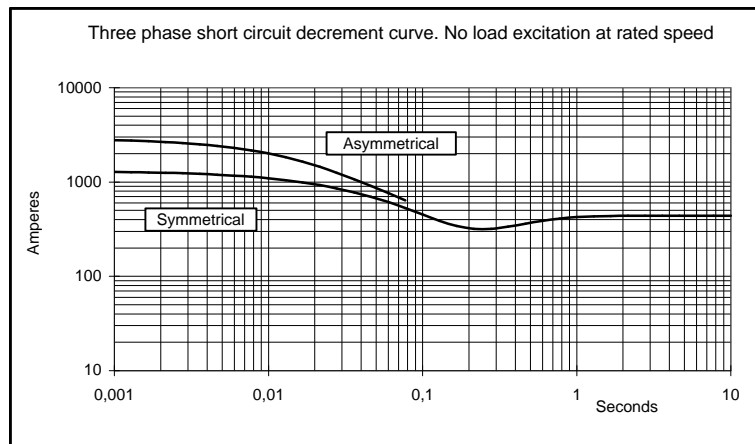
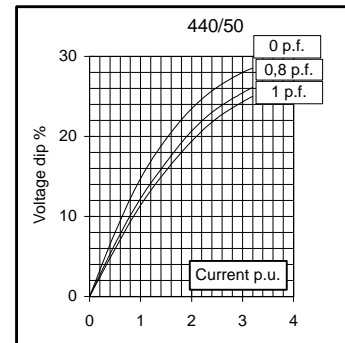
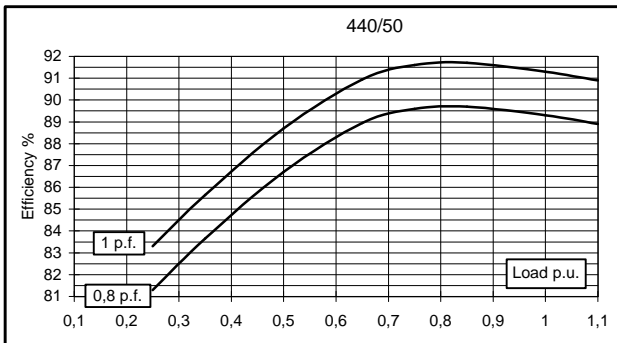
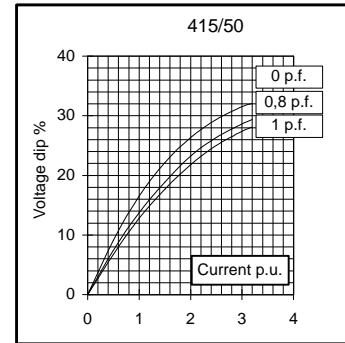
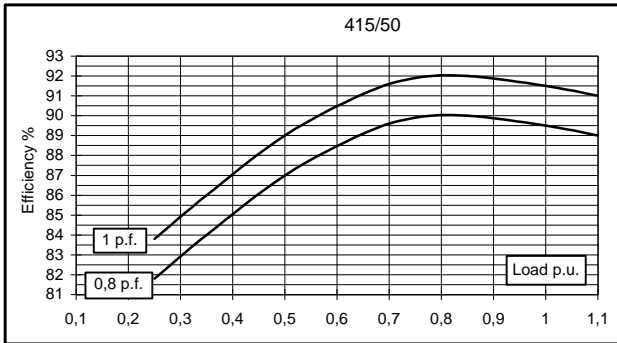
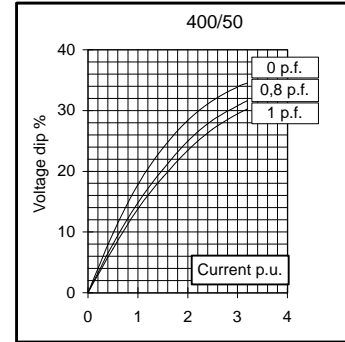
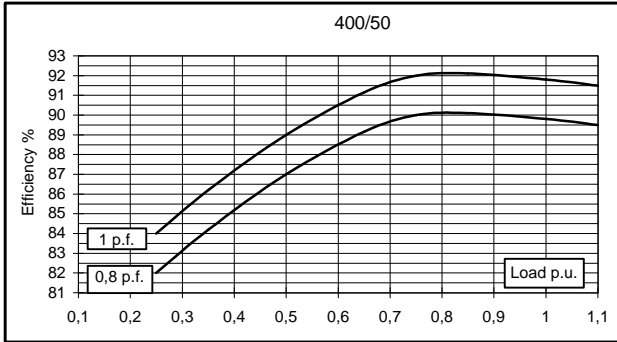
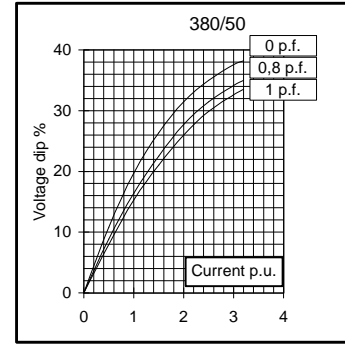
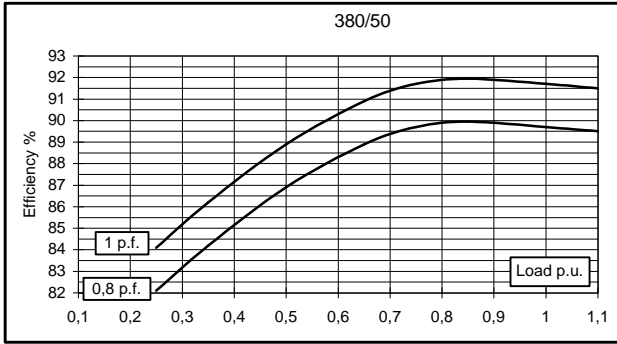
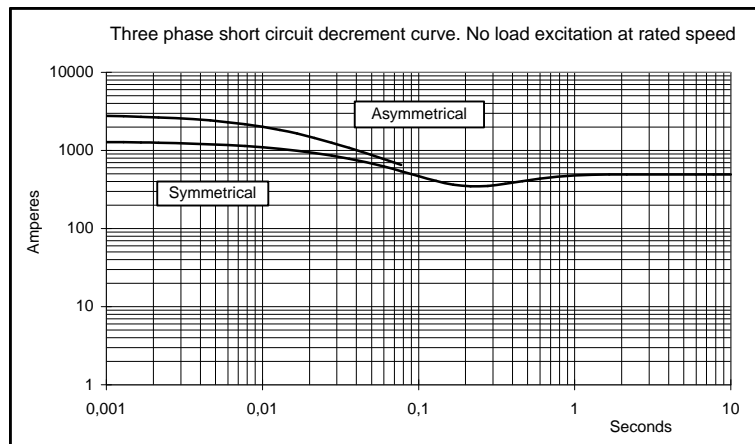
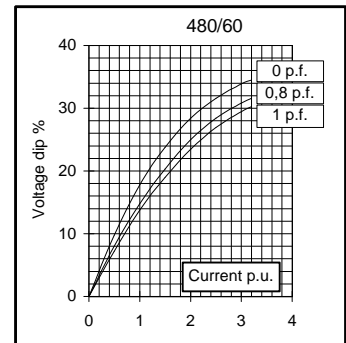
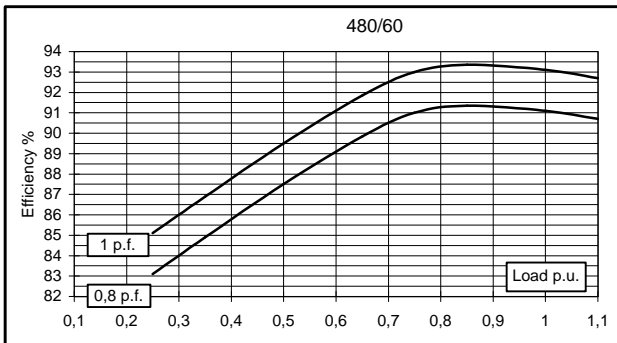
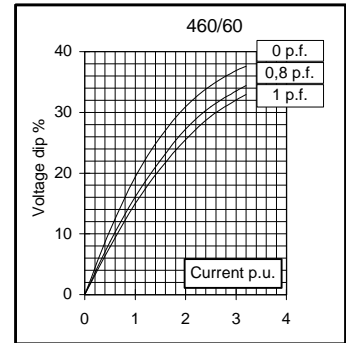
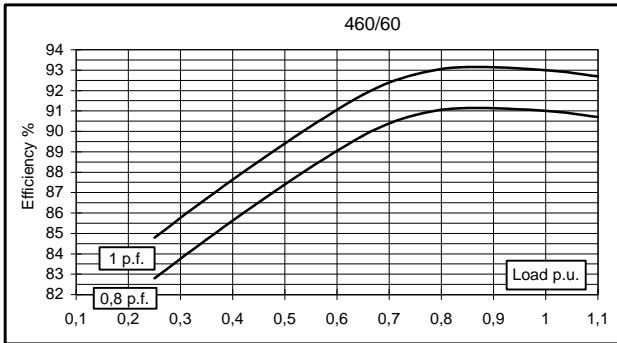
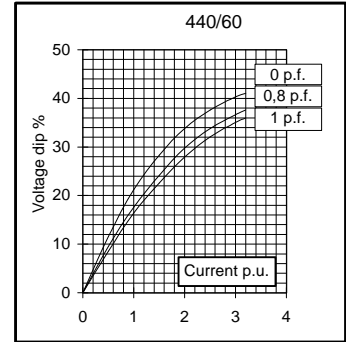
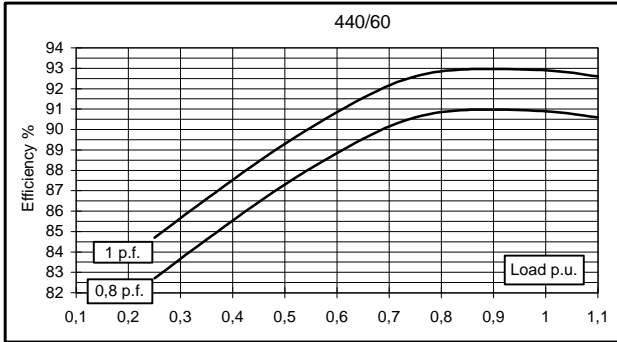
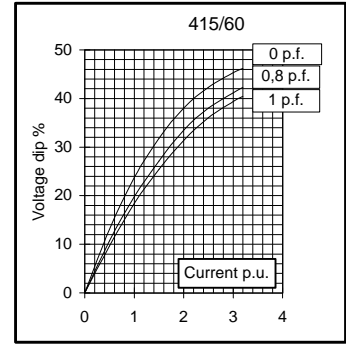
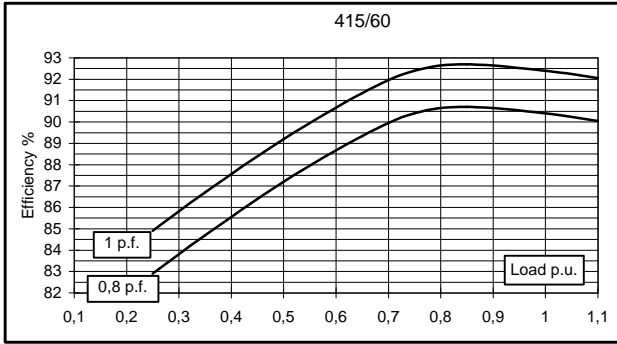


Electrical Characteristics										
Frequency	Hz	50				60				
Voltage (star)	V	380	400	415	440	415	440	460	480	
Rated power class H	kVA	95	95	90	80	97	108	114	114	
	kW	76	76	72	64	77,6	86,4	91,2	91,2	
Rated power class F	kVA	90	90	85	75,5	91,5	102	108	108	
	kW	72	72	68	60,4	73,2	81,6	86,4	86,4	
Regulation 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	4/4	%	89,7	89,8	89,5	89,3	90,4	90,9	91	91,1
(see graph. for details)	3/4	%	89,7	90	89,9	89,6	90,4	90,6	90,8	91
	2/4	%	86,9	87	87	86,7	87,2	87,3	87,4	87,5
	1/4	%	82,1	82	81,8	81,3	82,9	82,7	82,8	83,1
Reactances (f. l.cl. F)	Xd	%	506,4	457	402,2	318,1	520,2	515,2	497,6	457
	Xd'	%	13,63	12,3	10,83	8,56	14,00	13,87	13,39	12,3
	Xd''	%	6,87	6,2	5,46	4,31	7,06	6,99	6,75	6,2
	Xq	%	264,8	239	210,3	166,3	272,1	269,5	260,2	239
	Xq'	%	264,8	239	210,3	166,3	272,1	269,5	260,2	239
	Xq''	%	23,5	21,2	18,7	14,8	24,1	23,9	23,1	21,2
	X ₂	%	18,06	16,3	14,35	11,34	18,55	18,38	17,75	16,3
	X ₀	%	3,43	3,1	2,73	2,16	3,53	3,50	3,38	3,1
Short Circuit Ratio	Kcc		0,40	0,49	0,56	1,11	0,28	0,32	0,40	0,49
Time Constants	Td'	sec.	0,076							
	Td''	sec.	0,015							
	Tdo'	sec.	1,50							
	Ta	sec.	0,012							
Short Circuit Current Capacity		%	>300				>320			
Excitation at no load	Amp.		0,5	0,6	0,75	0,9	0,3	0,4	0,5	0,6
Excitation at full load	Amp.		1,7	1,8	1,9	2	1,45	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		0,024							
Rotor Winding Resistance (20°C)	Ω		5,223							
Exciter Resistance (20 °C)	Ω		Rotor : 0,442				Stator : 11,35			
Heat dissipation at f.l.cl.H	W		8727	8633	8447	7669	8241	8650	9020	8910
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 %		3,2 / 2,8							
Waveform Distors.(THD) at no load	LL/LN %		4,2 / 3,9							
Mechanical characteristics										
Protection			IP 21 (other protection on request)							
DE bearing			6312-2RS							
NDE bearing			6309-2RS							
Weight of wound stator assembly	kg		92,6							
Weight of wound rotor assembly	kg		60,6							
Weight of complete generator	kg		251							
Maximun overspeed	rpm		4320							
Unbalanced magnetic pull at f.l.cl.F	kN/mm		4,2							
Cooling air requirement	m³/min		22,4				27			
Inertia Constant (H)	sec.		0,287				0,344			
Noise level at 1m/7m	dB(A)		88 / 77				93 / 80			

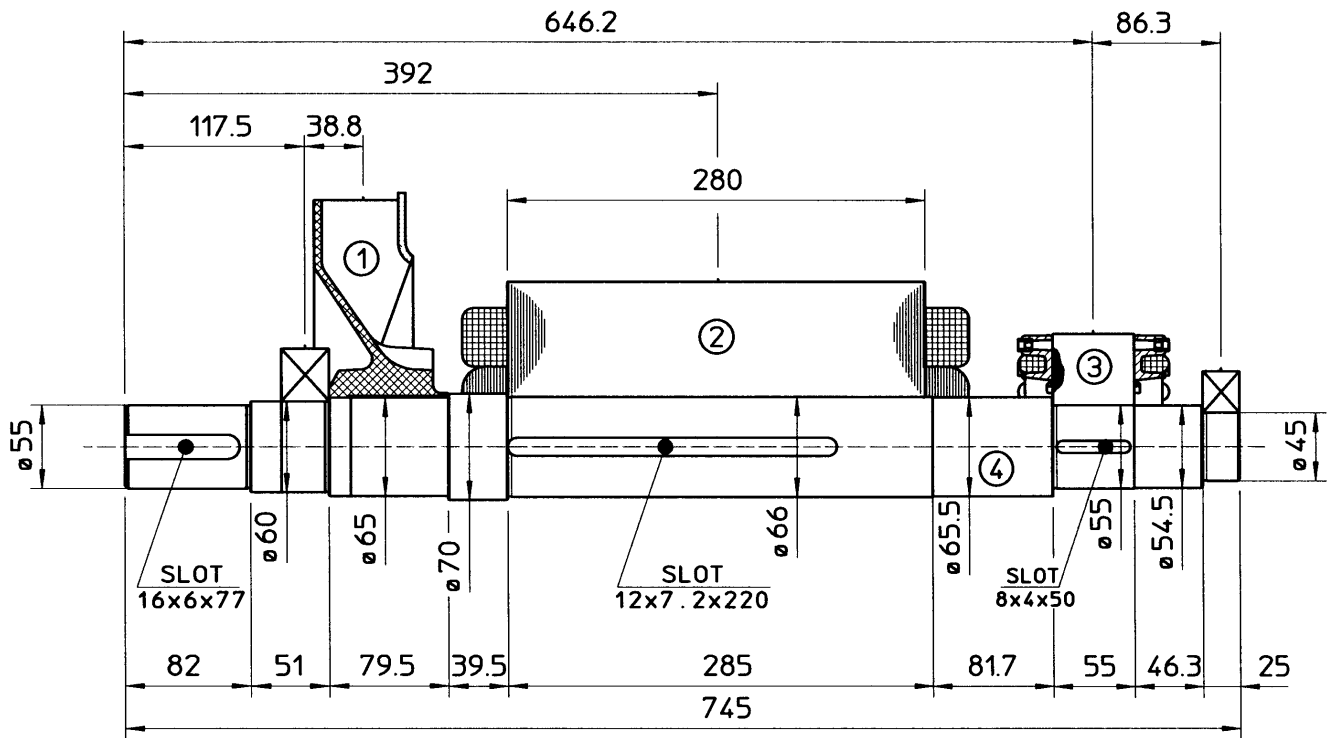
50 Hz



60 Hz

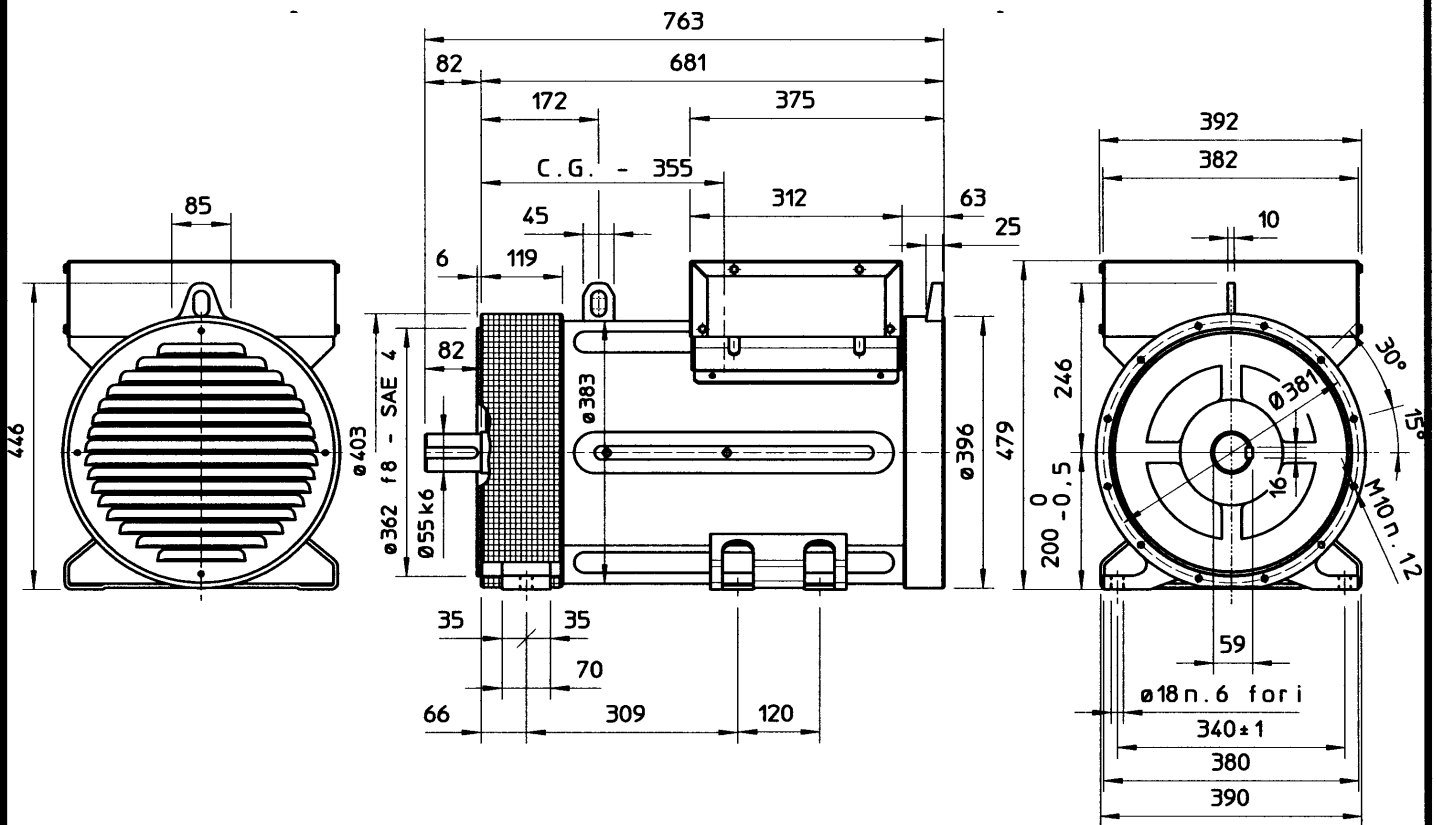


TWO BEARING MOMENTS OF INERTIA



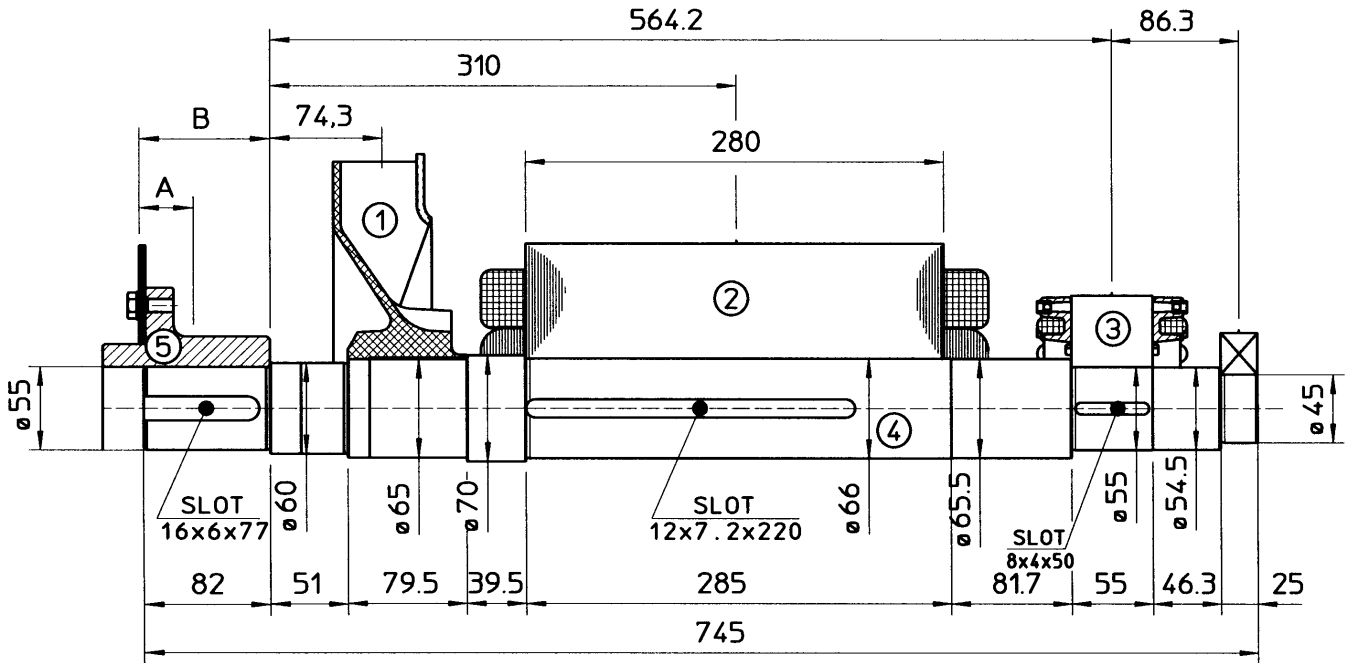
COMPONENT	WEIGHT kg	J kgm ²
1 FAN	2.3	0.0224
2 MAIN ROTOR	59	0.221
3 EX. ROTOR	7	0.016
4 SHAFT	17.5	0.008
TOTAL	85.8	0.2674

TWO BEARING DIMENSIONS



C.G. = GRAVITY CENTER

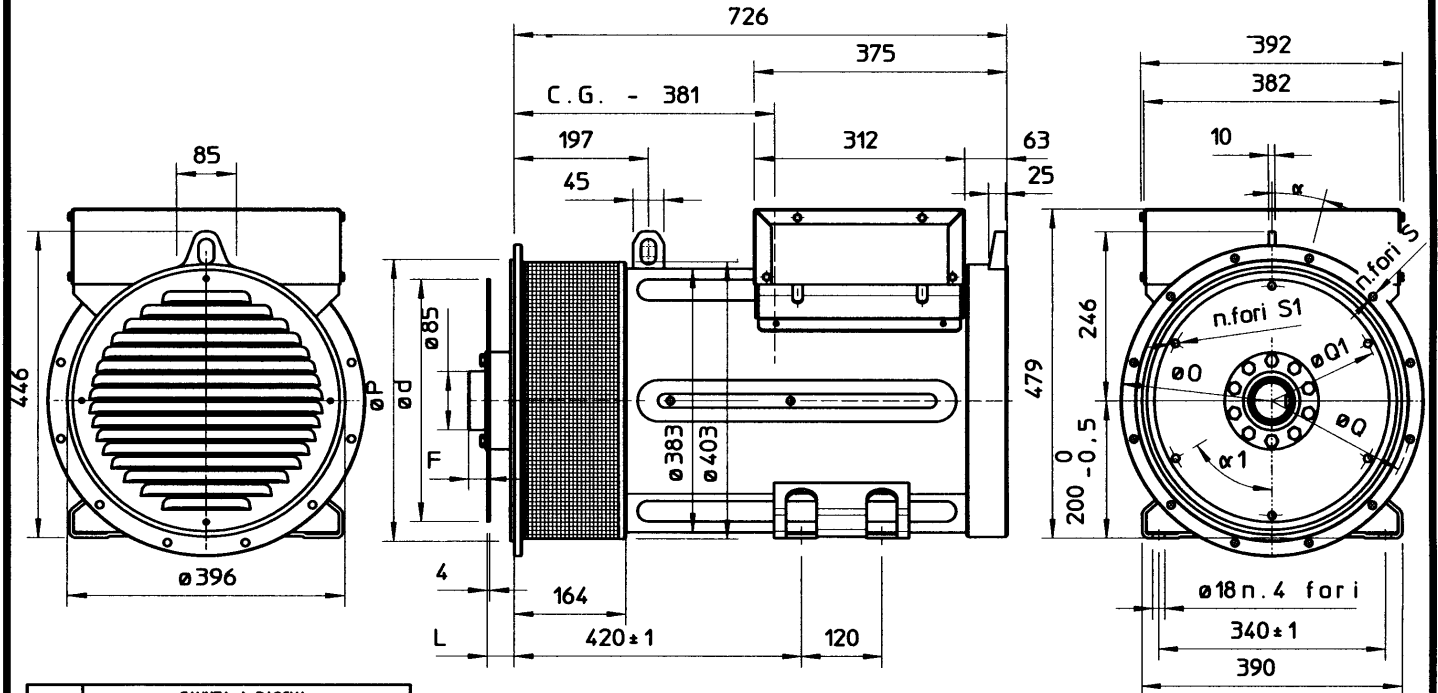
SINGLE BEARING MOMENTS OF INERTIA



COMPONENT	WEIGHT kg	J kgm ²
1 FAN	2,3	0,0224
2 MAIN ROTOR	59	0,221
3 EX. ROTOR	7	0,016
4 SHAFT	17,5	0,008
TOTAL	85,8	0,2674

SAE No	SHAFTS COUPLING FLEX PLATE			
	A	B	WEIGHT kg	J kgm ²
6,5	26,1	75,2	4,2	0,0225
7,5	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