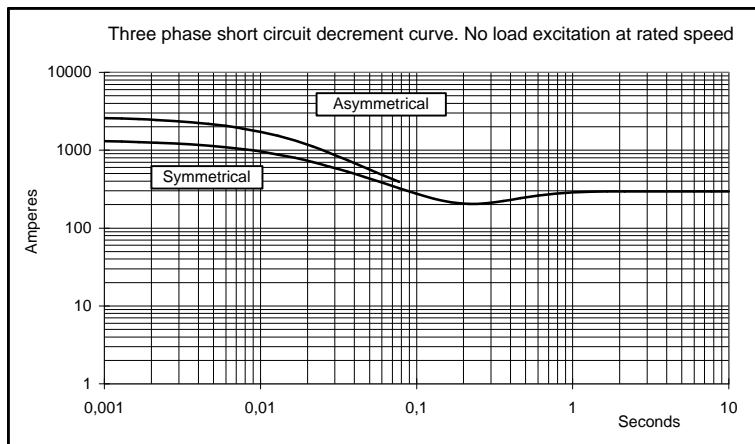
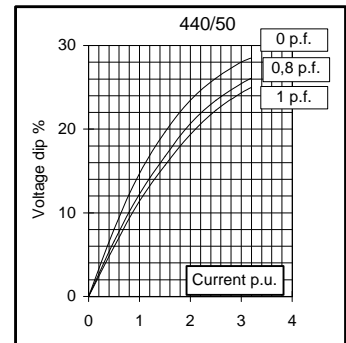
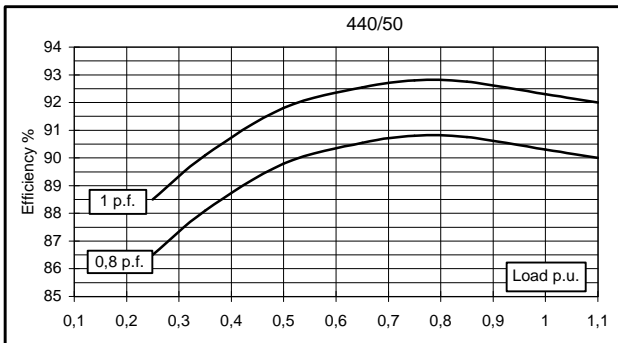
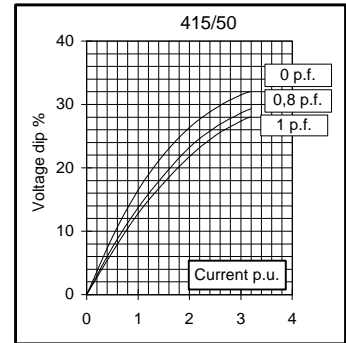
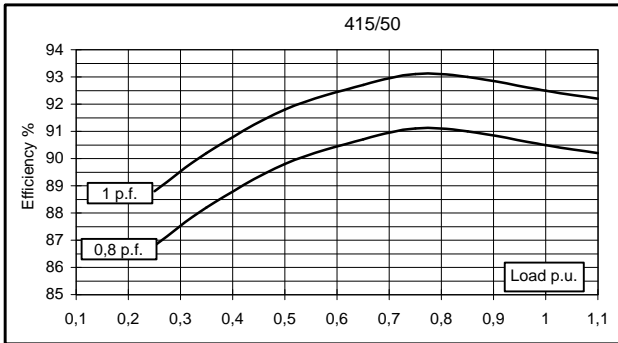
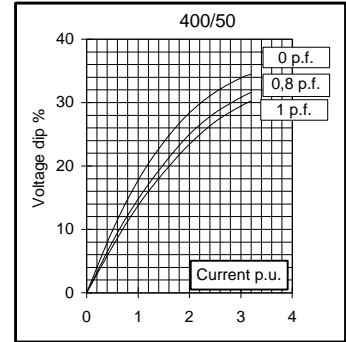
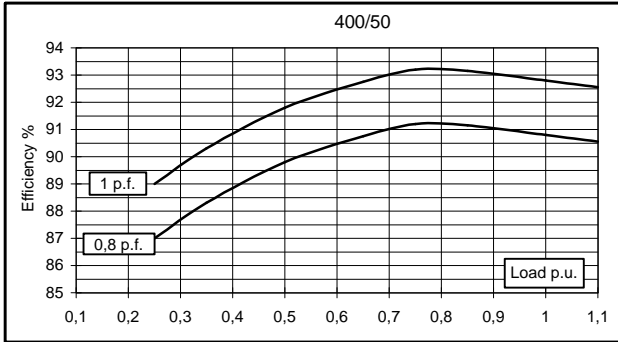
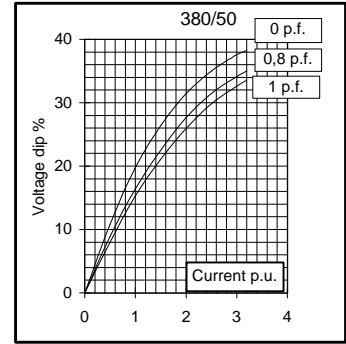
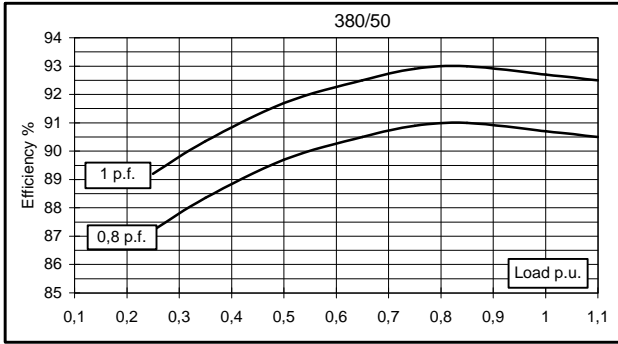
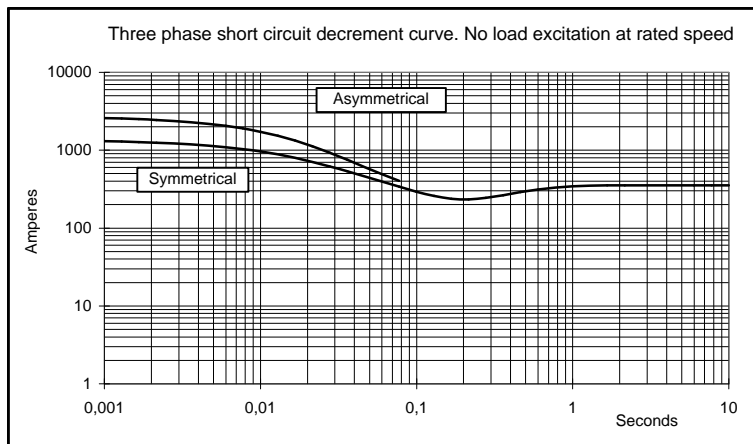
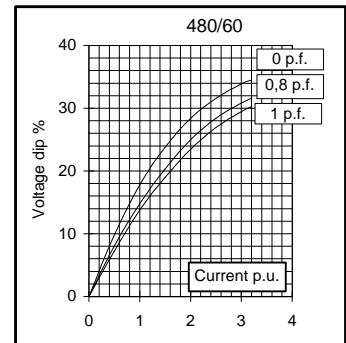
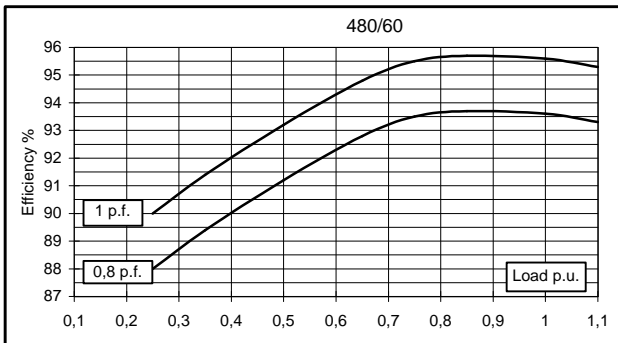
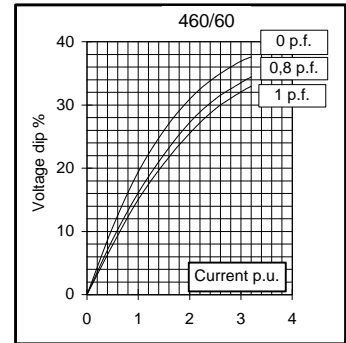
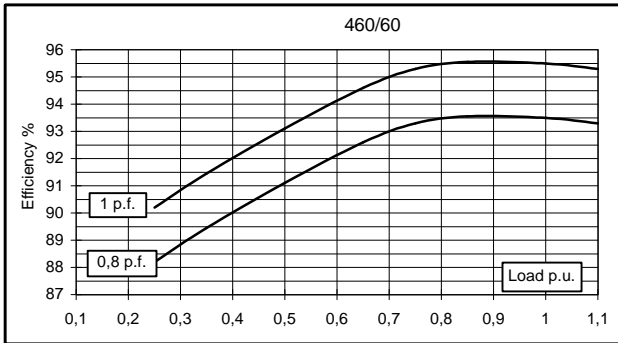
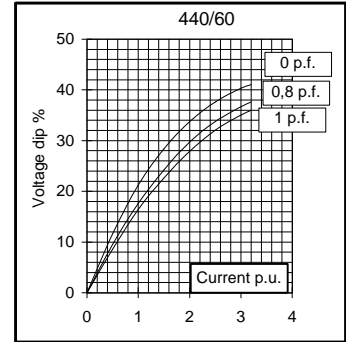
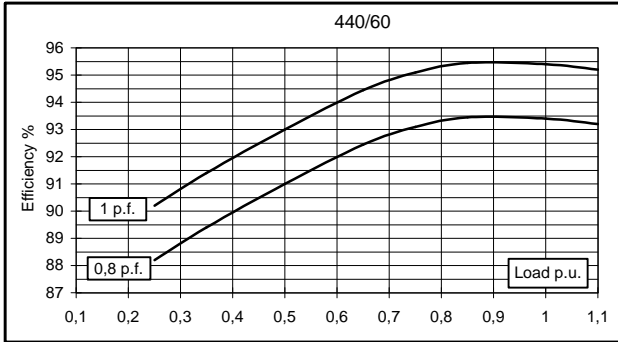
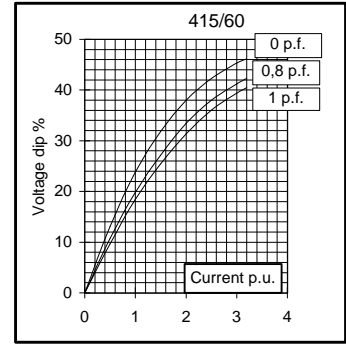
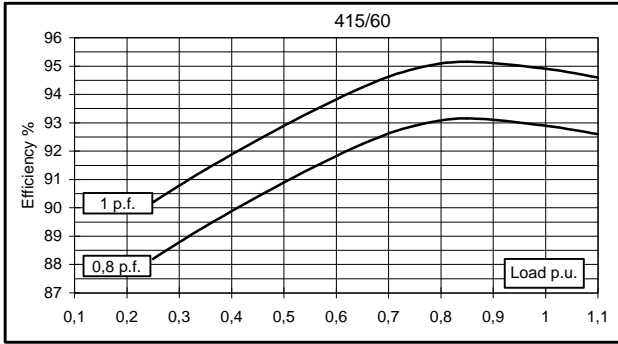


Electrical Characteristics										
Frequency	Hz	50				60				
Voltage (series star)	V	380	400	415	440	415	440	460	480	
Rated power class H	kVA	70	70	70	65	75	80	84	84	
	kW	56	56	56	52	60	64	67,2	67,2	
Rated power class F	kVA	63	63	63	52	68	75	78	78	
	kW	50,4	50,4	50,4	41,6	54,4	60	62,4	62,4	
Regulation 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	%	90,7	90,8	90,5	90,3	92,9	93,4	93,5	93,6
(see graph. for details)	3/4	%	90,9	91,2	91,1	90,8	92,9	93,1	93,3	93,5
	2/4	%	89,7	89,8	89,8	89,8	90,9	91	91,1	91,2
	1/4	%	87,2	87	86,8	86,5	88,2	88,2	88,2	88
Reactances (f. l.cl. F)	Xd	%	315,8	285	264,8	218,7	340,4	323,0	310,3	285
	Xd'	%	13,85	12,5	11,61	9,59	14,93	14,17	13,61	12,5
	Xd''	%	7,20	6,5	6,04	4,99	7,76	7,37	7,08	6,5
	Xq	%	121,9	110	102,2	84,4	131,4	124,7	119,8	110
	Xq'	%	121,9	110	102,2	84,4	131,4	124,7	119,8	110
	Xq''	%	35,5	32	29,7	24,6	38,2	36,3	34,8	32
	X ₂	%	24,16	21,8	20,25	16,73	26,04	24,71	23,74	21,8
	X ₀	%	3,43	3,1	2,88	2,38	3,70	3,51	3,38	3,1
Short Circuit Ratio	Kcc		0,49	0,58	0,65	1,20	0,37	0,41	0,49	0,58
Time Constants	Td'	sec.	0,065							
	Td''	sec.	0,0135							
	Tdo'	sec.	1,30							
	Tα	sec.	0,027							
Short Circuit Current Capacity		%	>300				>350			
Excitation at no load	Amp.		0,5	0,6	0,7	1,2	0,25	0,3	0,4	0,5
Excitation at full load	Amp.		2	2,1	2,3	2,7	1,7	1,6	1,8	2
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load							
Overload per 20 sec.		%	300							
Stator Winding Resistance (20°C)	Ω		0,035							
Rotor Winding Resistance (20°C)	Ω		3,171							
Exciter Resistance (20 °C)	Ω		Rotor : 0,442				Stator : 11,35			
Heat dissipation at f.l.cl.H	W		5742	5674	5878	5586	4586	4522	4672	4595
Telephone Interference			FHT < 2%				TIF < 45			
Radio interference			EN50081-1, EN50082-1, VDE0875K. For others standards apply to factory							
Waveform Distors.(THD) at f. load	LL/LN %		3,9 / 3,7							
Waveform Distors.(THD) at no load	LL/LN %		3,3 / 3,1							
Mechanical characteristics										
Protection			IP 21 (other protection on request)							
DE bearing			6312-2RS							
NDE bearing			6309-2RS							
Weight of wound stator assembly	kg		110							
Weight of wound rotor assembly	kg		72							
Weight of complete generator	kg		298							
Maximun overspeed	rpm		2250							
Unbalanced magnetic pull at f.l.cl.F	kN/mm		5,2							
Cooling air requirement	m ³ /min		11,8				14,5			
Inertia Constant (H)	sec.		0,101				0,121			
Noise level at 1m/7m	dB(A)		75 / 60				79 / 64			

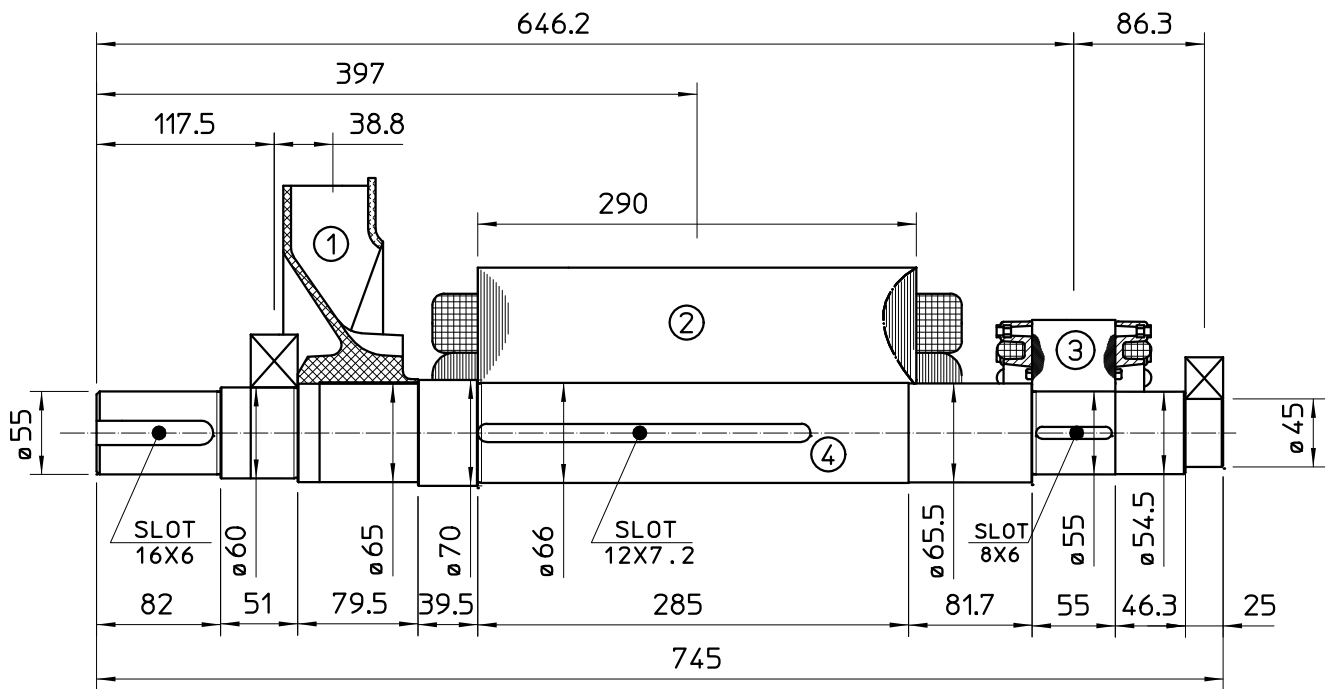
50 Hz



60 Hz

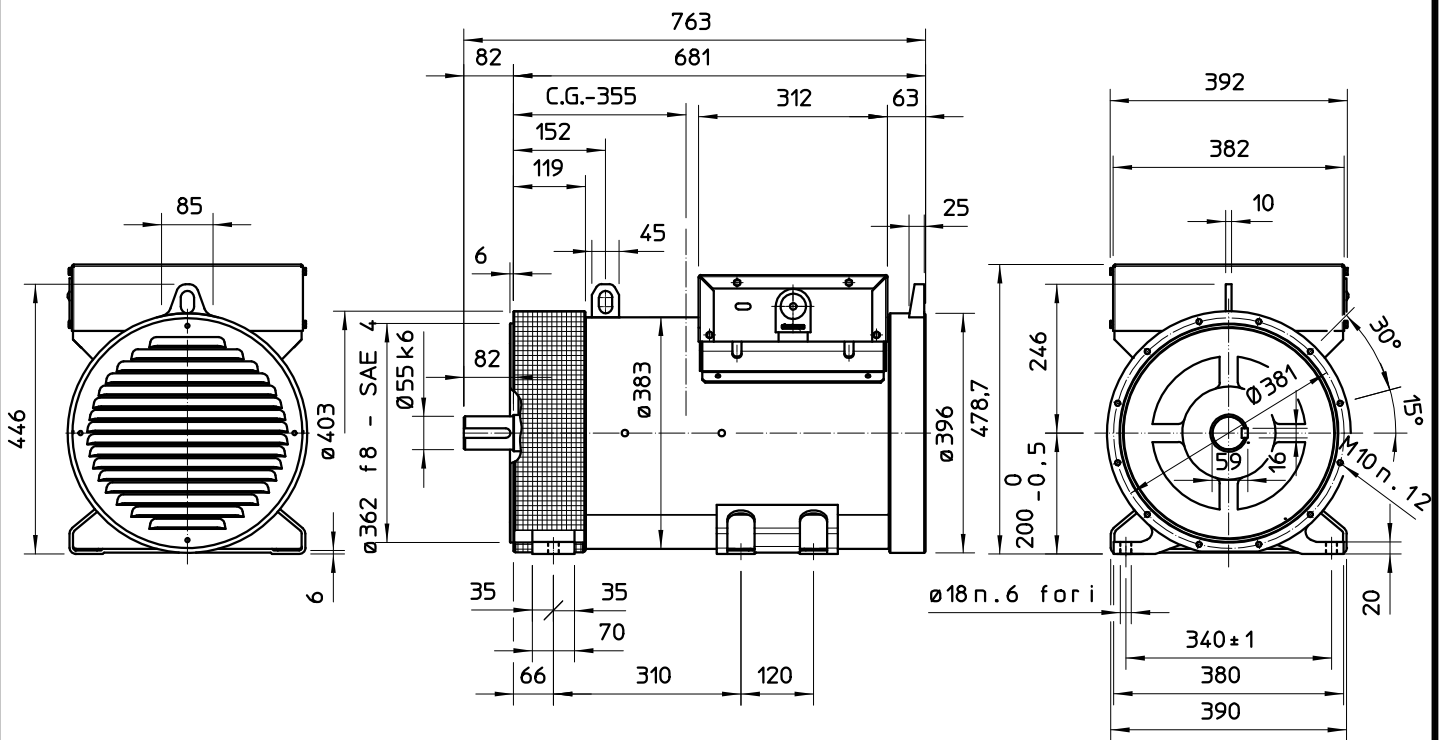


TWO BEARING MOMENTS OF INERTIA



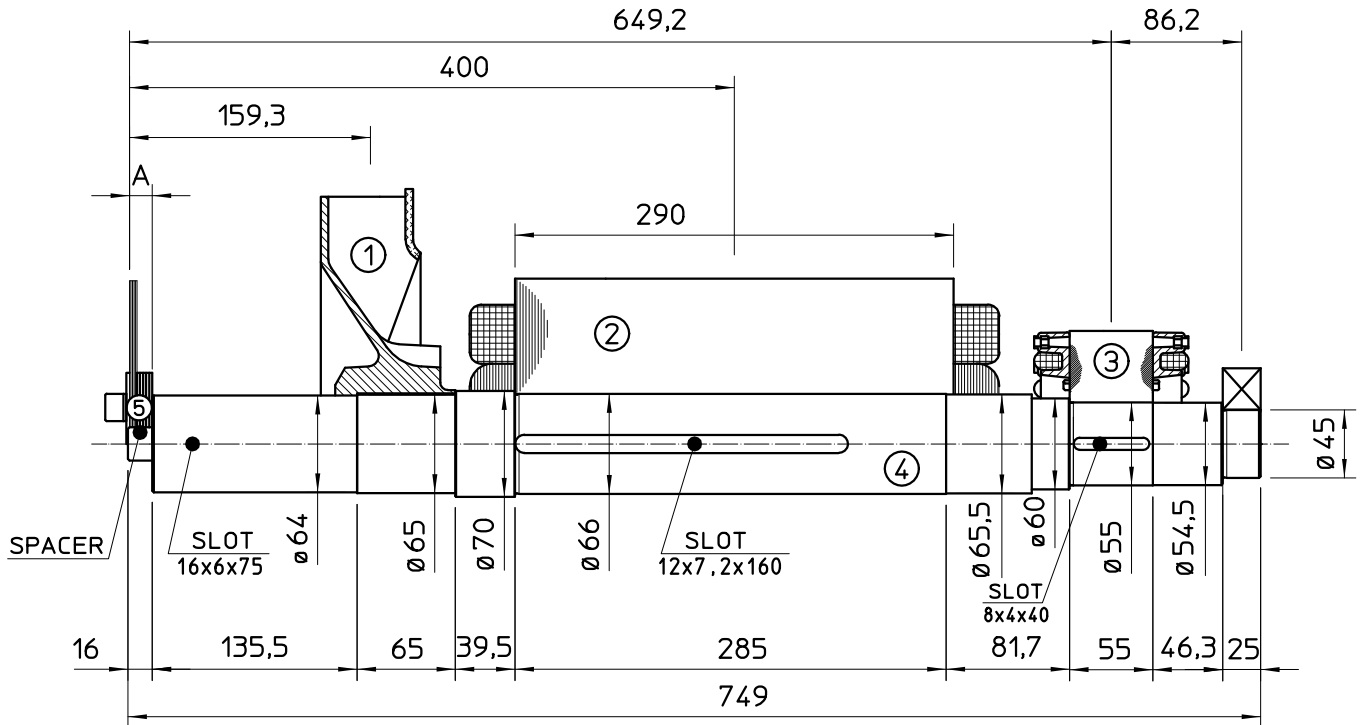
COMPONENT	WEIGHT kg	J kgm ²
1 FAN	2,3	0,0224
2 MAIN ROTOR	74	0,5254
3 EX. ROTOR	7	0,016
4 SHAFT	17,5	0,008
TOTAL	100,8	0,5718

TWO BEARING DIMENSIONS



C.G. = GRAVITY CENTER

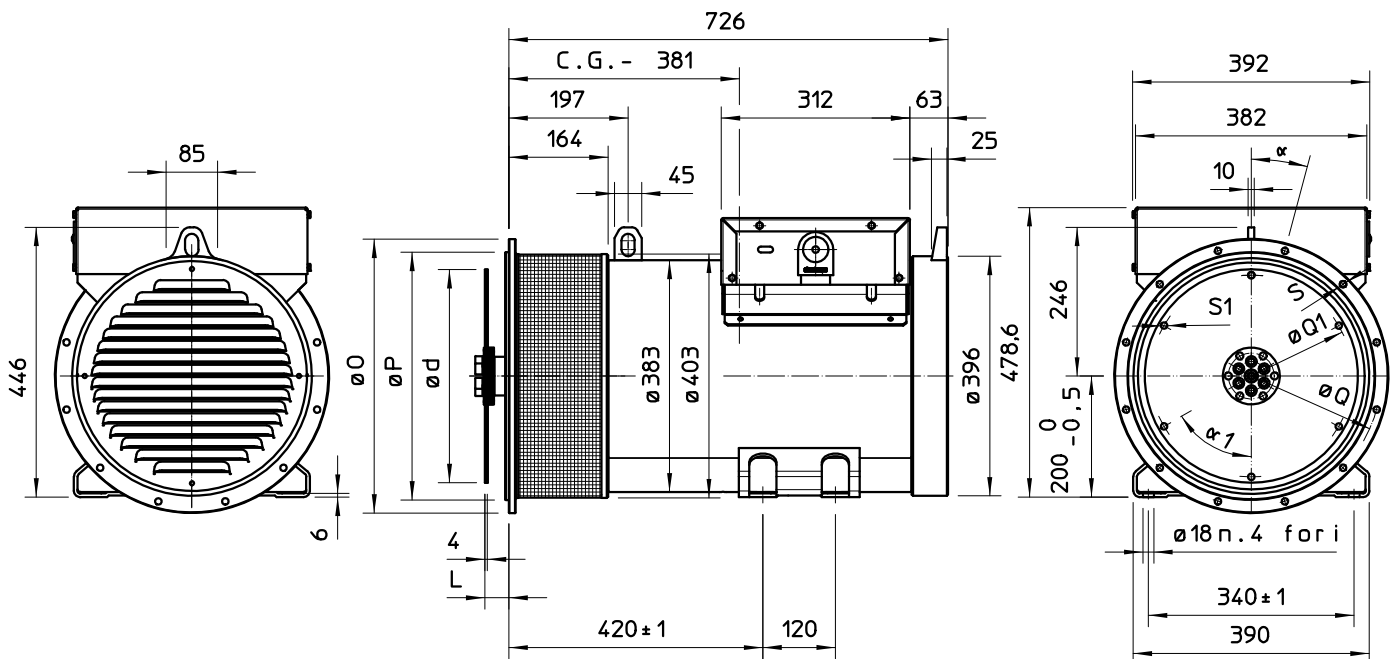
SINGLE BEARING MOMENTS OF INERTIA



COMPONENT	WEIGHT kg	J kgm ²
1 FAN	2,3	0,0224
2 MAIN ROTOR	74	0,5254
3 EX. ROTOR	7	0,016
4 SHAFT	18,3	0,0094
TOTAL	101,6	0,5732

SAE No	SHAFTS COUPLING FLEX PLATE			
	A (mm)	WEIGHT kg	J kgm ²	
6,5	5	1,74	0,0084	
7,5	5	2,1	0,013	
8	36,6	3,9	0,02	
10	28,6	4,47	0,038	
11,5	15	4,51	0,059	

SINGLE BEARING DIMENSIONS



SAE No	DISC COUPLING					
	L	d	Q1	No holes	S1	a1
6,5	30,2	215,9	200	6	9	60°
7,5	30,2	241,3	222,25	8	9	45°
8	62	263,52	244,47	6	11	60°
10	53,8	314,32	295,27	8	11	45°
11,5	39,6	352,42	333,37	8	11	45°

SAE No	FLANGE					
	O	P	Q	No holes	S	a
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