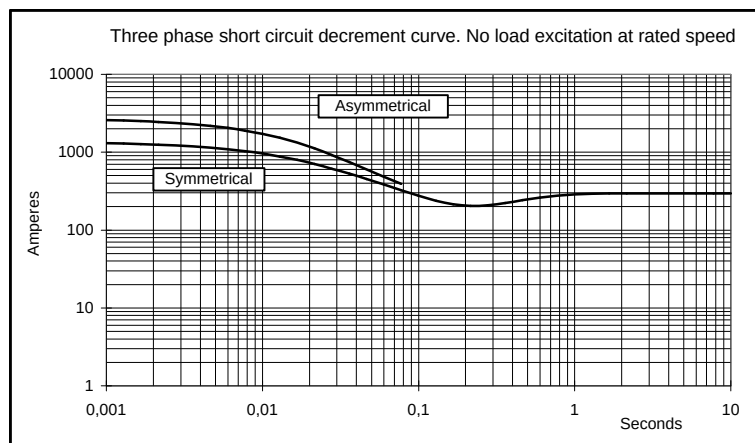
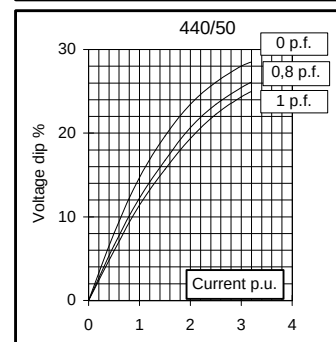
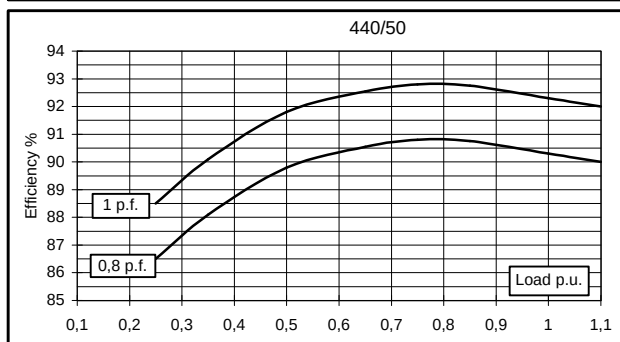
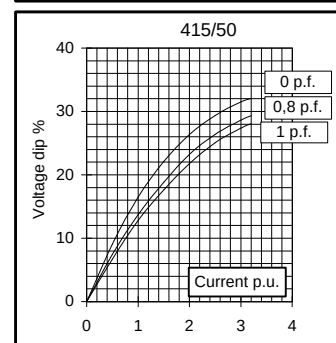
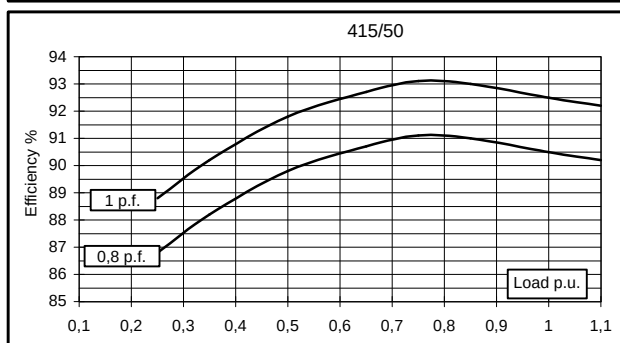
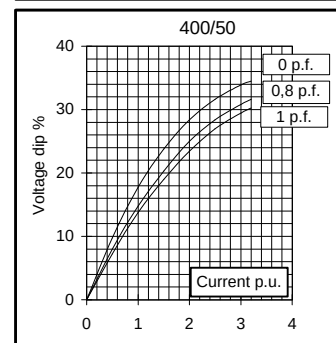
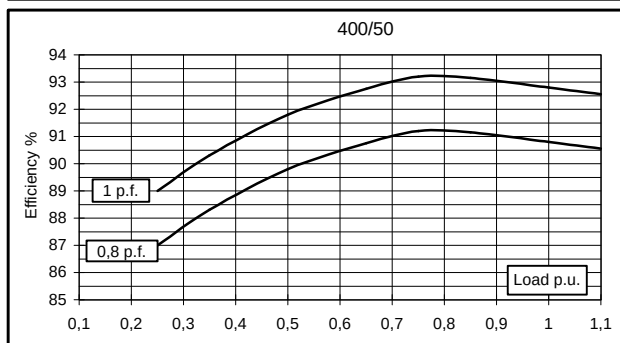
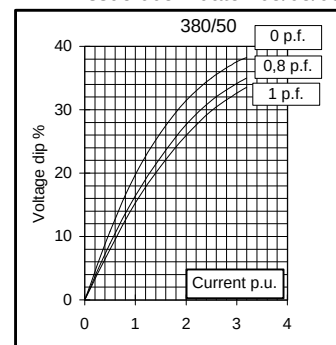
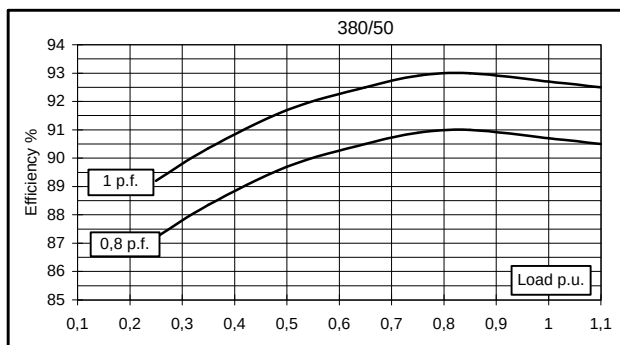
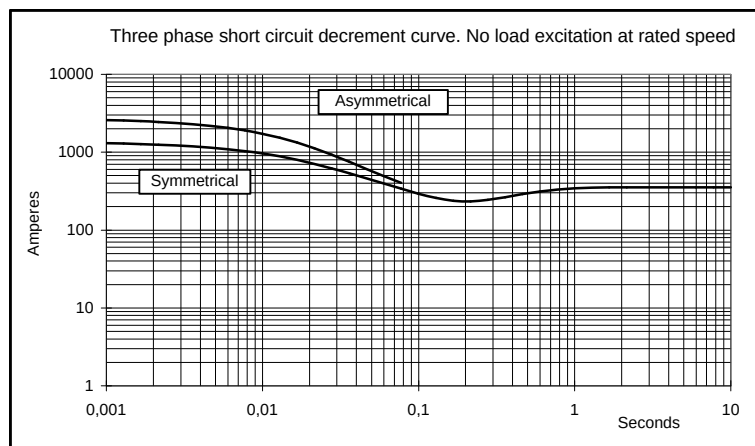
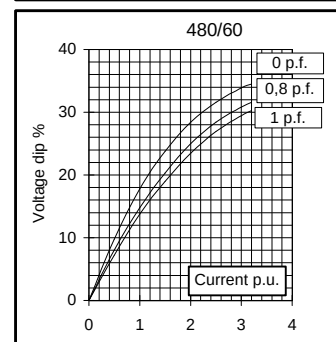
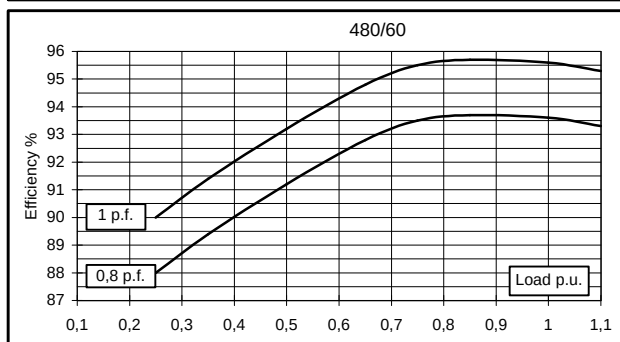
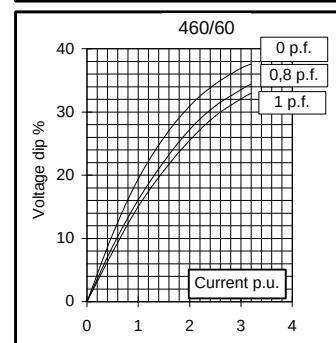
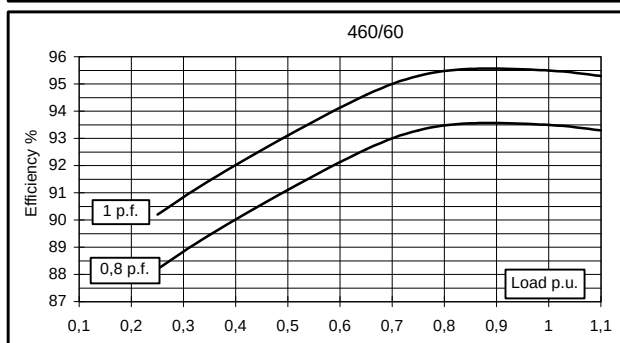
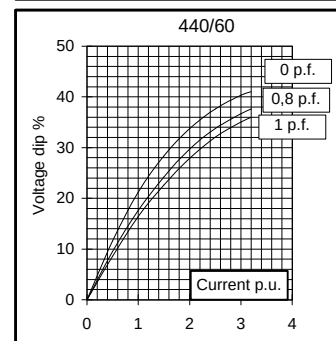
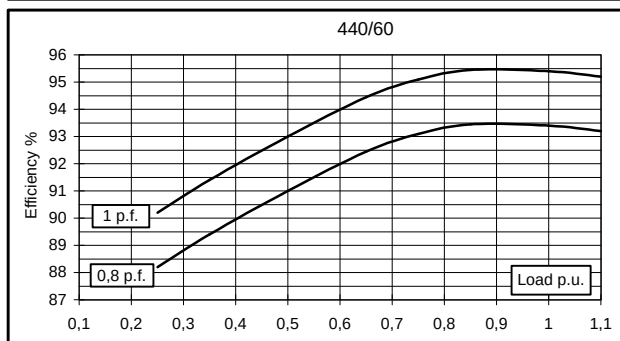
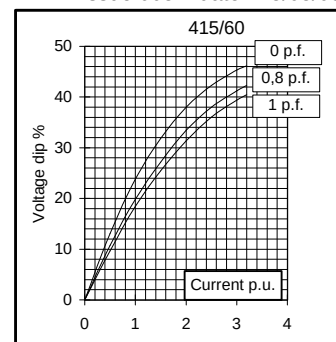
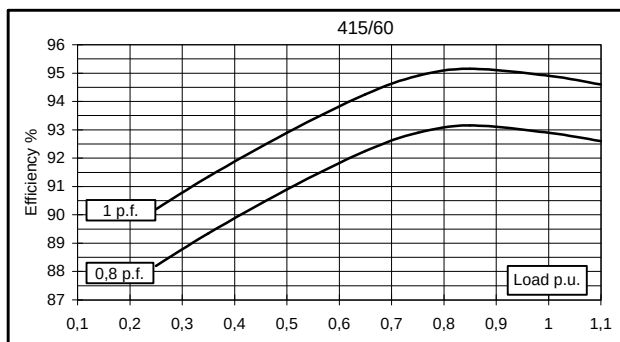


Electrical Characteristics										
Frequency		Hz	50				60			
Voltage (series star)		V	380	400	415	440	415	440	460	480
Rated power class H		kVA	70	70	70	65	75	80	84	84
		kW	56	56	56	52	60	64	67,2	67,2
Rated power class F		kVA	63	63	63	52	68	75	78	78
		kW	50,4	50,4	50,4	41,6	54,4	60	62,4	62,4
Regulation 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	m³/min	11,8					14,5			
Inertia Constant (H)	sec.	0,101					0,121			
Noise level at 1m/7m	dB(A)	75 / 60					79 / 64			

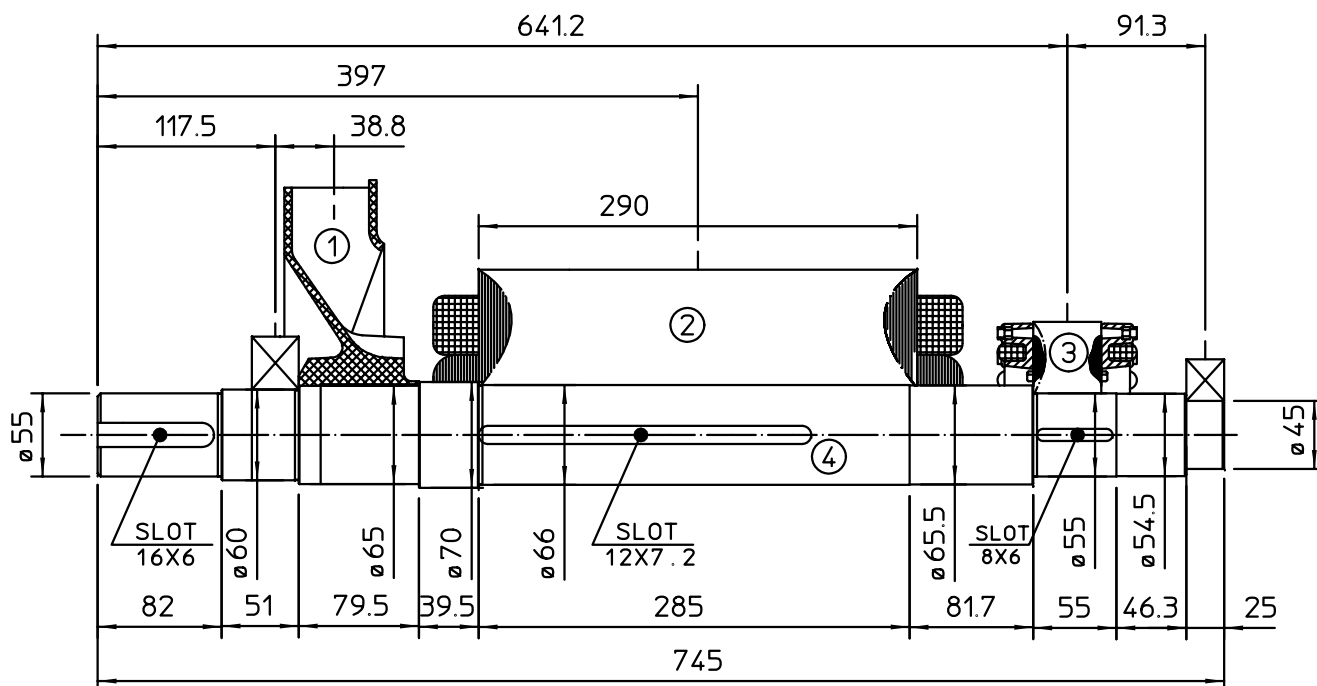
50 Hz



60 Hz

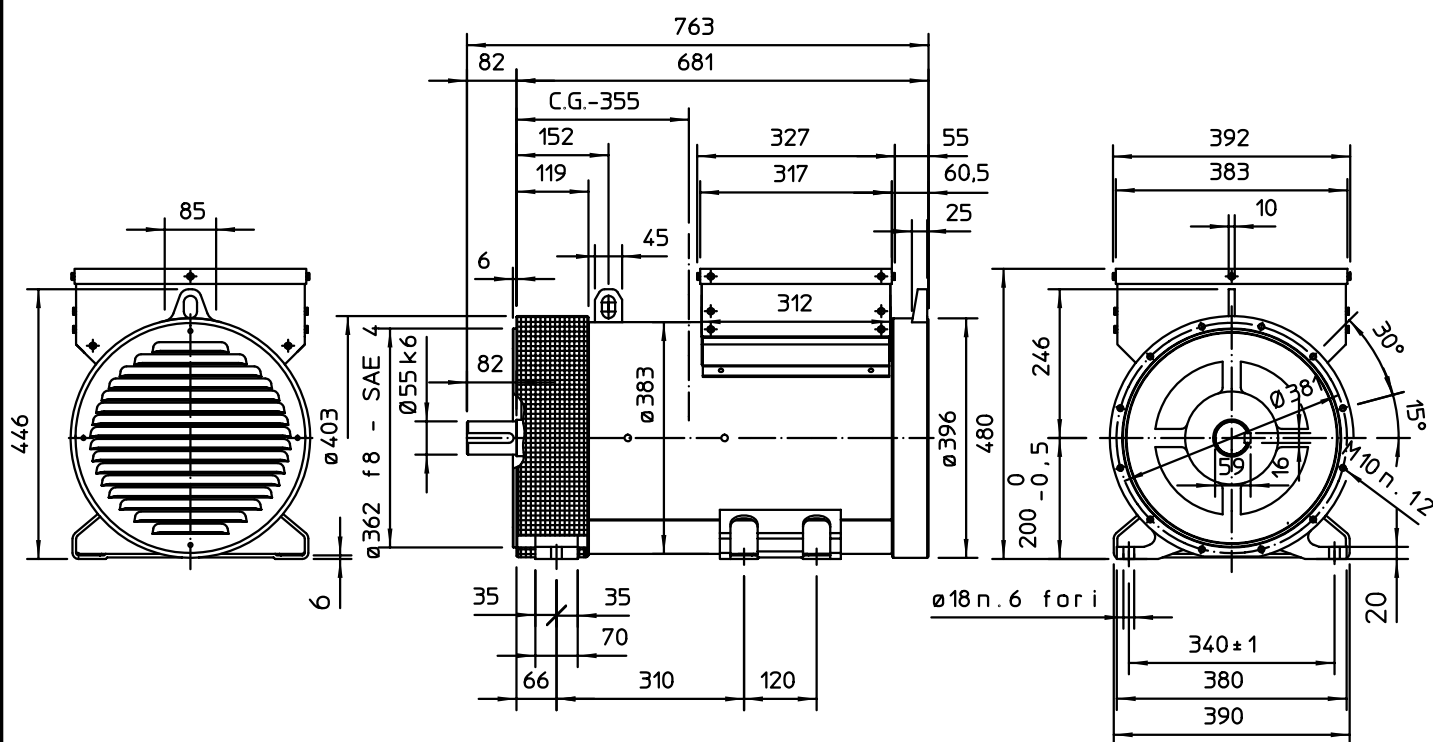


TWO BEARING MOMENTS OF INERTIA

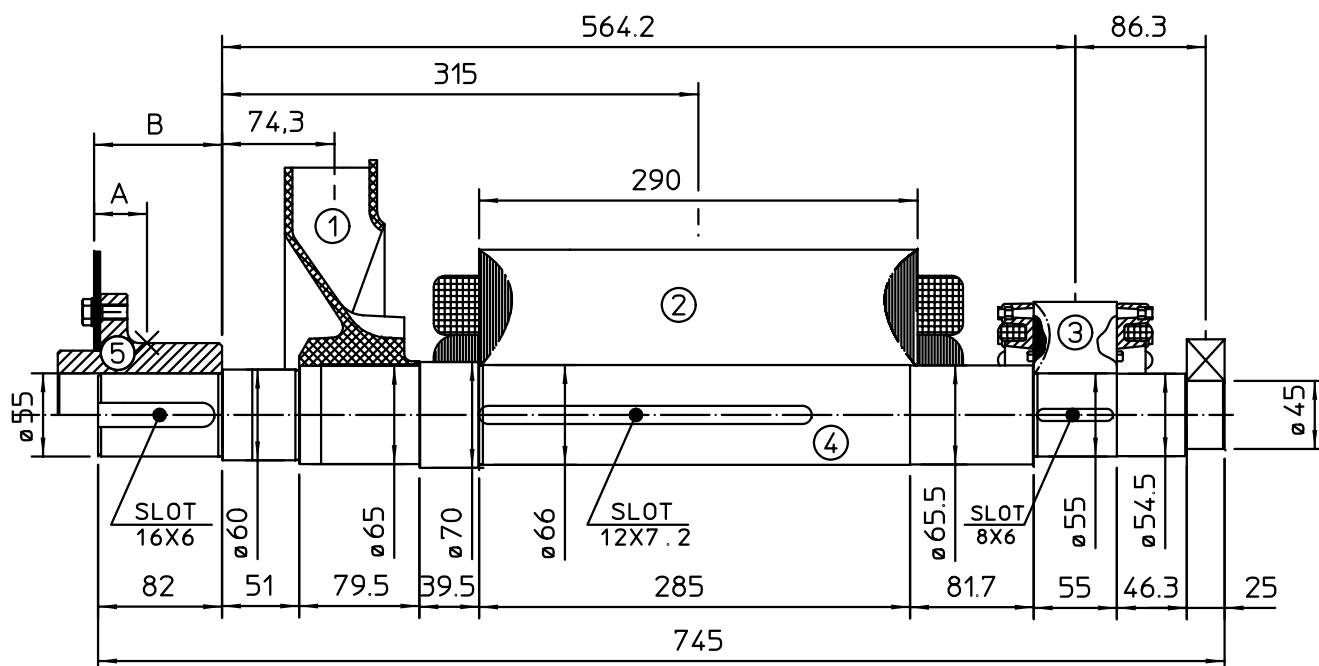


COMPONENT	WEIGHT kg	J kgm ²
1 FAN	2.3	0.0224
2 MAIN ROTOR	7.4	0.5254
3 EX. ROTOR	7	0.016
4 SHAFT	17.5	0.008
TOTAL	100.8	0.5718

TWO BEARING DIMENSIONS



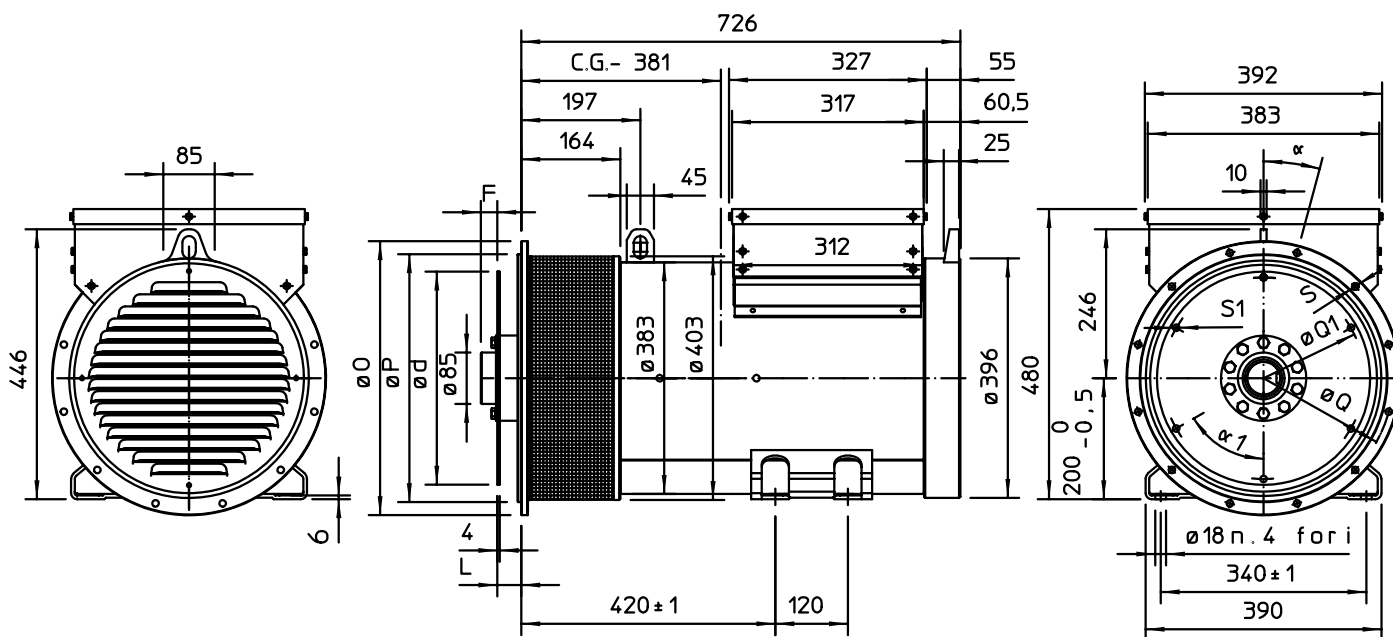
SINGLE BEARING MOMENTS OF INERTIA



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	17.5	0.008
TOTAL	100.8	0.5718

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 No	DISC COUPLING						
	L	d	Q1	No holes	S1	α1	F
6,5	30.2	215.9	200	6	9	60°	7
7,5	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
11,5	39.6	352.42	333.37	8	11	45°	24

SAE No	FLANGE					
	O	P	Q	No holes	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