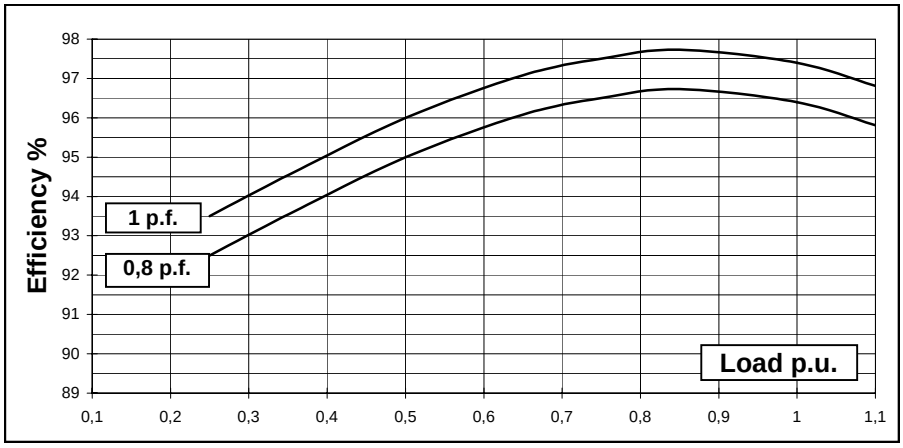
GENERATOR TYPE ECO 43-2LN/4

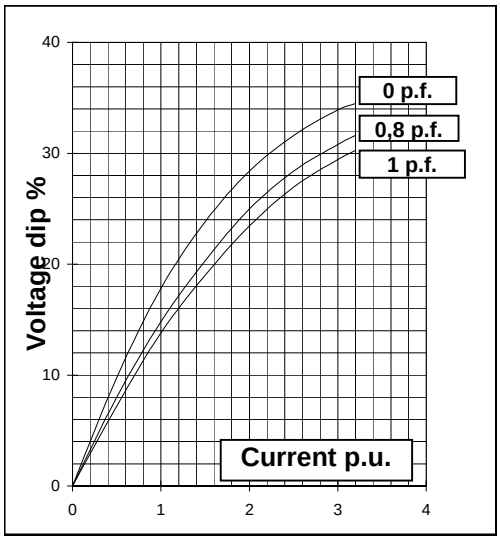
Document : **DS126A/1**
issue 000 date 28/05/2009

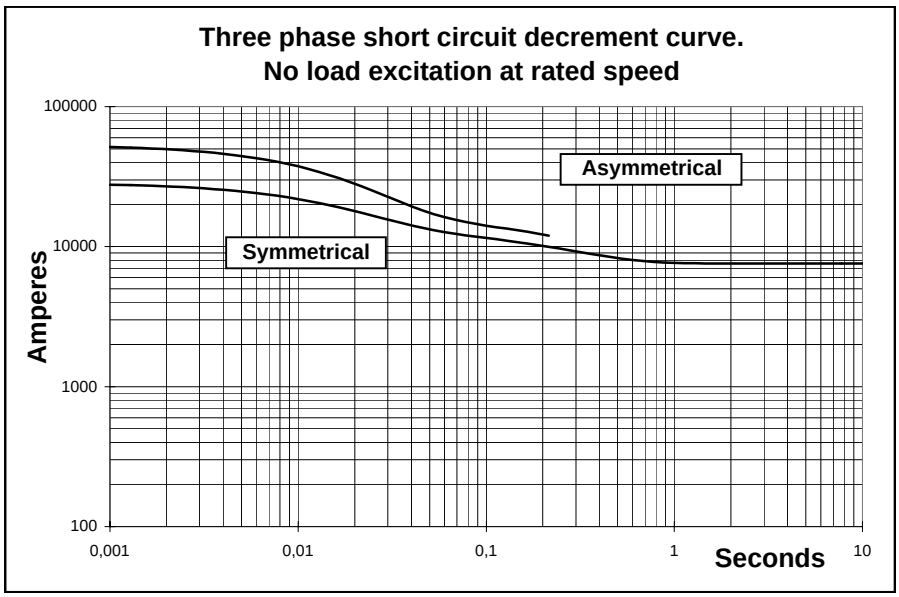
Electrical Characteristics			
Frequency		Hz	60
Voltage (parallel star)		V	380
Rated power class H		kVA	1560
		kW	1248
Rated power class F		kVA	1440
		kW	1152
Rated Stand by power (150°/40°)		kVA	1638
		kW	1310
Regulation with		UVR6	±1% with any power factor and speed variations between -5% +30%
Insulation class			H
Execution			Brushless
Stator winding			12 ends
Rotor			with damping cage
Efficiencies class H	4/4	%	96,4
(see graph. for details)	3/4	%	96,5
	2/4	%	95
	1/4	%	92,5
Reactances (f. l.cl. F)	Xd	%	375,0
	Xd'	%	17,6
	Xd"	%	8,3
	Xq	%	170,0
	Xq'	%	170,0
	Xq"	%	19,0
	X_2	%	13,5
	X_0	%	3,8
Short Circuit Ratio	Kcc		0,38
Time Constants	Td'	sec.	0,27
	Td"	sec.	0,018
	Tdo'	sec.	8,50
	Tα	sec.	0,025
Short Circuit Current Capacity		%	> 350
Excitation at no load		Amp.	0,7
Excitation at full load		Amp.	3,3
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load
Overload per 20 sec.		%	300
Stator Winding Resistance (20°C)		Ω	0,0046
Rotor Winding Resistance (20°C)		Ω	3,82
Exciter Resistance (20 °C)		Ω	Rotor : 0,130 Stator : 10,63
Heat dissipation at f.l.cl.H		W	46.606
Telephone Interference			FHT < 2% TIF < 40
Radio interference			EN60034-1. For others standards apply to factory
Waveform Distors.(THD) at f. load		LL/LN %	1,5 / 1,5
Waveform Distors.(THD) at no load		LL/LN %	2,4 / 2,4
Mechanical characteristics			
Protection			IP 21 (other protection on request)
DE bearing			6324
NDE bearing			6322
Weight of wound stator assembly		kg	979
Weight of wound rotor assembly		kg	759
Weight of complete generator		kg	2660
Maximun overspeed		rpm	2250
Unbalanced magnetic pull at f.l.cl.F		kN/mm	5,9
Cooling air requirement		m³/min	108
Inertia Constant (H)		sec.	0,292
Noise level at 1m/7m		dB(A)	99 / 89

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

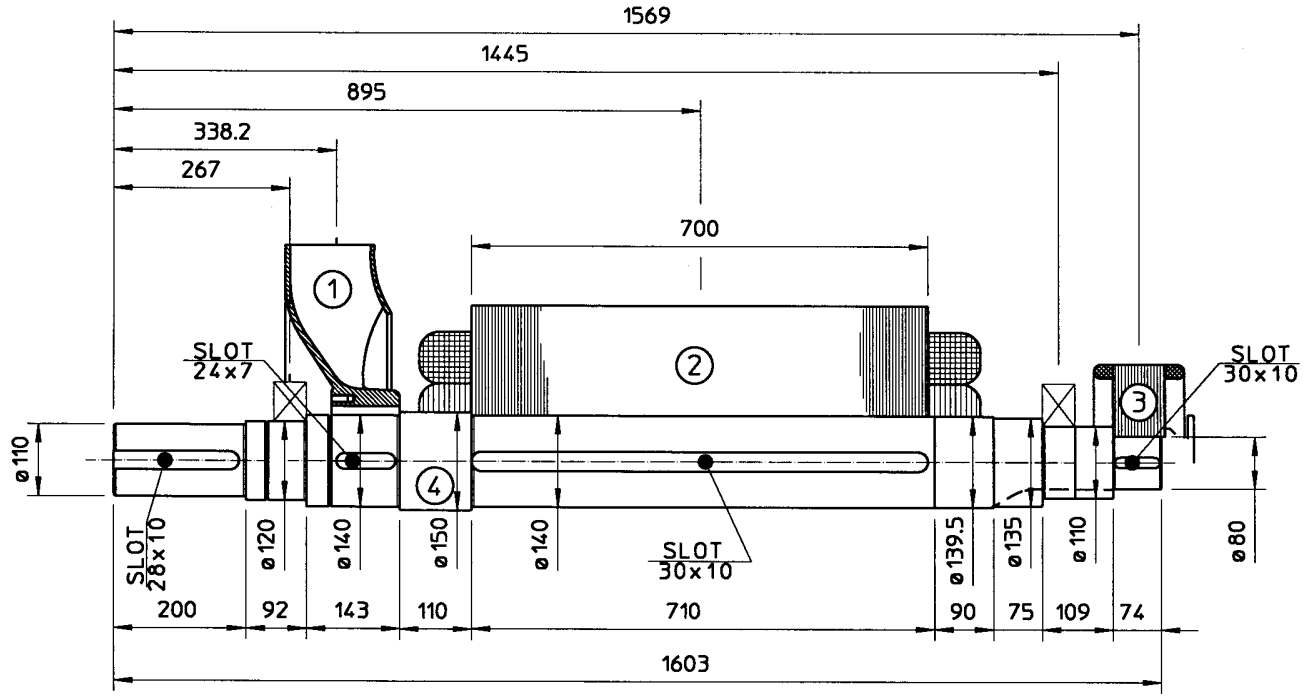
380V - 60 Hz





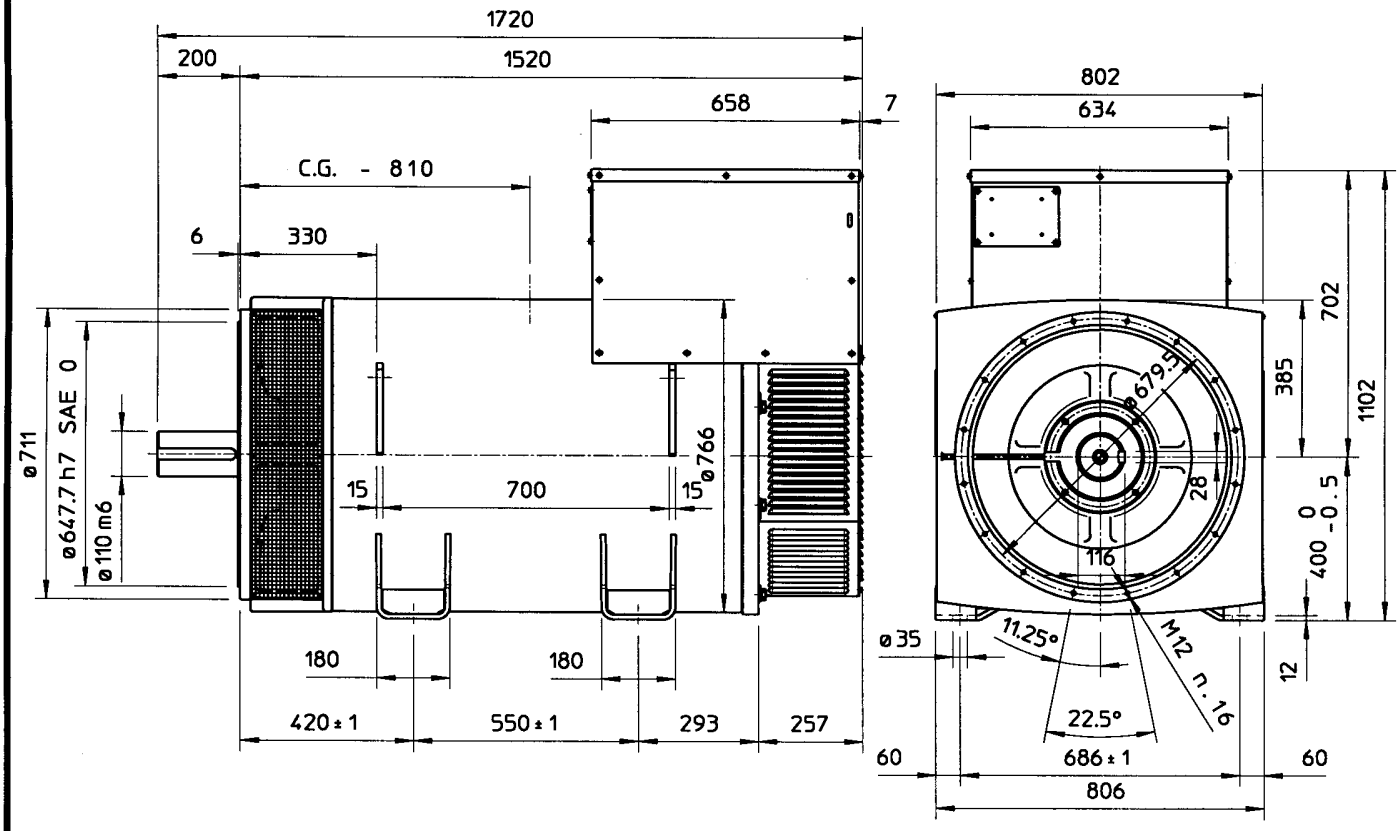


TWO BEARING MOMENTS OF INERTIA



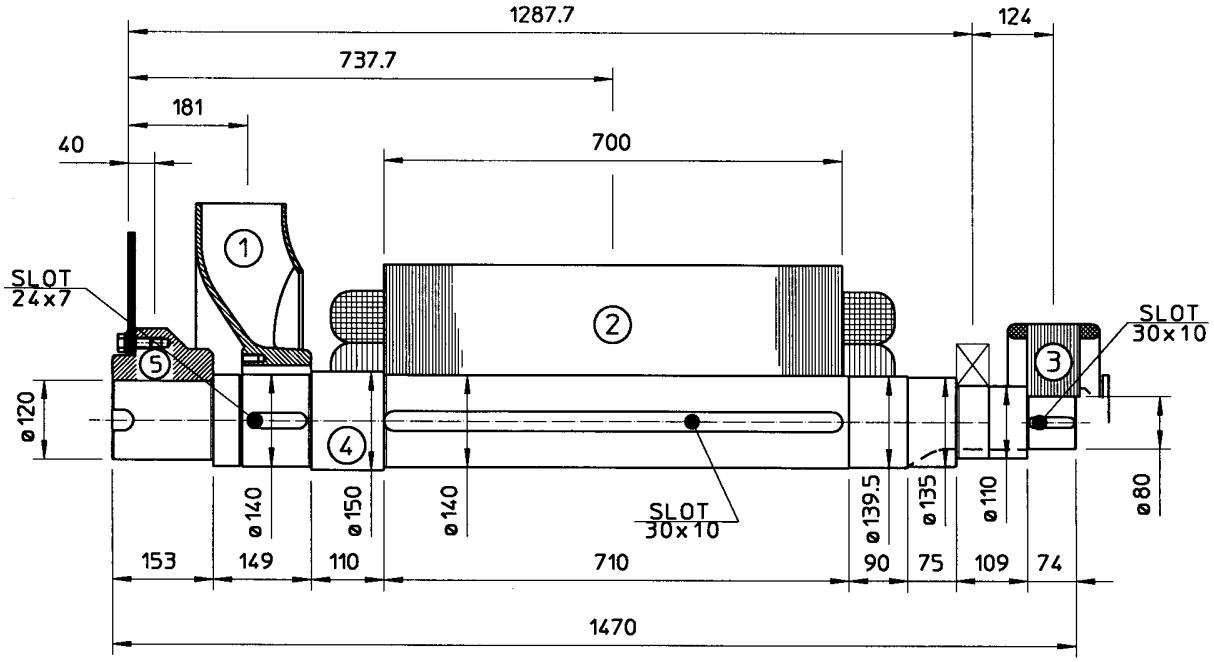
	COMPONENT	WEIGHT kg	J kgm ^{2}
1	FAN	27	1.12
2	MAIN ROTOR	759	23.351
3	EX. ROTOR	40	0.629
4	SHAFT	171.3	0.485
	TOTAL	997.3	25.585

TWO BEARING DIMENSIONS



C.G.= GRAVITY CENTER

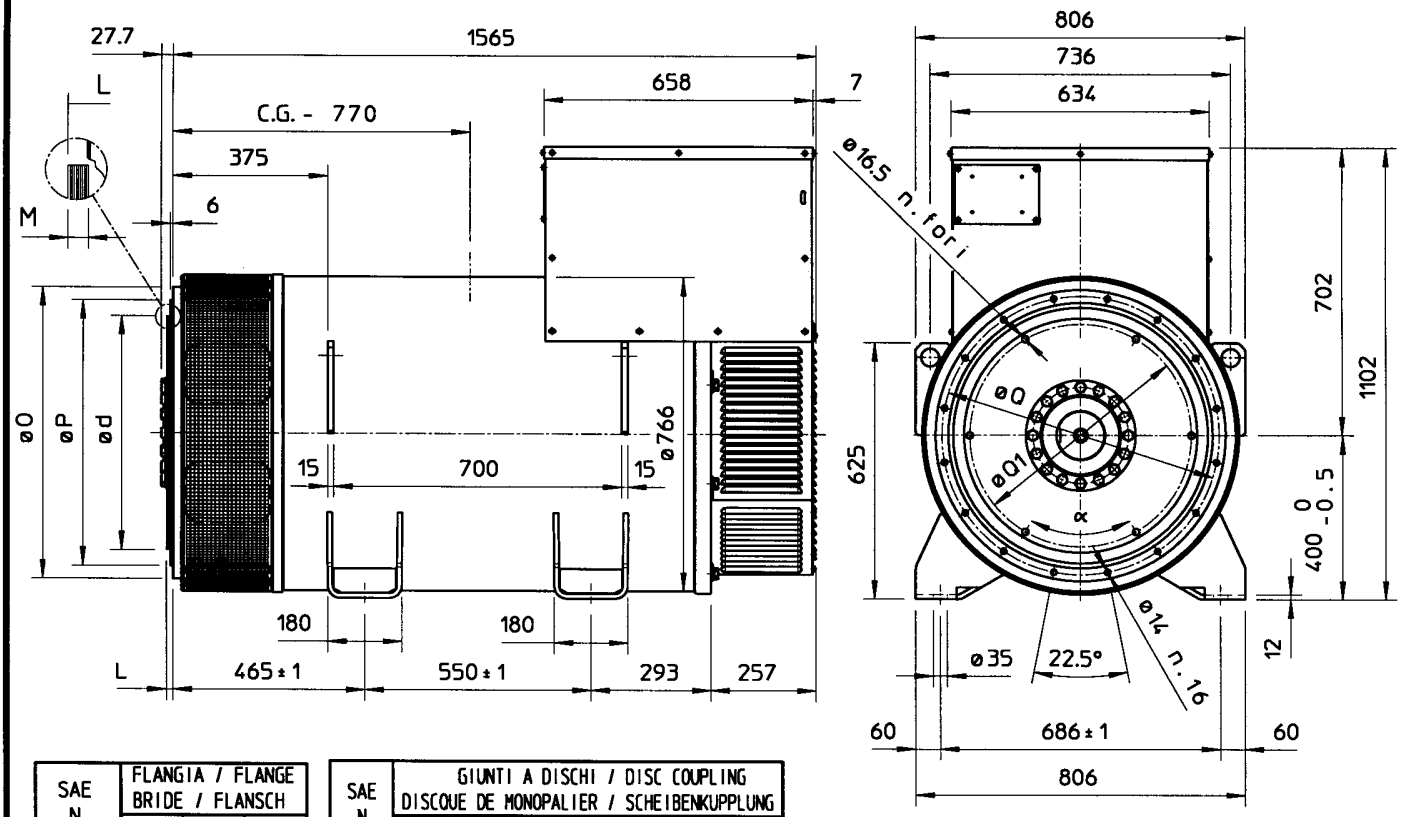
SINGLE BEARING MOMENTS OF INERTIA



	COMPONENT	WEIGHT kg	J kgm ^{2}
1	FAN	27	1.12
2	MAIN ROTOR	759	23.351
3	EX. ROTOR	40	0.629
4	SHAFT	162.5	0.460
	TOTAL	988.5	25.56

SAE N.	5 SHAFTS COUPLING FLEX PLATE	
	WEIGHT kg	J kgm ^{2}
18	69.9	1.065

SINGLE BEARING DIMENSIONS



SAE N.	FLANGIA / FLANGE BRIDE / FLANSCH		
	O	P	O
0	711	647,7	679,5
00	883	787,4	850,9

SAE N.	GIUNTI A DISCHI / DISC COUPLING DISCOUE DE MONOPALIER / SCHEIBENKUPPLUNG					
	d	L	M	Q1	N.FORI	α
18	571,5	15,7	10	542,92	6	60°
21	673,1	0	12	641,35	12	30°

C.G.= GRAVITY CENTER