موتور دیزل : IVECO	ژنراتور : Meccalte

	Prime		Standby	
دیزل ژنراتور	KVA	KW	KVA	KW
	80	100	88	110

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موتور دیزل		
Manufacturer	IVECO	تولید کننده
Type	TM2A	تیپ
Number of cylinders	6	تعداد سیلندر ها
Cylinder arrangement	inline	آرایش سیلندر ها
Displacement , Liters	6.7	جا به جایی
Bore × Stroke , mm	104x132	قطر سیلندر × کورس پیستون

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ژنراتور		
Manufacturer	Mecc Alte	تولید کننده
Type	ECP34 - 2S	تیپ
Frequency, Hz	50	فرکانس
Speed, Rpm	1500	سرعت
Voltage, V	380	ولتاژ
Excitation	Brushless	سیستم تحریک
Stator windings	12	سیم پیچ استاتور
Rotor	with damping cage	روتور
Over speed, Rpm	2250	حداکثر سرعت مجاز
Short circuit current	0,41	جریان اتصال کوتاه
Insulation class	H	کلاس عایق
Protection class	IP 21	کلاس حفاظتی
Cooling air volume,m^3 / sec	19,3	دبی هوای خنک کننده

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TM2A

125 kW@1500 rpm
140 kW@1800 rpm
EU 2002/88/EC

Specifications

Thermodynamic cycle		Diesel 4 stroke	
Air intake		TAA	
Arrangement		6, in line	
Bore x Stroke	mm	104 x 132	
Total displacement	l	6.7	
Valves per cylinder		2	
Injection system		direct	
Speed governor		mechanical	
Cooling system		liquid (water + 50% Paraflu11)	
Flywheel housing/flywheel	type	SAE3 / 11" 1/2	
Flywheel rotation		CCW	
Lube oil specifications		ACEA E3-E5	
Lube oil consumption		<0.1% of fuel consumption	
Fuel specifications		EN 590	
Oil and filters intervals for replacement	hours	600	
Fuel consumption at:	rpm	1500	1800
	100% load l/h (g/kWh)	29.0 (207.0)	35.0 (218.0)
	80% load l/h (g/kWh)	24.0 (212.6)	29.0 (223.7)
	50% load l/h (g/kWh)	16.0 (223.8)	19.0 (240.4)
Coolant capacity: engine only	l	~10.5	
engine+radiator	l	~25.5	
ATB (without canopy)	°C	61	
No remote cooling radiator allowed			
Lube oil total system capacity including pipes, filters etc.	l	~17.2	
Electrical system		12Vcc	
Starting batteries: recommended capacity	Ah	1x100	
Discharge current (EN 50342)	A	800	
Cold starting: without air preheating	°C	-10	
with air preheating	°C	-25	

Performances

Ratings[1]		1500 rpm		1800 rpm	
		PRIME	STAND-BY	PRIME	STAND-BY
Rated Output[2]	kWm	114	125	127	140

1) Ratings in accordance with ISO 8528. For duty at temperature over 40°C and/or altitude over 1000 meters must be considered a power derating factor. Contact the FPT sales organization.
2) Net power at flywheel available after 50 hours running with a ±3% tolerance.

PRIME POWER: The prime power is the maximum power available with varying loads for an unlimited number of hours. The average power output during a 24h period of operation must not exceed 80% of the declared prime power between the prescribed maintenance intervals and at standard environmental conditions. A 10% overload is permissible for 1 hour every 12 hours of operation.

STAND-BY POWER: The stand-by power is the maximum power available for a period of 500 hours/year with a mean load factor of 90% of the declared stand-by power. No kind of overloads is permissible for this use.

CONTINUOUS POWER: Contact the FPT sales organization.

Standard configuration

FPT engine N67 TM2A equipped with:

- Mounted radiator incorporating air-to-air charge cooler
- Mounted belt driven pusher fan
- Fan guard
- Mounted air filter with replaceable cartridges
- Fuel filter
- Primary fuel filter/water separator
- Replaceable oil filter
- Front engine mounting brackets
- Flywheel housing SAE3 and flywheel 11" 1/2
- Re-directable exhaust gas elbow
- Recirculed oil breather system
- Oil dipstick
- HWT and LOP sensors
- 12Vdc electrical system
- User's handbook

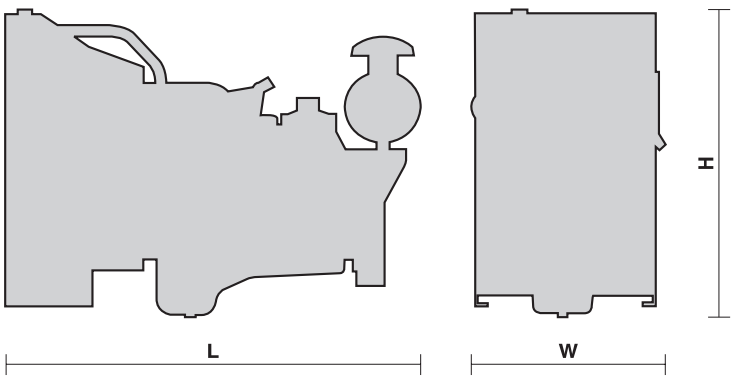
THE ENGINE IS SUPPLIED WITHOUT LIQUIDS

Optional equipment:

On request the engine can be supplied with:

- Oil drain pump
- Oil drain valve
- 120/230 Volt water jacket heater
- WT and OP sensors for gauges
- Low water level sensor
- Turbo and exhaust gas guards
- Exhaust gas flexible joint
- 24Vdc electrical system

Overall dimensions:



L = 1697 mm
W = 789 mm
H = 1318 mm
Dry weight ~ 640 kg

mecc alte spa

GENERATOR TYPE ECP 34-2S/4

Document : **DS013A/1**

issue 001 date 14/06/2005

Electrical Characteristics										
Frequency		Hz	50				60			
Voltage (series star)		V	380	400	415	440	415	440	460	480
Rated power class H		kVA	105	105	105	85	115	126	126	126
		kW	84	84	84	68	92	101	101	101
Rated power class F		kVA	95	95	95	77	104	114	114	114
		kW	76	76	76	61,6	83,2	91,2	91,2	91,2
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	%	92,1	92,2	91,9	91,7	93,1	93,6	93,7	93,8
(see graph. for details)	3/4	%	92,2	92,5	92,4	92,1	93,6	93,8	93,9	94,1
	2/4	%	90,6	90,7	90,7	90,5	92	92,1	92,2	92,3
	1/4	%	87,2	87	86,8	86,8	88,2	88,2	88,2	88
Reactances (f. l.cl. F)	Xd	%	254,8	230	213,7	153,9	280,8	273,7	250,4	230
	Xd'	%	19,5	17,6	16,4	11,8	21,5	20,9	19,2	17,6
	Xd"	%	6,3	5,7	5,3	3,8	7,0	6,8	6,2	5,7
	Xq	%	165,8	149,6	139,0	100,1	182,7	178,0	162,9	149,6
	Xq'	%	165,8	149,6	139,0	100,1	182,7	178,0	162,9	149,6
	Xq"	%	34,6	31,2	29,0	20,9	38,1	37,1	34,0	31,2
	X_2	%	20,5	18,5	17,2	12,4	22,6	22,0	20,1	18,5
	X_0	%	3,9	3,5	3,3	2,3	4,3	4,2	3,8	3,5
Short Circuit Ratio	Kcc		0,41	0,47	0,61	0,90	0,32	0,35	0,41	0,47
Time Constants	Td'	sec.	0,0393							
	Td"	sec.	0,0055							
	Tdo'	sec.	1,70							
	$T\alpha$	sec.	0,0146							
Short Circuit Current Capacity		%	>300				>350			
Excitation at no load		Amp.	0,5	0,6	0,8	1,1	0,2	0,3	0,4	0,5
Excitation at full load		Amp.	2	2,2	2,3	2,6	1,7	1,9	2	2,2
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load							
Overload per 20 sec.		%	300							
Stator Winding Resistance (20°C)		Ω	0,02							
Rotor Winding Resistance (20°C)		Ω	2,951							
Exciter Resistance (20 °C)		Ω	Rotor : 0,410				Stator : 15,28			
Heat dissipation at f.l.cl.H		W	7205	7106	7404	6155	6818	6892	6777	6663
Telephone Interference			THF < 2%				TIF < 40			
Radio interference			EN50081-1; EN50082-1; VDE0875K. For others standards apply to factory							
Waveform Distors.(THD) at f. load		LL/LN %	1,8 / 1,9							
Waveform Distors.(THD) at no load		LL/LN %	2,8 / 2,9							
Mechanical characteristics										
Protection			IP 21 (other protection on request)							
DE bearing			6314.2RS							
NDE bearing			6311.2RS							
Weight of wound stator assembly		kg	126							
Weight of wound rotor assembly		kg	81							
Weight of complete generator		kg	419							
Maximun overspeed		rpm	2250							
Unbalanced magnetic pull at f.l.cl.F		kN/mm	5,1							
Cooling air requirement		m^3/min	19,3				23			
Inertia Constant (H)		sec.	0,111				0,133			
Noise level at 1m/7m		dB(A)	79 / 65				83 / 69			

All technical data are to be considered as a reference and they can be modified without any notice.
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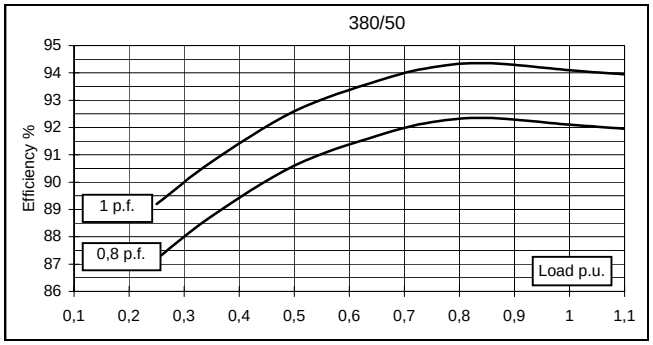
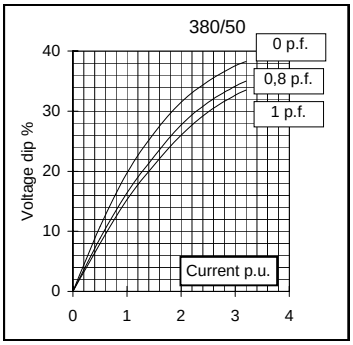
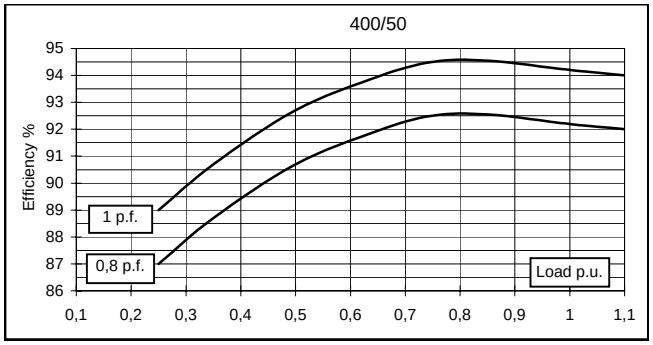
GENERATOR TYPE ECP 34-2S/4

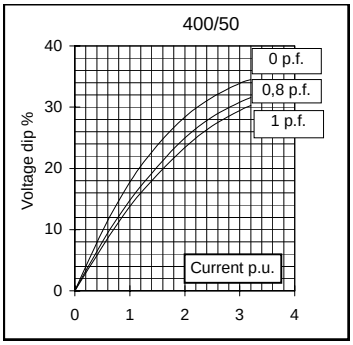
Document : **DS013A/2**
issue 000 date : 14/06/05

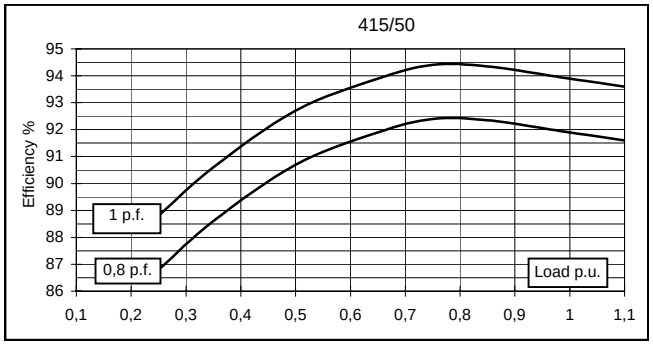
50 Hz

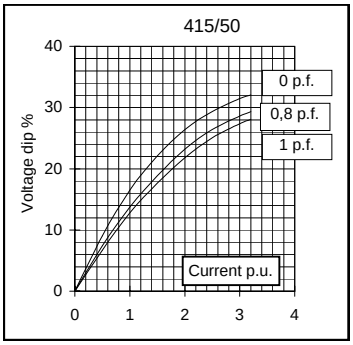


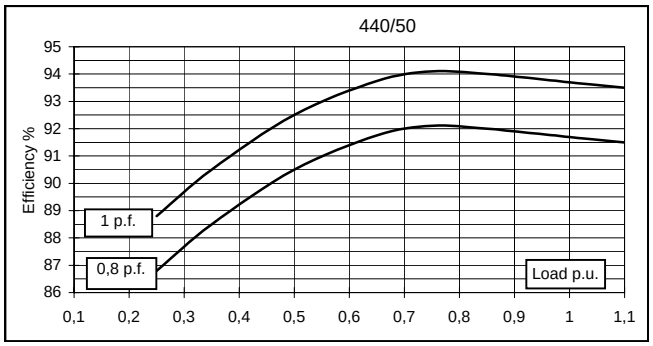


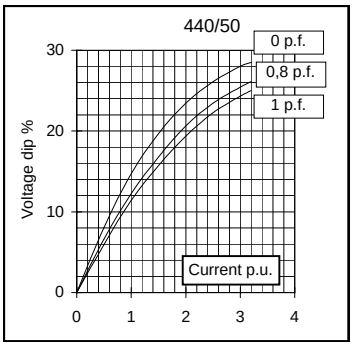


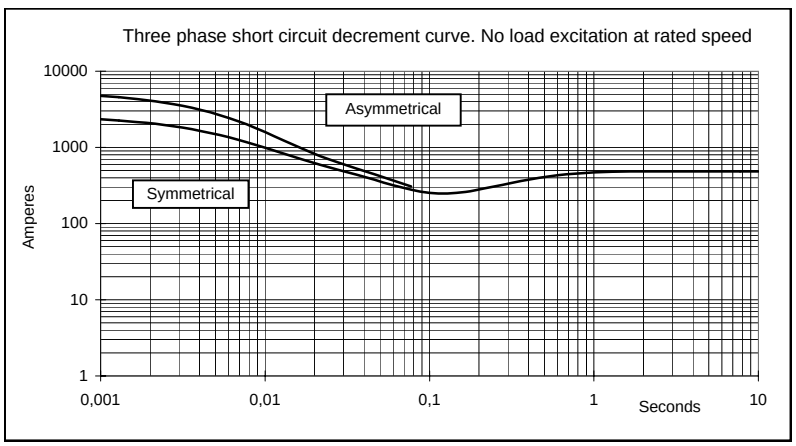












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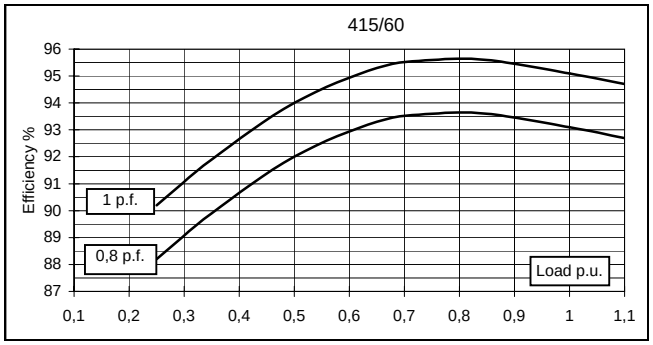
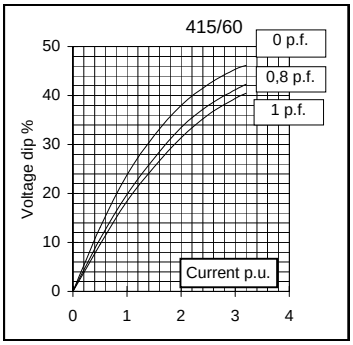
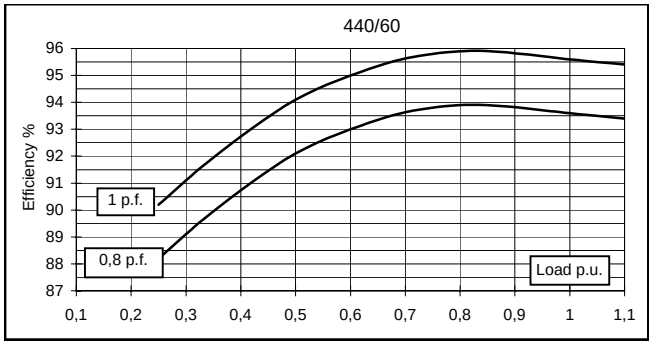
GENERATOR TYPE ECP 34-2S/4

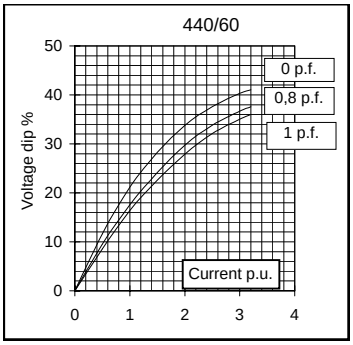
Document : **DS013A/3**
issue 000 date : 14/06/05

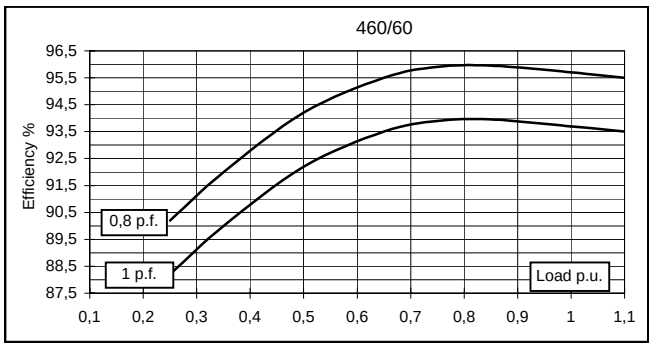
60 Hz

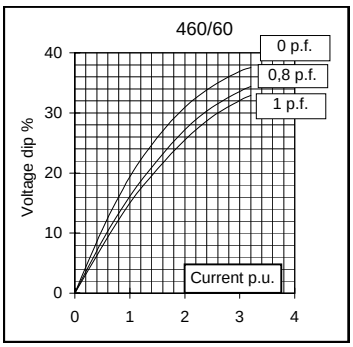


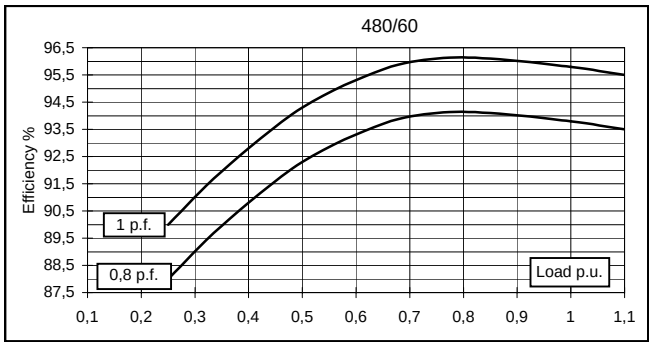


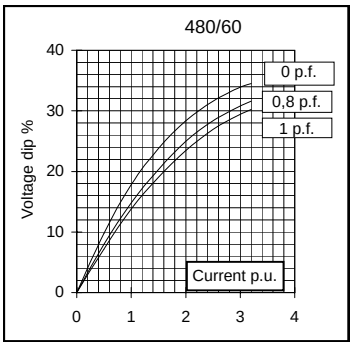


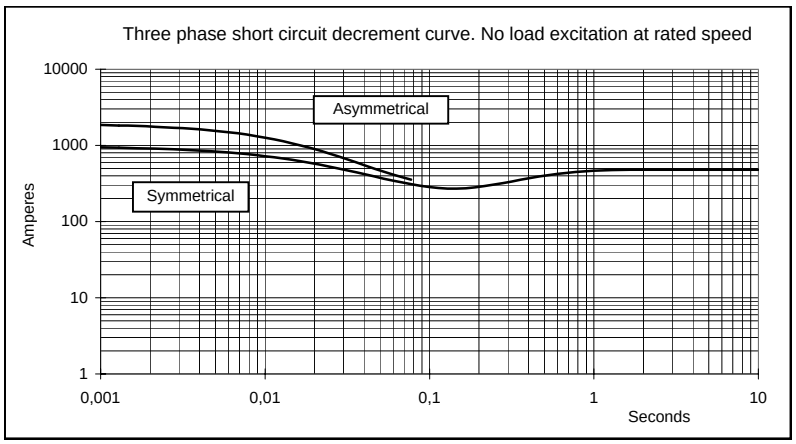












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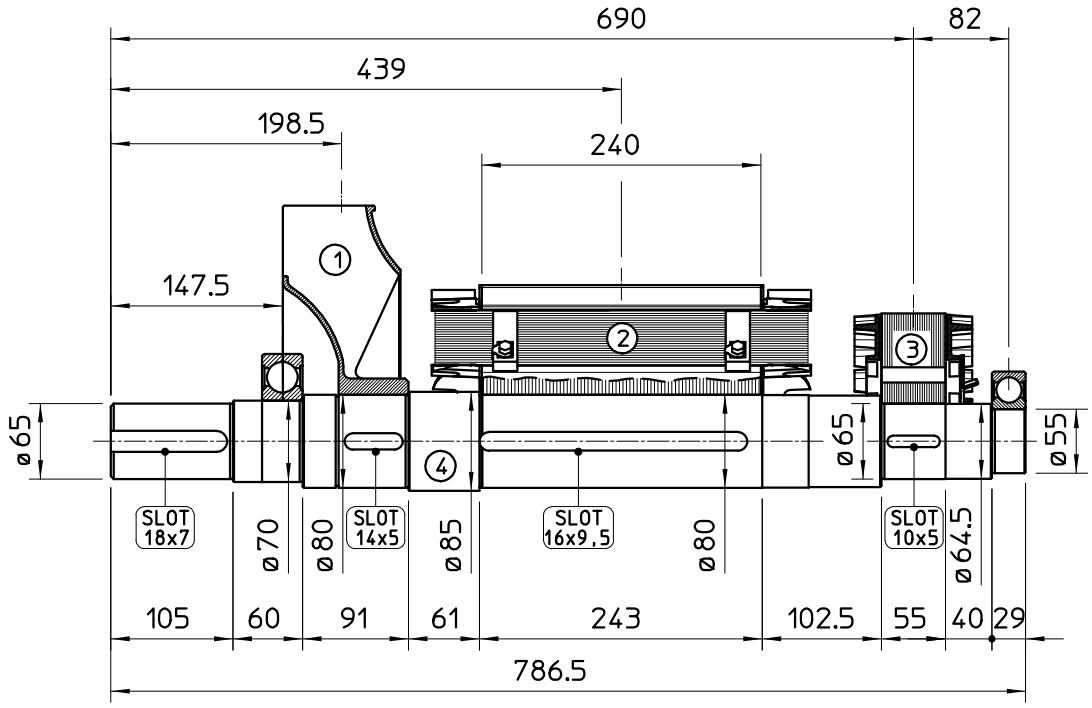
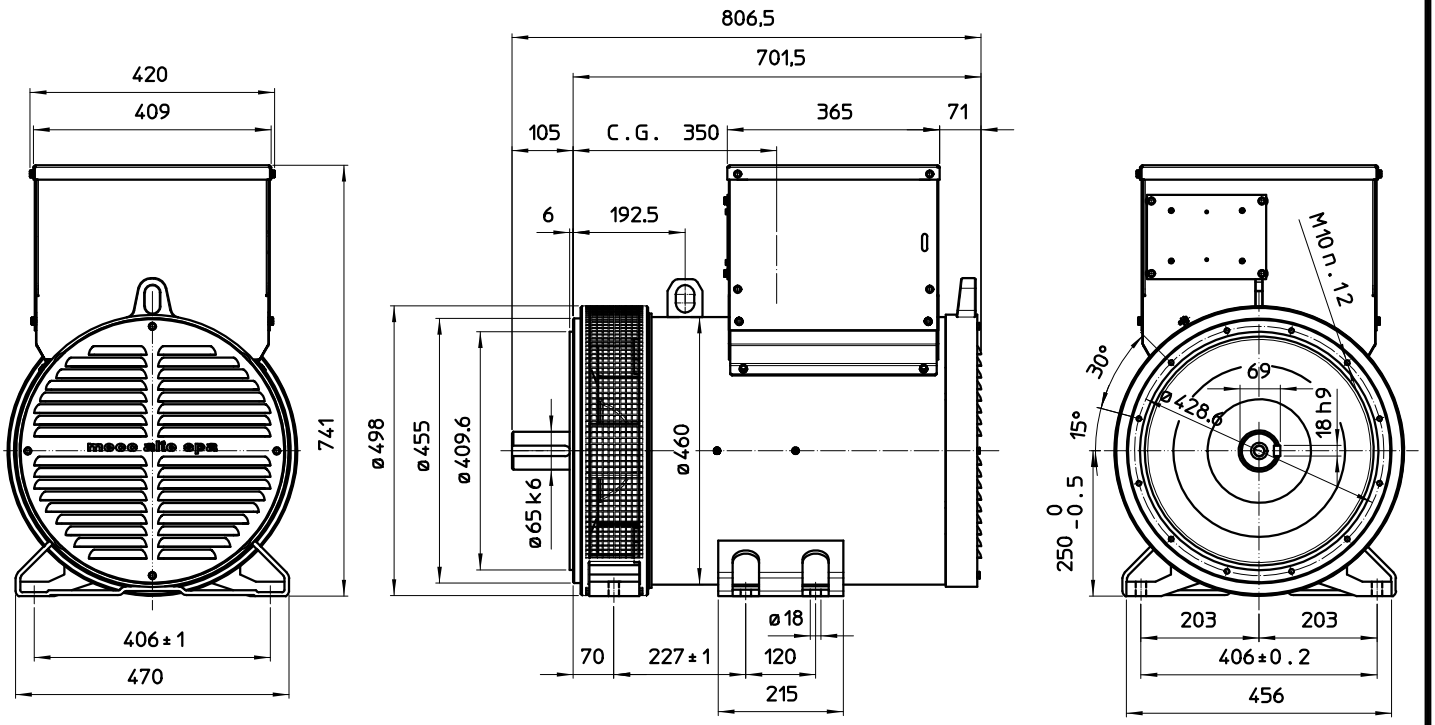
TWO BEARING MOMENTS OF INERTIA



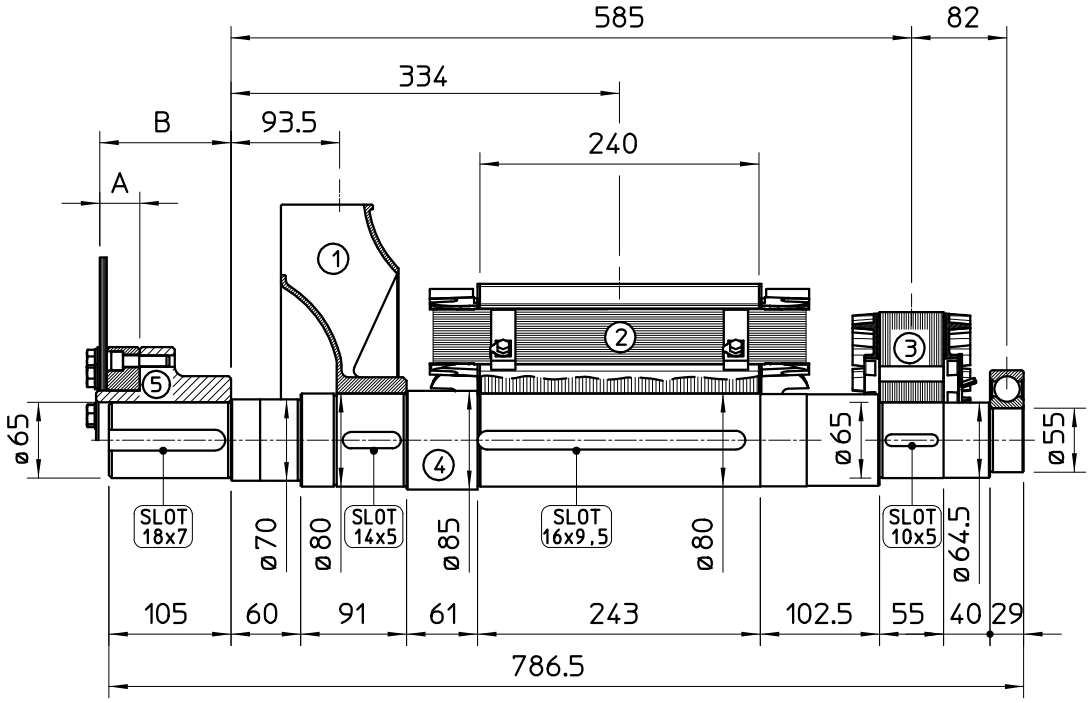
	COMPONENT	WEIGHT kg	J kgm^2
1	FAN	3,3	0,0451
2	MAIN ROTOR	81	0,7896
3	EX. ROTOR	14,5	0,0874
4	SHAFT	26,6	0,0194
	TOTAL	125,4	0,9415

TWO BEARING DIMENSIONS



C.G.= GRAVITY CENTER

SINGLE BEARING MOMENTS OF INERTIA



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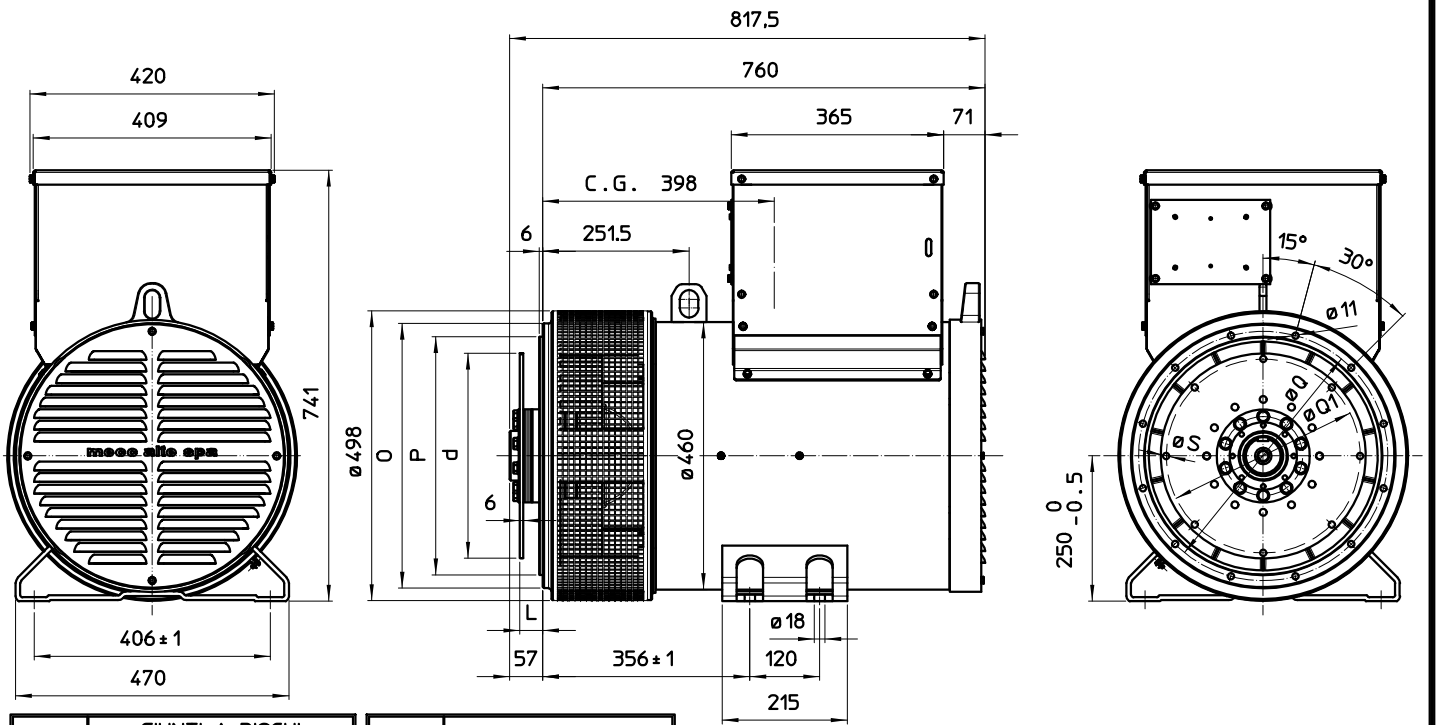
4	SHAFT	26,6	0,0194
	TOTAL	125,4	0,9415

SAE N°	5 SHAFTS COUPLING FLEX PLATE			
	A	B	WEIGHT Kg	J kgm^2
10	34,4	112,8	13,5	0,0770
11,5	20	98,6	12,5	0,0956
14	6	84,4	14,8	0,2360

SINGLE BEARING DIMENSIONS



SAE N.	GIUNTI A DISCHI DISC COUPLING DISQUE DE MONOPALIER SCHEIBENKUPPLUNG				
	L	d	Q1	N. fori	S
10	53,8	314,32	295,27	8	11
11 1/2	39,6	352,42	333,37	8	11
14	25,4	466,72	438,15	8	14

SAE N.	FLANGIA/FLANGE BRIDE/FLANSCH			
	O	P	Q	N. fori
3	451	409,6	428,6	12
2	489	447,7	466,7	12
1	552	511,2	530,2	12

C.G.= GRAVITY CENTER