

ژنراتور : MeccAlte

موتور دیزل : Iveco

Standby		Prime		دیزل ژنراتور
KVA	KW	KVA	KW	
330	-	300	240	



C10 TE1D

286 kW@1500 rpm
 311 kW@1800 rpm
 EU 2002/88/EC
 EPA/CARB TIER 3

Specifications

Thermodynamic cycle	Diesel 4 stroke		
Air intake	TAA		
Arrangement	6, in line		
Bore x Stroke	mm	125 x 140	
Total displacement	l	10.3	
Valves per cylinder	4		
Injection system	direct E.U.I.		
Speed governor	electronic		
Cooling system	liquid (water + 50% Paraflu11)		
Flywheel housing/flywheel	type	SAE1 / 14"	
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)	62.8 (192)	76.3 (210)
	80% load l/h (g/kWh)	53.7(198)	63.8 (219.8)
	50% load l/h (g/kWh)	36.4 (202.5)	43.6 (218.6)
Coolant capacity: engine only	l	~15	
	engine+radiator	l	~63
ATB (without canopy)	°C	58	
No remote cooling radiator allowed			
Lube oil total system capacity including pipes, filters etc.	l	~30	
Electrical system	12Vcc		
Starting batteries: recommended capacity	Ah	2x185	
Discharge current (EN 50342)	A	1200	
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	260	286	282	311

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 C10 TE1D equipped with:

- Mounted radiator incorporating air-to-air charge cooler
- Front radiator guard
- Oil drain pump
- Mounted belt driven pusher fan
- Fan guard
- Mounted air filter
- Fuel filter
- Primary fuel filter/water separator
- Replaceable oil filter
- Electronic engine control unit, pump injector units with wiring and sensor
- Interface box
- WT and OP sensors for samples
- HWT and LOP sensors
- Front engine mounting brackets
- Flywheel housing SAE1 and flywheel 14"
- Re-directable exhaust gas elbow
- Recircled oil breather system
- Oil dipstick
- 24Vdc electrical system
- User's handbook

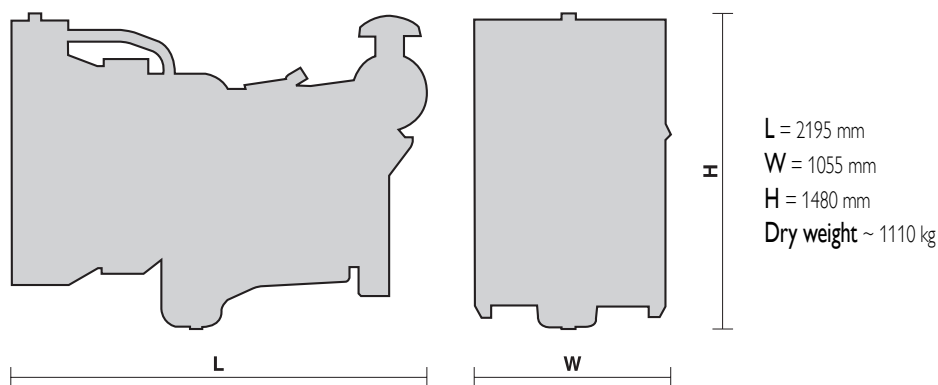
THE ENGINE IS SUPPLIED WITHOUT LIQUIDS

Optional equipment:

On request the engine can be supplied with:

- 230 Volt water jacket heater
- Turbo and exhaust gas guards
- Low water level sensor
- Exhaust gas flexible joint

Overall dimensions:





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Electrical Characteristics										
Frequency	Hz	50				60				
Voltage (series star)	V	380	400	415	440	415	440	460	480	
Rated power class H	kVA	300	300	300	290	325	340	360	360	
	kW	240	240	240	232	260	272	288	288	
Rated power class F	kVA	275	275	275	265	300	310	330	330	
	kW	220	220	220	212	240	248	264	264	
Regulation with DSR		±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	%	93,5	93,7	93,4	93,2	94	94,5	94,6	94,7
(see graph. for details)	3/4	%	93,8	94	93,9	93,6	94,5	94,7	94,9	95,1
	2/4	%	92,7	92,7	92,7	92,5	93,6	93,7	93,8	93,9
	1/4	%	90,2	89,9	89,7	89,5	90,6	90,6	90,6	90,4
Reactances (f. l.cl. F)	Xd	%	230,5	208	193,2	166,2	251,2	233,8	226,5	208
	Xd'	%	17,0	15,3	14,2	12,2	18,5	17,2	16,7	15,3
	Xd''	%	9,0	8,1	7,5	6,5	9,8	9,1	8,8	8,1
	Xq	%	133,0	120	111,5	95,9	144,9	134,9	130,7	120
	Xq'	%	133,0	120	111,5	95,9	144,9	134,9	130,7	120
	Xq''	%	23,0	20,8	19,3	16,6	25,1	23,4	22,6	20,8
	X ₂	%	17,8	16,1	15,0	12,9	19,4	18,1	17,5	16,1
	X ₀	%	2,5	2,3	2,1	1,8	2,8	2,6	2,5	2,3
Short Circuit Ratio	Kcc		0,39	0,43	0,62	0,97	0,32	0,38	0,40	0,43
Time Constants	Td'	sec.	0,091							
	Td''	sec.	0,0125							
	Tdo'	sec.	1,40							
	Tα	sec.	0,016							
Short Circuit Current Capacity		%	>300				>350			
Excitation at no load	Amp.		0,65	0,78	0,95	1,2	0,4	0,5	0,6	0,7
Excitation at full load	Amp.		3,8	3,9	4	4,2	3,2	3,6	3,7	3,8
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load							
Overload per 20 sec.		%	300							
Stator Winding Resistance (20°C)		Ω	0,0055							
Rotor Winding Resistance (20°C)		Ω	5,604							
Exciter Resistance (20 °C)		Ω	Rotor : 0,685				Stator : 15,28			
Heat dissipation at f.l.cl.H	W		16684	16137	16959	16927	16596	15831	16440	16118
Telephone Interference			THF < 2%				TIF < 40			
Radio interference			EN61000-6-3, EN61000-6-2. For others standards apply to factory							
Waveform Distors.(THD) at f. load	LL/LN %		3 / 2,9							
Waveform Distors.(THD) at no load	LL/LN %		2,6 / 2,8							
Mechanical characteristics										
Protection			IP 21 (other protection on request)							
DE bearing			6318.2RS							
NDE bearing			6314.2RS							
Weight of wound stator assembly	kg		258							
Weight of wound rotor assembly	kg		181							
Weight of complete generator	kg		765							
Maximun overspeed	rpm		2250							
Unbalanced magnetic pull at f.l.cl.F	kN/mm		5,9							
Cooling air requirement	m ³ /min		32				39			
Inertia Constant (H)	sec.		0,117				0,140			
Noise level at 1m/7m	dB(A)		82 / 69				86 / 73			

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

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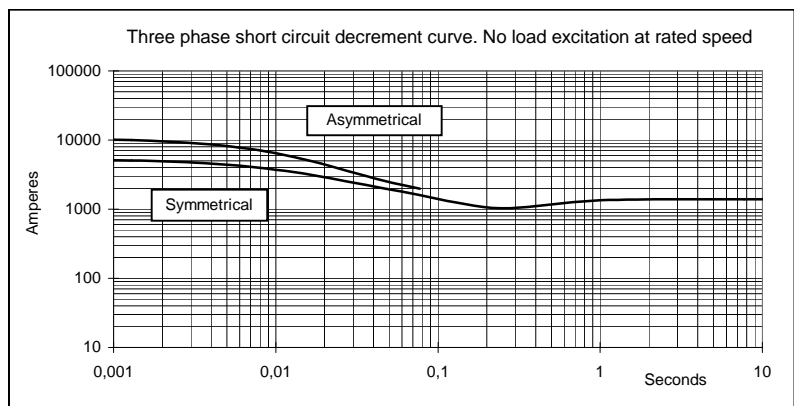
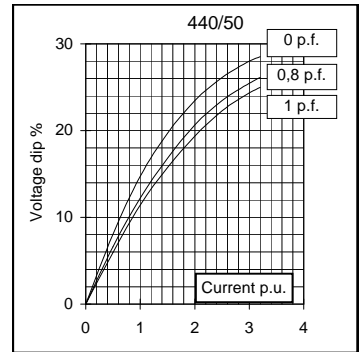
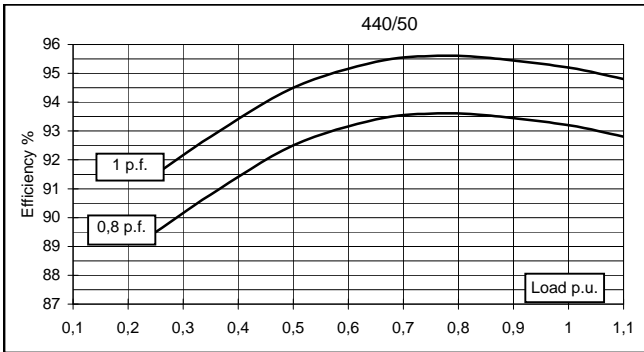
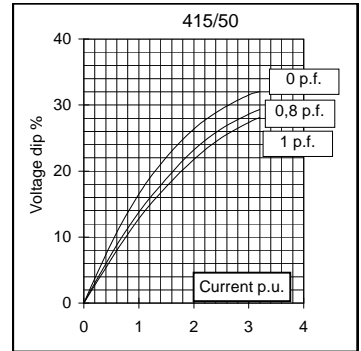
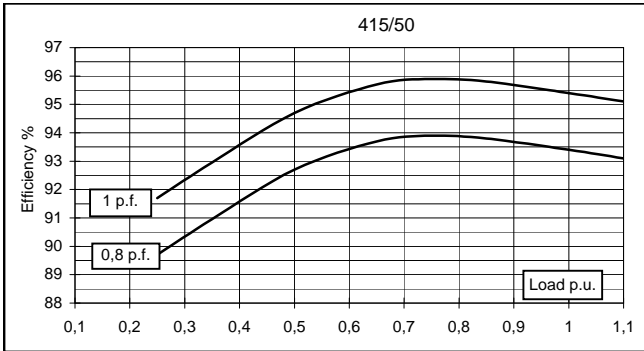
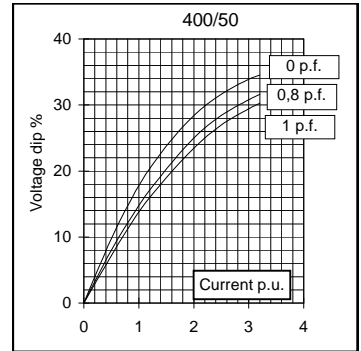
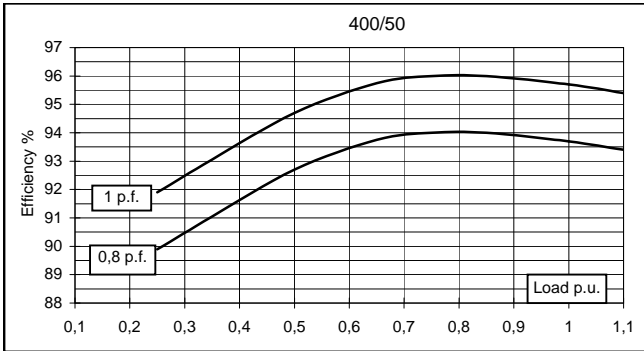
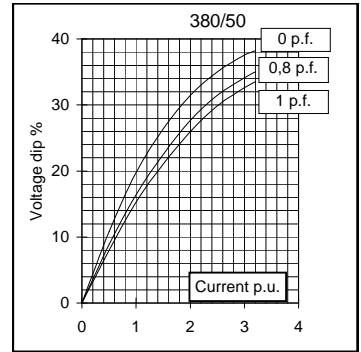
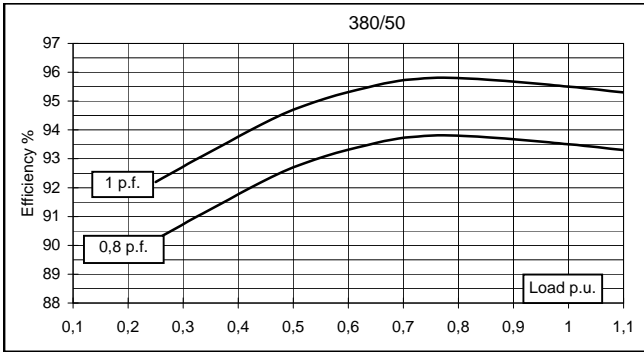


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50 Hz



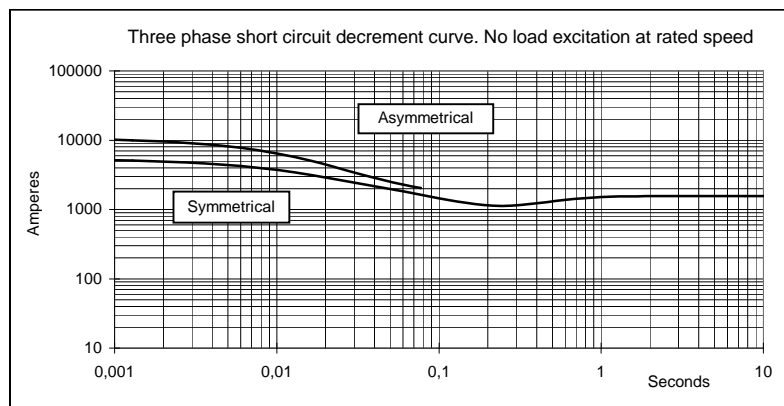
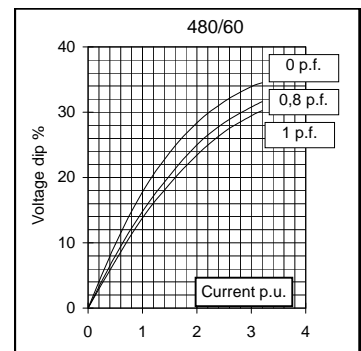
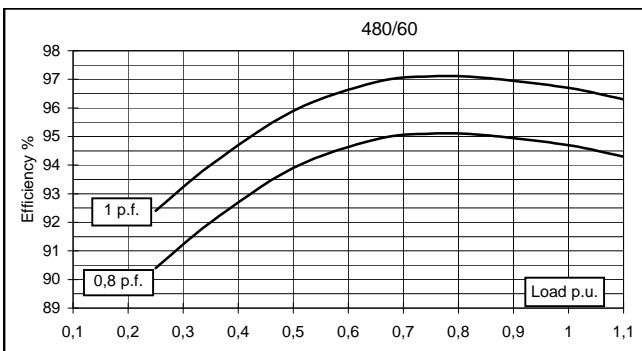
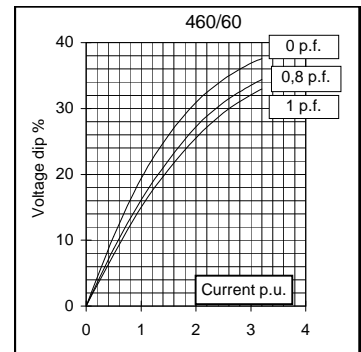
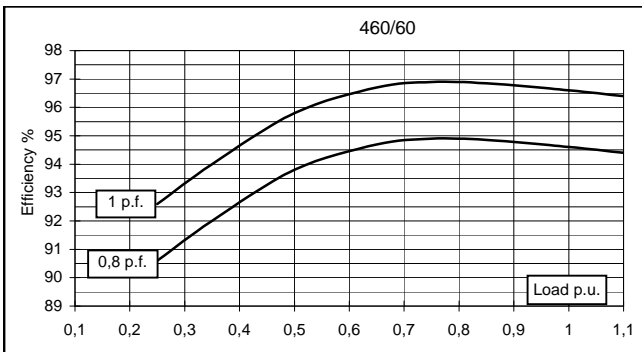
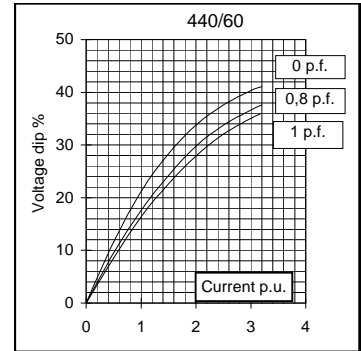
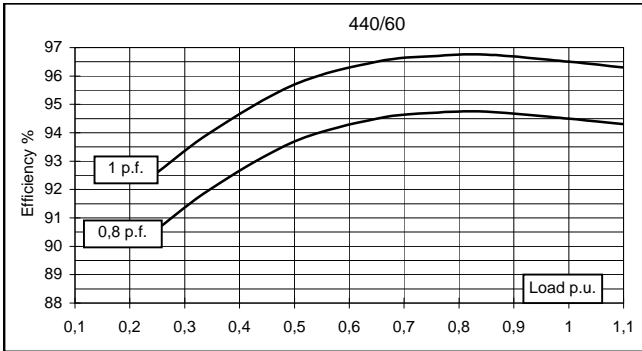
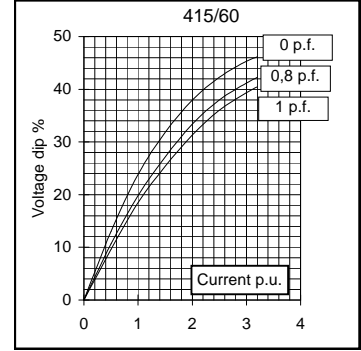
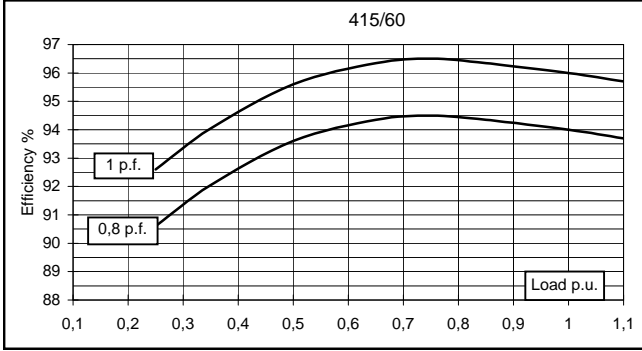


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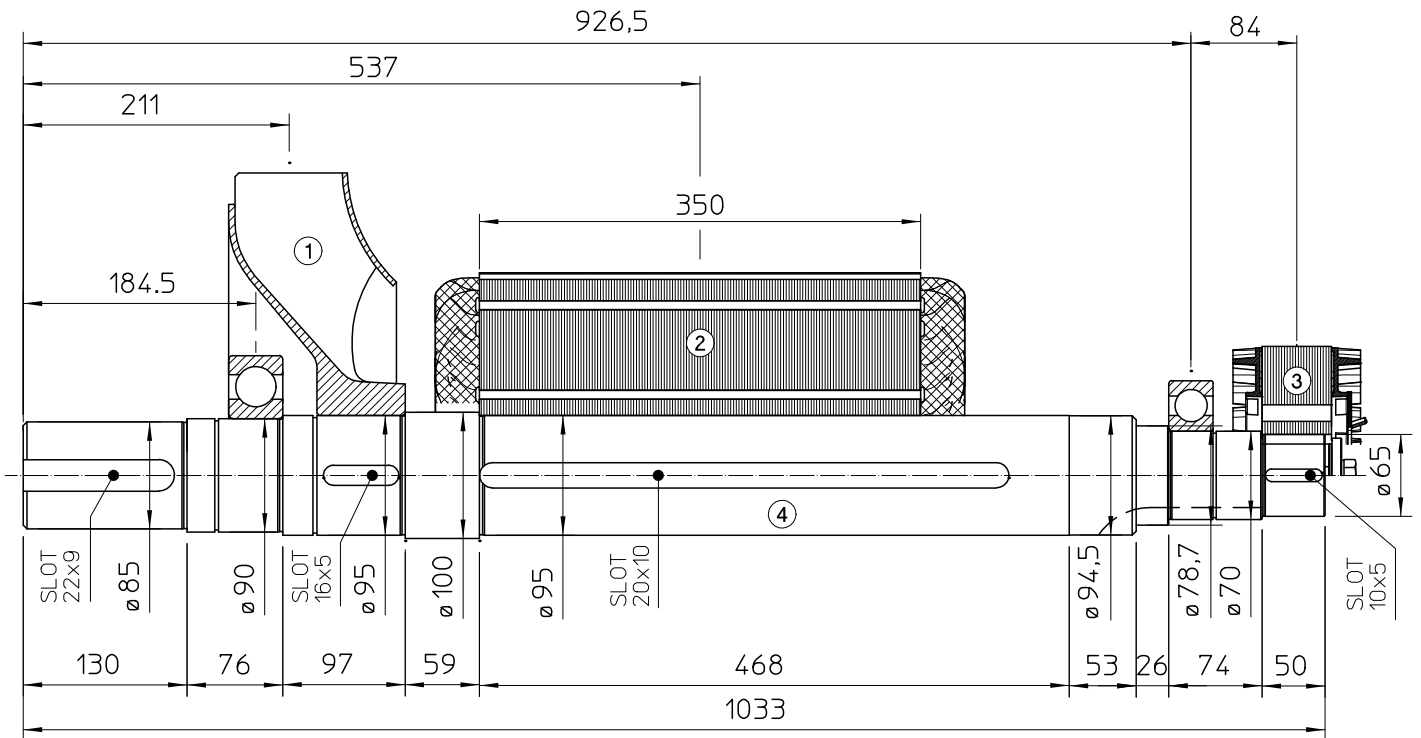
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60 Hz

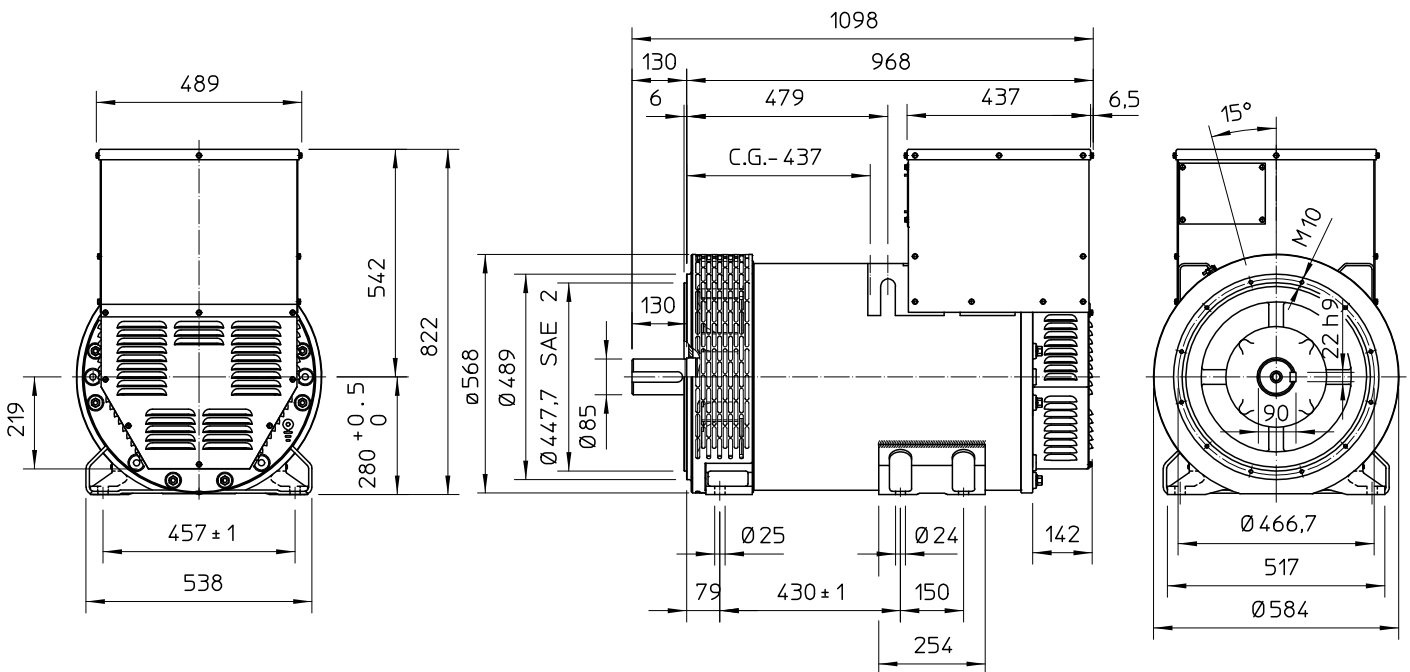


TWO BEARING MOMENTS OF INERTIA

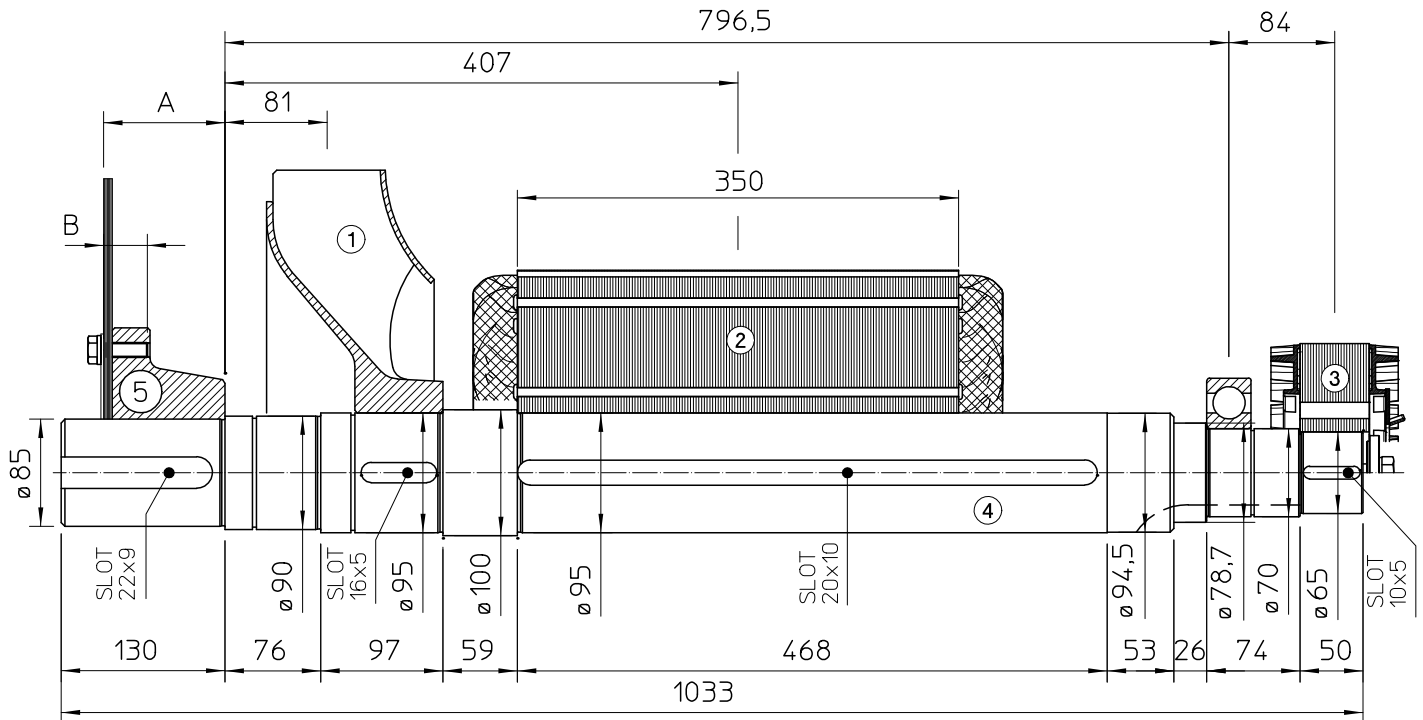


POS.	COMPONENT	WEIGHT (kg)	J (kgm ²)
1	FAN	6.1	0.1887
2	MAIN ROTOR	181	2.5056
3	EX. ROTOR	14.5	0.0874
4	SHAFT	49.9	0.0525
TOTAL		251.5	2.8342

TWO BEARING DIMENSIONS



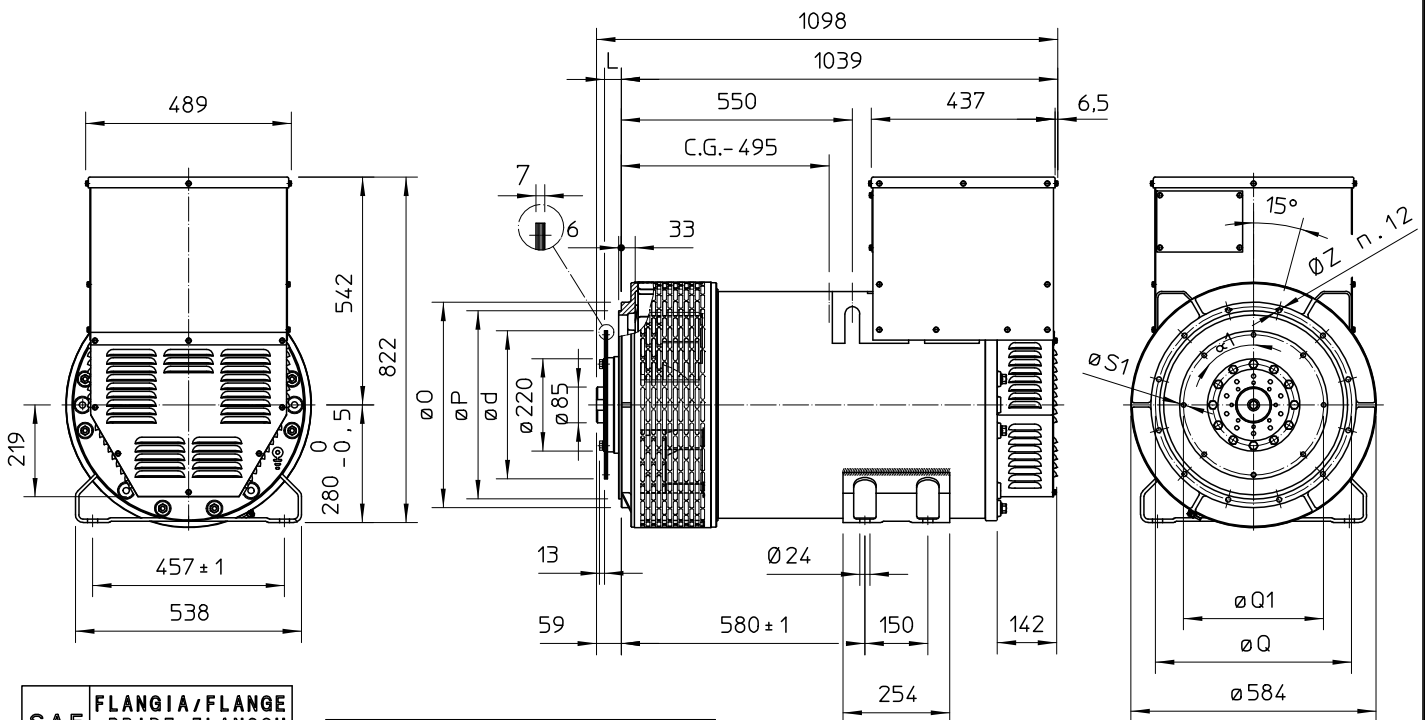
SINGLE BEARING MOMENTS OF INERTIA



POS.	COMPONENT	WEIGHT (kg)	J (kgm ²)
1	FAN	6.1	0.1887
2	MAIN ROTOR	181	2.5056
3	EX. ROTOR	14.5	0.0874
4	SHAFT	49.9	0.0525
TOTAL		251.5	2.4382

SAE N°	5		SHAFTS COUPLING FLEX PLATE	
	A	B	WEIGHT kg	J kgm ²
11.5	110.4	41.1	20.5	0.174
14	96.4	34.7	23.5	0.275

SINGLE BEARING DIMENSIONS



SAE N.	FLANGIA/FLANGE BRIDE/FLANSCH		
	O	P	Q
3	451	409,6	428,6
2	489	447,7	466,7
1	552	511,2	530,2
1/2	648	584,2	619,1

SAE N.	GIUNTI A DISCHI DISC COUPLING DISQUE DE MONOPALIER SCHEIBENKUPPLUNG					
	L	d	Q1	n _{fori}	S1	α1
11 1/2	39,6	352,42	333,37	8	11	45°
14	25,4	466,72	438,15	8	14	45°

C.G.= GRAVITY CENTER