موتور دیزل : IVECO	ژنراتور : Mecc Alte

Standby		Prime		
KW	KVA	KW	KVA	
275	220	250	200	دیزل ژنراتور

موتور دیزل		
Manufacturer	IVECO	تولید کننده
Type	C87TE1D	تیپ
Number of cylinders	6	تعداد سیلندر ها
Cylinder arrangement	inline	آرایش سیلندر ها
Displacement , Liters	8.7	جا به جایی
Bore × Stroke , mm	117x135	قطر سیلندر × کورس پیستون

ژنراتور		
Manufacturer	Mecc Alte	تولید کننده
Type	ECO38-1LN/4	تیپ
Frequency, Hz	60	فرکانس
Speed, Rpm	1500	سرعت
Voltage, V	600	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	>350 %	جریان اتصال کوتاه
Insulation class	H	کلاس عایق
Protection class	IP 21	کلاس حفاظتی
Cooling air volume,m^3 / sec	39	دبی هوای خنک کننده

C87 TE1D FOR POWER GENERATION APPLICATIONS

Specifications

Thermodinamic cycle			Diesel, 4 stroke	
Air intake			TAA	
Arrangement			6, in line	
Bore x stroke		mm	117x135	
Total displacement		l	8.7	
Valves per cylinder			4	
Injection system			D.I. Electronic Common Rail	
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			<0.2% 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)	58.8 (205.4)	64.3 (204.5)
		80% load l/h (g/kWh)	49 (209.3)	55.6 (215)
		50% load l/h (g/kWh)	35.4 (225)	38.8 (225)
Coolant capacity:	engine only	l	~15 (4.3)	
	engine+radiator	l	~63 (16.6)	
ATB (without canopy)		°C	55	
No remote cooling radiator allowed				
Lube oil total system capacity including pipes, filters etc.		l	~28	
Electrical system			24Vcc	
Starting batteries: recommended capacity		Ah	2x185	
Discharge current (EN 50342)		A	1200	
Cold starting:	without air preheating	°C	-10	
	with air preheating	°C	-25	

Performance

Ratings[1]		1500 rpm		1800 rpm	
		PRIME	STAND-BY	PRIME	STAND-BY
Rated Output[2]	kWm	232	255	251	276

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 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.

C87 TE1D FOR POWER GENERATION APPLICATIONS

Standard Configuration:

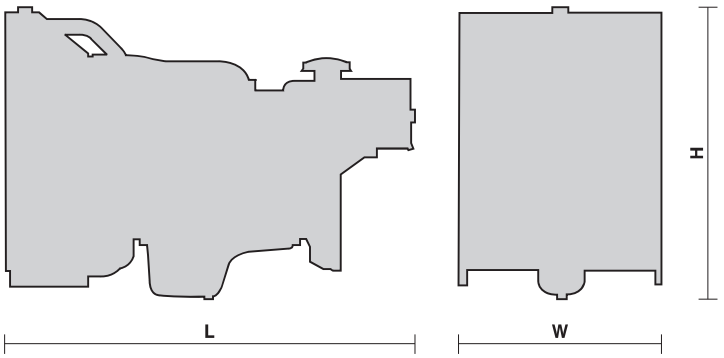
FPT engine C87 TE1D equipped with:
- Mounted radiator incorporating air-to-air charge cooler
- Front radiator guard
- Oil drain pump
- Mounted belt driven pusher fan
- Fan guard
- Mounted air filter with replaceable cartridges
- Fuel filter
- Primary fuel filter/water separator
- Replaceable oil filter
- Electronic engine control unit
- Interface box
- WT and OP sensors for gauges
- HWT and LOP sensors
- Front engine mountings brackets
- Flywheel housing SAE1 and flywheel 14"
- Re-directable exhaust gas elbow
- Recirculed oil breather system
- Oil dipstick
- 24Vdc elettrical 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
- Exhaust gas flexible joint
- Low water level sensor

Overall dimensions



L = 2042 mm
W = 1055 mm
H = 1394 mm
Dry weight ~1220 kg

GENERATOR TYPE ECO 38-1LN/4

Dedicated Winding

Document : **DS267A/1**

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Electrical Characteristics			
Frequency		Hz	60
Voltage (parallel star)		V	600
Rated power class H		kVA	300
		kW	240
Rated power class F		kVA	280
		kW	224
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	%	94,5
(see graph. for details)	3/4	%	94,9
	2/4	%	93,7
	1/4	%	90,4
Reactances (f. l.cl. F)	Xd	%	207
	Xd'	%	14
	Xd"	%	7,2
	Xq	%	117
	Xq'	%	117
	Xq"	%	22
	X_2	%	16
	X_0	%	2,4
Short Circuit Ratio	Kcc		0,44
Time Constants	Td'	sec.	0,085
	Td"	sec.	0,013
	Tdo'	sec.	1,30
	Tα	sec.	0,017
Short Circuit Current Capacity		%	>350
Excitation at no load		Amp.	0,7
Excitation at full load		Amp.	2,8
Overload (long-term)		%	1 hour in a 6 hours period 110% rated load
Overload per 20 sec.		%	300
Stator Winding Resistance (20°C)		Ω	0,0065
Rotor Winding Resistance (20°C)		Ω	4,887
Exciter Resistance (20 °C)		Ω	Rotor : 0,685 Stator : 15,28
Heat dissipation at f.l.cl.H		W	13968
Telephone Interference			THF < 2% TIF < 40
Radio interference			EN61000-6-3, EN61000-6-1. For others standards apply to factory
Waveform Distors.(THD) at f. load		LL/LN %	2 / 2,1
Waveform Distors.(THD) at no load		LL/LN %	2,9 / 3,1
Mechanical characteristics			
Protection			IP 21 (other protection on request)
DE bearing			6318.2RS
NDE bearing			6314.2RS
Weight of wound stator assembly		kg	231
Weight of wound rotor assembly		kg	147,5
Weight of complete generator		kg	680
Maximun overspeed		rpm	2250
Unbalanced magnetic pull at f.l.cl.F		kN/mm	5,1
Cooling air requirement		m^3/min	39
Inertia Constant (H)		sec.	0,139
Noise level at 1m/7m		dB(A)	86 / 73

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

GENERATOR TYPE ECO 38-1LN/4

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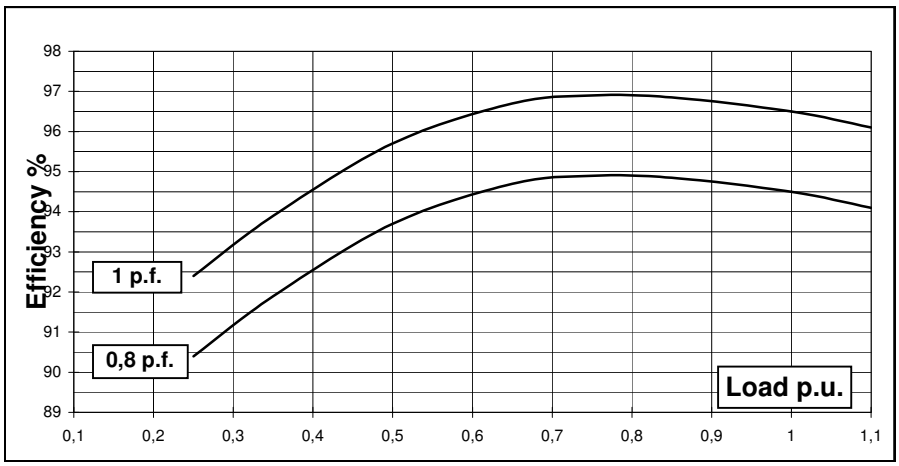
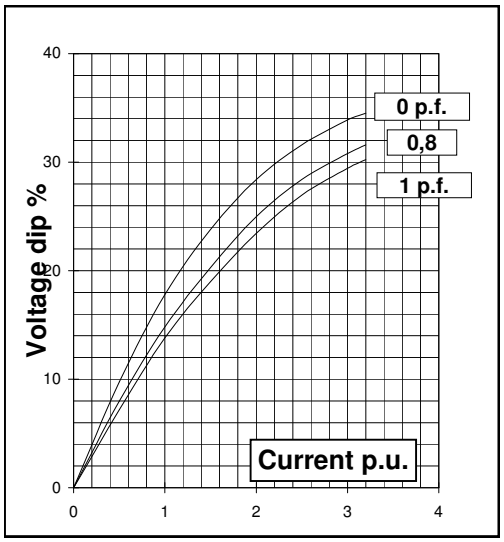
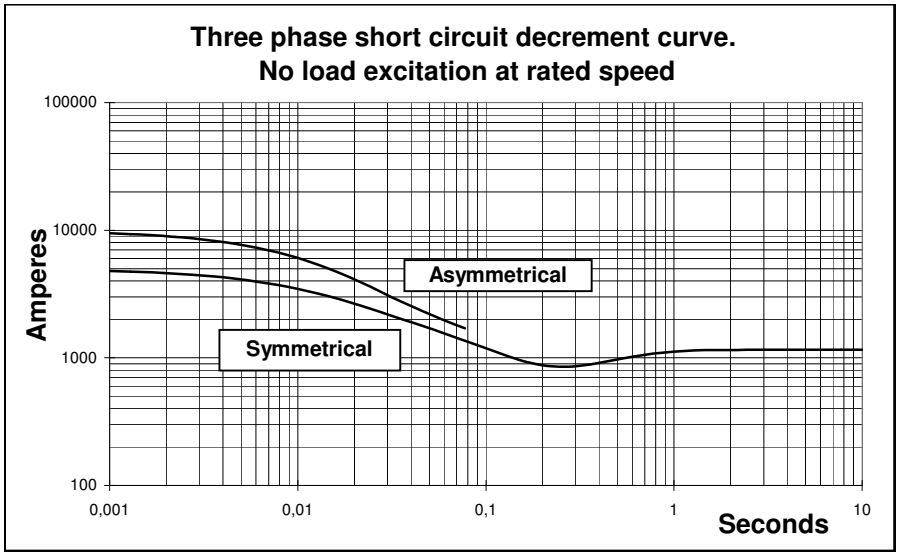
issue 000 date : 21/06/2013

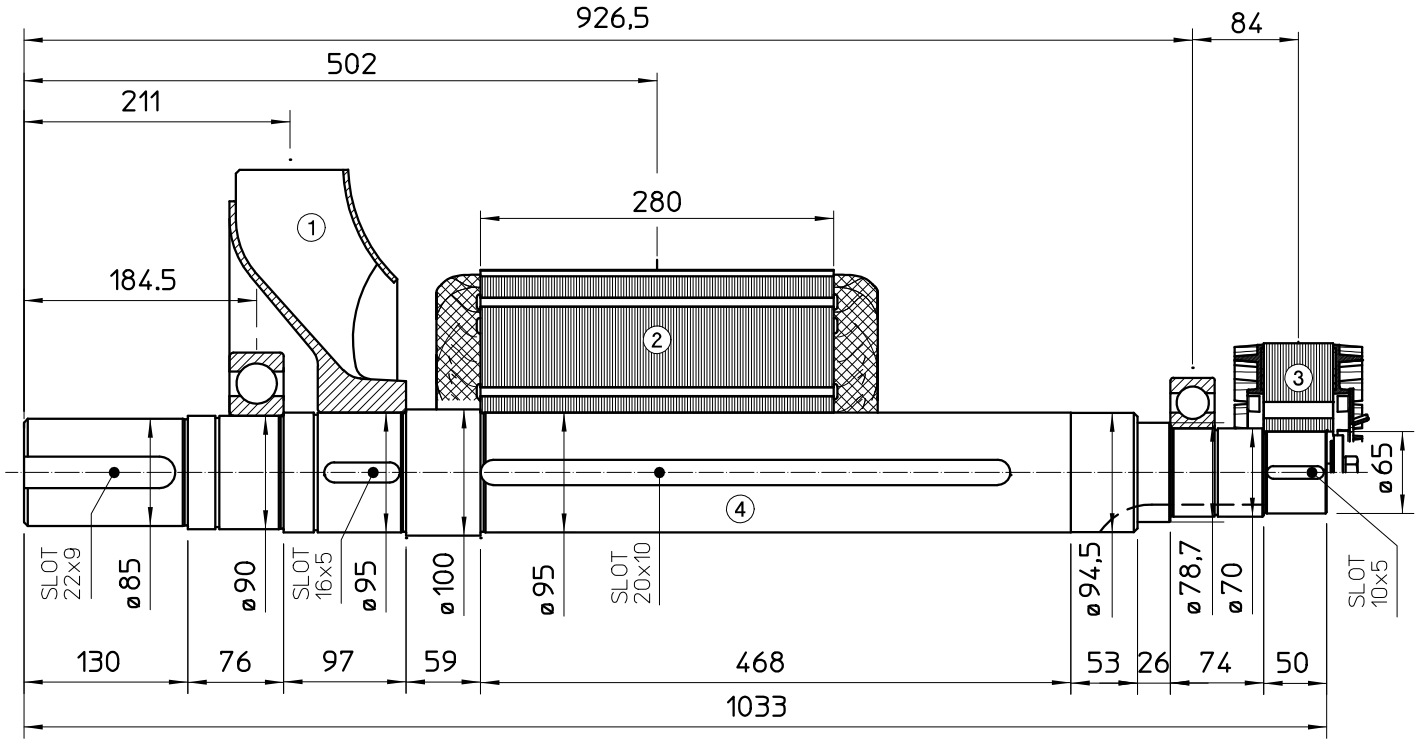
600V - 60Hz





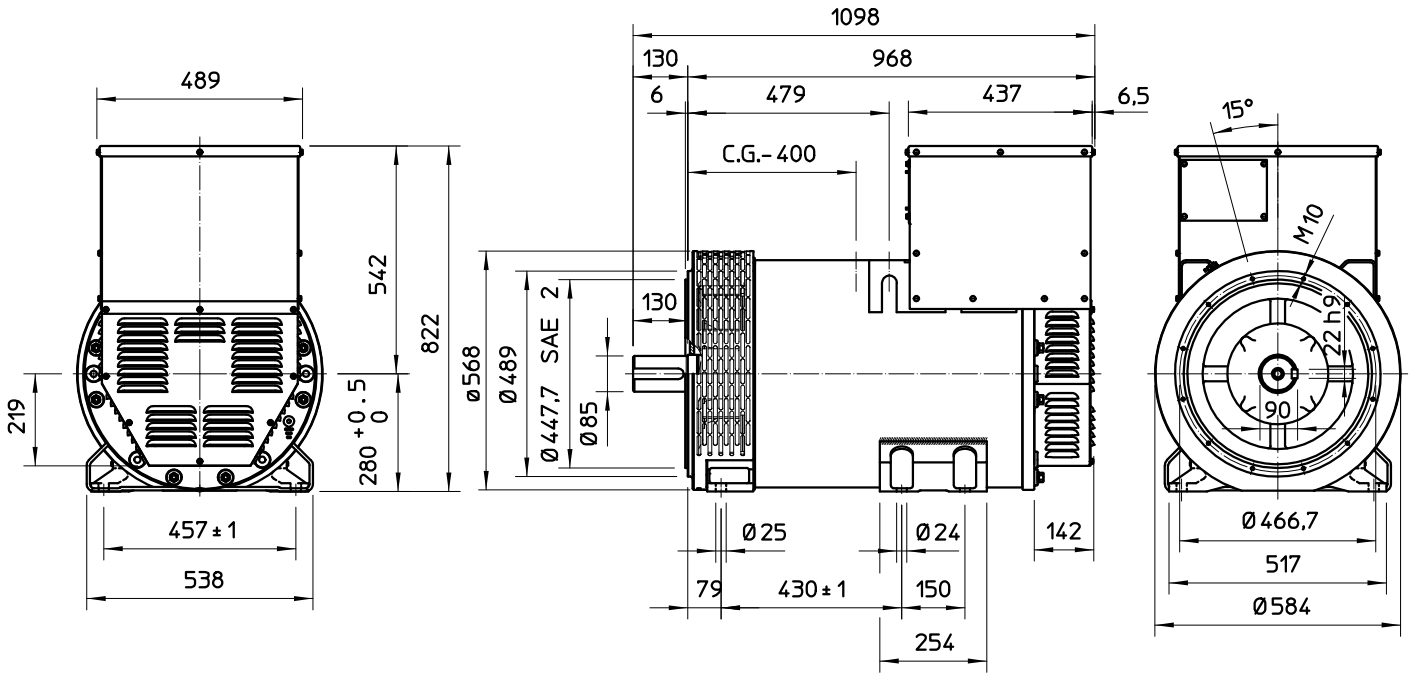


TWO BEARING MOMENTS OF INERTIA



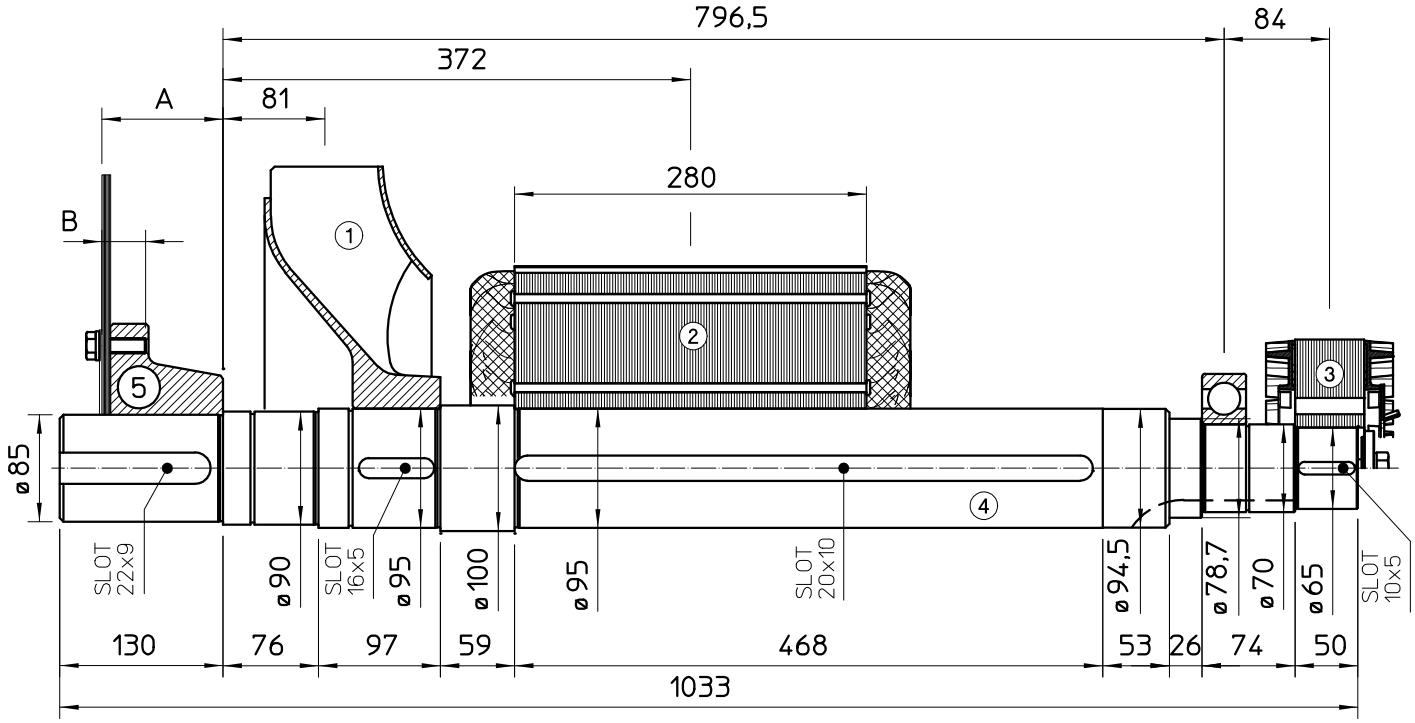
POS.	COMPONENT	WEIGHT (kg)	J (kgm^2)
1	FAN	6.1	0.1887
2	MAIN ROTOR	147.5	2.0195
3	EX. ROTOR	14.5	0.0874
4	SHAFT	49.9	0.0525
TOTAL		218	2.3481

TWO BEARING DIMENSIONS



C.G.= GRAVITY CENTER

SINGLE BEARING MOMENTS OF INERTIA



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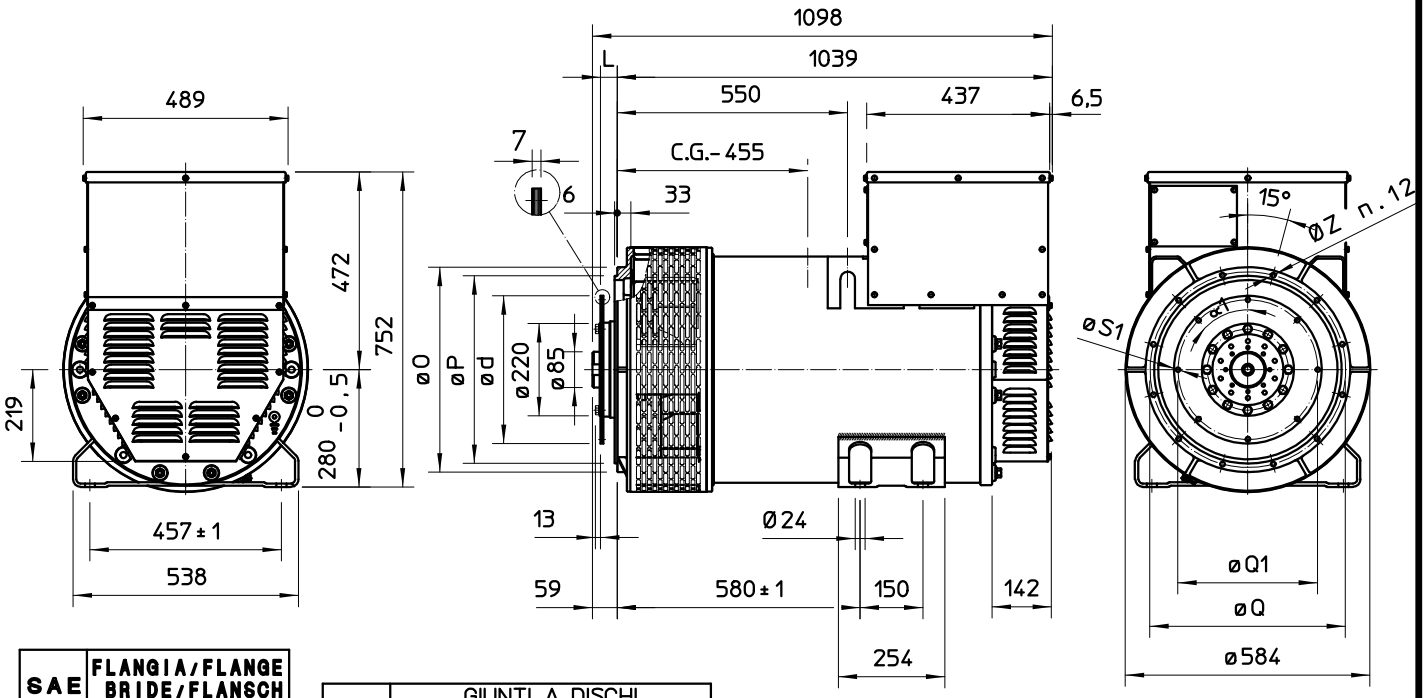
4	SHAFT	49.9	0.0525
TOTAL		218	2.3481

SAE	5	SHAFTS COUPLING FLEX PLATE		
N°	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	∝1
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