



GENERATING SET GE 12000 HZDT

The images are for reference



POWER RATINGS		
* Stand-By three-phase power (LTP)	12 kVA (9.6 kW) / 400 V / 17.3 A	
* PRP three-phase power	11 kVA (8.8 kW) / 400 V / 15.8 A	
* PRP single-phase power	6 kVA/kW / 230 V / 26 A	
Frequency	50 Hz	
Cos φ	0.8	

^{*} Output powers according to ISO 8528-1

FEATURES

- Low oil pressure automatic engine shut down and high temperature
- A recessed panel protects the sockets
- Protective frame
- Automatic voltage regulation "AVR"
- · Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Not compliant with noise directive 2000/14/EC









air cooled

diesel three-phase

electric sta

DEFINITION

Valid declared powers up to the followings environmental conditions: temperature 25°C, altitude 100 meters above sea level)

LTP power: stand-by power: Maximum available power for use with variable loads for a yearly number of hours limited at 500 h. No overload is admitted.

PRP power: continue power with variable loads. Maximum power for use with variable loads for a yearly illimited nubers of hours.

 $\begin{tabular}{ll} \textbf{COP power}: continuous power with constant load. Maximum power for use with constant loads for a yearly unlimited numbers of hours. \end{tabular}$

ENGINE 3000 RPM

4-STROKE, DIRECT INJECTION	
Model	HATZ 1D90
* Stand-By net power	11.2 kWm (15.2 hp)
* PRP net power	10.2 kWm (13.9 hp)
* COP net power	/
Cylinders / Displacement	1 / 722 cm ³
Bore / Stroke	104 / 85 (mm)
Compression ratio	10.5 : 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Meccanico
FUEL CONSUMPTION	
110 % (Stand-by power)	3.6 lt./h
100 % to PRP	3.3 lt./h
75 % to PRP	2.5 lt./h
50 % to PRP	1.6 lt./h
COOLING SYSTEM	Air
Total system cap only engine	/
Fan air flow	10.6 m³/min.
LUBRICATION SYSTEM	
Total oil system capacity	/
Oil capacity in sump	1.9 lt.
Oil consumption at full load	< 0.028 kg./h

EXHAUST SYSTEM	
Maximum exhaust gas flow	/
Max. exhaust gas temp.	/
Maximum back pressure	/
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	12 Vdc
Starter motor power	2 kW
Battery charging alternator cap.	16 A
Cold start	/
With cold start aid	- 10°C
AIR FILTER	Dry
Combustion air flow	1.08 m³/min.
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	
Radiated to room	
To charge cooler	1



ALTERNATOR

SYNCHRONOUS, THREE-PHASE, SELF-EXCITED, SELF-REGULATED, BRUSHLESS		
	WITH AVR	WITHOUT AVR
Continuos power	11.5	kVA
Stand-by power	12.5	kVA
Three phase voltage	380-415 Vac	400 Vac
Frequency	50	Hz
Cos φ	0.	.8
Model A.V.R.	HVR 10	/
Voltage regulation acc.	± 1 %	± 4 %
Sustained short circuit current	≤ 3 ln	
Transient dip (100% load)	< 15 %	
Recovery time		/
Efficiency at 100% load	83.5 % (400V - Cos φ 0,8)	83 % (400V - Cos φ 0,8)
Insulation	Clas	se H
Connection - Terminals	Stella - N°6	
Electromagnetic compatibility (R.F.I. suppr.)	/	
Waveform distorsion - THD	< 4 %	< 5 %
Thelephone interference - THF	,	1

REACTANCES (11.5 KVA - 400 V)		
Direct axis synchronuos - Xd	239 %	280 %
Direct axis transient - X'd	19 %	21 %
Subdirect axis transient - X"d	4.6 %	5,8 %
Quadrature axis synchronuos - Xq	130 %	155 %
Quadr. axis subtransient - X"q		/
Negative sequence - X2		/
Zero sequence - X0		/
TIME CONSTANTS		
Transient - T'd	46 ms	40 ms
Subtransient - T"d	6 ms	6 ms
Open circuit - T'do	580 ms	530 ms
Armature - Ta		/
Short-circuit ratio Kcc	0.72	0.62
IP protection degree	IP 23	
Cooling air flow	0.082 m ³ /sec.	
Coupling Bearing	Diretto J6	09b - N°1

GENERAL SPECIFICATIONS

Fuel tank capacity	18 lt.
Running time (75% to PRP)	7.2 h
Starter battery	12 Vdc -37Ah / 330A CCA(EN)
IP protection degree	IP 23

Acoustic power LwA (pressure LpA)	105 dB(A) (80 dB(A) @ 7m)
Performance class (ISO 8528)	G2

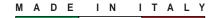
CONTROL PANEL

- Start and stop engine key
- Low oil pressure warning light with shutdown
- High engine temperature warning light with shutdown
- Battery charge warning light fault
- Digital multifunction meter: Voltmeter Frequencymeter Total Hoursmeter -Partial Hoursmeter (resettable)
- Circuit breaker
- ELCB-GFI (Ground Fault Interruptor)
- Output sockets: 1x 400V 32A 3P+N+T CEE 2x 230V 16A 2P+T CEE
- Output sockets (schuko version): 1x 400V 32A 3P+N+T CEE 2x 230V 16A 2P+T Schuko
- Earth terminal (PE)









WEIGHT - DIMENSIONS AND ACCESSORIES



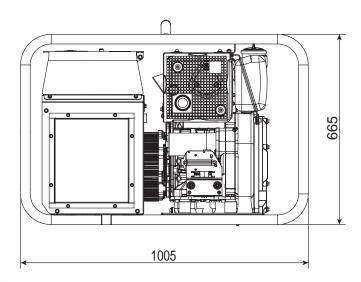
DRY WEIGHT MACHINE:

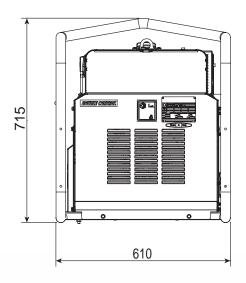
220 Kg

Generating set pictured may include optional accessories.



DIMENSIONS DRAW (mm)





FACTORY INSTALLATION OPTIONS

• Trolley CTM 14

OPTIONS ON REQUEST

VERSIONS ON REQUEST

 Earthing SCHUKO Version

GENERAL INFORMATION

COMPLIANCE GENERATING SETS WITH EC DIRECTIVES AND STANDARDS

2006/42 / EC (Machines Directive)

2014/35 / EU (Low Voltage Directive)

2014/30 / EU (EMC Directive)

ISO 8528 (Reciprocating internal combustion engine driven alternating current generating sets)



ISO 9001:2008 - Cert. 0192

WARRANTY

All devices are covered by the manufacturer's warranty.

Non-contractual document. Specification subject to change without notice.

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