

# Kronos

## HZA3-10M

Powered by:

**HATZ 1D 81 S**

8 kW at 50 Hz

Sound pressure level at 7m: 85 dBA

Generating Set Performance		50 Hz
SERVICE		Electric power
Active power output	kW	8,0
Rated speed	r.p.m.	3.000
Standard voltage	V	230

Performance data refers to Standard Reference Conditions of DIN ISO 3046: + 25 °C , 100 m ALT, relative humidity 30 %  
 During running-in period the output increases by approx. 5 % which is taken into consideration at delivery.  
 Power reduction acc. to DIN ISO 3046.  
 Standard values: Above 100 m ALT approx. 1 % per 100 m. Above 25 °C (77 °F) approx. 4 % per 10 °C (50 °F).

Prime Mover Performance		S*	B*
Rated output	kW	9,5	10,5
	CV	12,9	14,3
Manufacturer		HATZ	
Engine model		1D 81 S	
4 Stroke Diesel Engine - Injection type		Direct	
Aspiration type		Axial blower fan	
Cylinders, number and arrangement		1	
Bore x stroke	mm - in	100 x 85 - 3,94 x 3,35	
Total displacement	L - in <sup>3</sup>	0,667 - 40,7	
Cooling system		Air	
Lube oil specifications		15 W 40	
Compression ratio		20,5 : 1	
Specific fuel consumption	g/kWh	258	
Specific oil consumption		Aprox 1% of fuel consumption	
Lube oil maximum capacity	L - US qts	1,9 - 2	
Lube oil minimum capacity	L - US qts	1 - 1,06	
Speed governor	Type	Mechanical	
Air filter		Dry	

S\* : ISO-STANDARD POWER (ICXN) (10% overload permissible) and ISO-STANDARD FUEL STOP POWER (no overload permissible) according to DIN ISO 3046.  
 For constant speed and constant load (ICFN).  
 B\* : ISO BRAKE FUEL STOP NET POWER (IFN) for intermittent load acc. to DIN ISO 3046.

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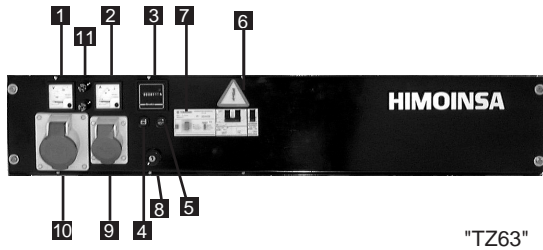
### Synchronous Generator\*

Poles	Nº	2
Winding connections (Standard)		Serie
Frame mounting		09/B23
Windings treatment	Type	For humid - saline climate
Insulation	Class	H
Damper windings		Yes
Enclosure (according to IEC-34-5)		IP 20
Waveform distortion		No more than 6%
Exciter system		Condenser
Voltage regulator		Brushless autoexciter
Steady voltage precision		±6%

\* Alternators used by HIMOINSA Gensets meet the requirements of following Standard: IEC 34-1; CEI 2-3; BS 4999-5000; VDE 0530; NF 51-100,111

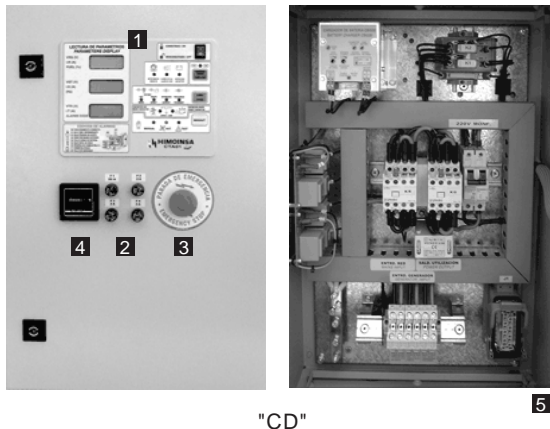
Generating Set Installation Data		3.000 r.p.m.
<b>EXHAUST SYSTEM</b>		
Max. exhaust temperature at full load	C°	600
	F°	1.112
Exhaust gas flow	Q(m³/h)	157
Heat rejected to exhaust	(kW-IFN)	10,5
Maximum allowed back pressure	mm/WS	270
<b>AIR REQUIREMENT</b>		
Air requirement for combustion at 100% load / rated speed	m³/min	1
	ft³/min	35
<b>ELECTRIC STARTING SYSTEM</b>		
Starting motor output	kW	1,5
	CV	2
Minimum recommended battery capacity	Ah	50
Auxiliary voltage	Vcc.	12V
<b>LIQUID CAPACITY</b>		
Lube oil system including sump, filters, etc.	L	1,9 max. / 1 min.
	qts	2 max. / 1,06 min.
Fuel tank capacity	L	10
<b>WEIGHT AND DIMENSIONS</b>		
Length	m - ft	0,95 - 3,11
Width	m - ft	0,66 - 2,16
Height	m - ft	0,7 - 2,29
Shipping volume seaworthy packing (standard supplier)	m³ - ft³	0,44 - 15,5
Dry weight (with standard accessories)	kg - lb	180 - 396

**CONTROL PANEL**  
Key start control panel



- 1.- Voltmeter.
- 2.- Ammeter.
- 3.- Hour meter 230V.
- 4.- Battery charger led.
- 5.- Oil pressure led.
- 6.- 2 poles thermal magnetic protection.
- 7.- Earth leakage (differential) protection.
- 8.- Start key.
- 9.- Plug 16A 2P+T.
- 10.- Plug 32A 2P+T .
- 11.- Protection fuses.
- 12.- Earth connection. (Panel backside).

Automatic control panel



- 1- AUTOMATIC switchboard model CTA01
- READINGS:  
Amps per phase, Frequency meter, Voltage mains and genset, Mains detector.
- ACOUSTIC ALARMS THROUGH CODE FOR:  
Low oil pressure, Alternator battery charger failure, High temperature, Start failure.
- 2- Protection fuses.
- 3- Emergency stop button.
- 4- Hour meter.
- 5- INTERNAL COMPOSITION:  
Change over contactor mains-genset, Battery charger, Current transformers, Plate voltmeter transformers for mains (voltage measure), Plate voltmeter transformers for genset (voltage measure), Electronical and mechanical interlocking for contactors, Terminal rail for output / input, Plate relay swich off /on, Engine wiring connection, Strip earth connection, 2 poles thermal magnetic protection, 6 mt control cables manoeuvre.