

GENERATING RATES		PRIME	STANDBY
Power	KVA	69	77
Power	KW	55	62
Current	A	100	111
Standard Voltage	V	400/230	
Revolution Per Minute	r.p.m.	1500	
Rated at Power Factor	Cos Q	0,8	

**STANDBY POWER:**

Supplying of emergency electrical power at variable load, in the event of normal utility power failure. This rating is maximum power, no overload capability is available.

**PRIME POWER:**

It is the continuous operating power under variable load. According to ISO 3046, 10% overload is allowed for 12 hours of operation.



**STANDART FEATURES**

- 4 Stroke, 1500 RPM, water cooled heavy duty diesel engine
- Protection system on manual run
- Flexible oil pipes and oil draining valve
- Pre-heater
- Lubrication oil and anti-freeze
- 4 Poles, synchron type, single bearing, brushless alternator
- Batteries and cables
- Electrostatic paint coated, steel, welded chassis
- Fuel tank housed in the chassis.
- Industrial type silencer
- Electronic battery charger
- Electrical wiring diagram
- User manual and operating manual

**OPTIONAL EQUIPMENTS**

- Sound proof canopy
- Automatic transfer switch
- Circuit breaker
- Trailer
- External fuel tank
- Heating system for fuel tank
- Oil heater
- Fuel filling system
- Automatic / Manuel
- Analog indicators
- 1 Phase - 3 Phase switch plugs
- Alarm system for fuel level
- Remote control and monitoring

#### ENGINE SPECIFICATIONS

Brand		RICARDO
Model		ZH4105ZLD
Engine Power Stand BY	(kWm / hp)	66/88
Revolution Per Minute	(r.p.m.)	1500
Total Displacement		4,33
Cylinders Orientation		4 SINGLE LINE
Bore x Stroke	(mm x mm)	105 x 125
Compression Orientation		17:01
Governor Type		MECANICAL
Aspiration System		TURBOCHARGE-INTERCOOLER
Injection		DIRECT
Cooling		WATER COOLED
Electrical System	(VDC)	24
Lub-Oil Capacity	(L)	16
Engine Coolant Capacity	(L)	25
Fuel Tank Capacity	(L)	175
Maximum Exhaust Temperature	(°C)	600
Maximum Exhaust Gas Flow	(m3/h)	3,97
Maximum Allowed Back Pressure	(kPa)	4
Cooling Air Flow	(m3/min)	174
Fuel Consumption 50 %	(L/h)	9,7
Fuel Consumption 75 %	(L/h)	14,6
Fuel Consumption 100 %	(L/h)	19,4

- Replaceable cylinder jacket • Dry type replaceable oil filter • Heat-resistant radiator for 50 °C

#### ALTERNATOR SPECIFICATIONS

Output Voltage	(V)	230/400
Frequency	(Hz)	50
Stationary Voltage Regulation	(±)	1%
Short Circuit Current		%300 (10 MIN.)
Insulation		H
Protection		IP 23
Efficiency	(%)	88
Overloading		% 110 FOR 1 HOUR
Power Factor		0.8
Total Harmonic Distortion Rate	(cos Q)	< 1 %
Connection Type		STAR
Number Of Pole		4
Number Of Bearing		SINGLE

- 4 Poles, Self-Excitation and Self-Cooled, Brushless, Synchronotype alternator • Electronic type automatic voltage regulator (AVR)

### CONTROL PANEL FEATURE

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs, full snapshot
- All parameters front panel editable
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable language
- Waveform display of V & I
- Harmonic analysis of V & I
- Synchroscope & check synch
- 16 Amp MCB & GCB outputs
- 8 configurable digital outputs
- Outputs expandable to 40
- 8 configurable digital outputs
- Outputs expandable to 40
- 4 configurable analog inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- Multiple automatic exerciser
- Weekly operation schedule
- Dual mutual standby with equal aging of genset
- Manual "speed fine adjust" on selected ECUs
- Automatic fuel pump control
- Disable protections feature
- Excess power protection
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Current unbalance protection
- Voltage unbalance protection
- Fuel fulling & fuel theft alarms
- Battery back-up real time clock
- Idle speed control
- Battery charge run enabled
- Combat mode support
- Contactor & MCB drive
- 4 quadrant genset power counters
- Main power counters
- Fuel fulling counter
- Fuel consumption counter
- Modem & Ethernet diagnostic
- Configurable through USB, RS-485, Ethernet and GPRS
- Free configuration program
- Allow SMS controls
- Ready for central monitoring Ethernet and GPRS
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity [USB and RS232]
- Dynamic DNS support
- Easy USB firmware upgrade
- IP65 rating with standard gasket
- Multiple nominal conditions

### DIMENSIONS AND WEIGHT



Lenght (L)	mm	2300
Height (H)	mm	1550
Width (W)	mm	1000
Wet weight	kg	890
Fuel Tank Capacity	L	175

### DIMENSIONS AND WEIGHT



Lenght (L)	mm	2600
Height (H)	mm	1750
Width (W)	mm	1000
Wet weight	kg	1035
Fuel Tank Capacity	L	175