



CONTROL PANEL Make DATAKOM Model D100MK2

The $\ensuremath{\text{D100MK2}}$ is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the Datakom Rainbow Plus PC software.

Metering and Alarm indications:

- Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Fuel level (Warning or shutdown) Optional
- Hours run counter
- Battery voltsFail to start/stop
- Emergency stop
- · Failed to reach loading voltage/frequency
- Charge fail
 - Loss of magnetic pick-up signal Optional
 Low DC voltage
 CAN diagnostics and CAN fail/error

GENERATING SET MODEL (EY39)			
Output Ratings	Prime	Standby	
380-415 V, 3 ph, 50 Hz, 1500 rpm	31 KVA	34.1 KVA	
	24.8 KW	27.3 KW	

Ratings at 0.8 Power Factor

ENGINE / TECHNICAL DATA		ALTERNATOR DATA	
Engine Make	YANGDONG	Make	YANAN
Engine Model	Y4102D	Model	SLG184G
Governing Type	Mechanical	No. of bearings	1
Number of Cylinders	4	Insulation class	Н
Cylinder Arrangement	Vertical in line	Total Harmonic Content	<3%
Bore and Stroke mm	102x118	Wires	12
Displacement / Cubic Capacity litres	3.875	Ingress Protection	IP22
Induction System	Naturally Aspirated	Excitation System	SHUNT
Cycle	4 stroke	Winding Pitch	2/3 (wdg 3)
Combustion System	Direct Injection	AVR Model	AS440
DC Voltage	12	Overspeed	2250 mn ⁻¹
Rotation	Anti-clockwise, viewed on flywheel	Voltage Regulation (steady)	±1%
Cooling System	Water - cooled	Short Circuit Capacity	-
Engine Speed	1500rpm	AREP Excitation System Available	as Optional.
Engine Power kWm	33		
Fuel Consumption @ 50% load L/hr	4.5		
@ 75% load L/hr	6.7		
@ 100% load L/hr	8.9		
Fuel Tank Capacity: litres	80	DIMENSIONS WITH CANO	РҮ
		Length mm	2275
		Width mm	1000
		Height mm	1400





RATINGS DEFINITION

Prime Power

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. 10% overload power is available for 1 hour in 12 hours continuous operation.

Standby Power

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

STANDARD	REFERENC	CE CONDITIONS	
STANDAND	NEI ENENG		

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and higher altitudes.

De-ration may apply, please consult your dealer for specific site ratings.

Some of the specifications are not standard on all Genset models.

STANDARD SPECIFICATIONS

ENGINE

YTO four stroke heavy duty high performance industrial type diesel

ENGINE FILTRATION SYSTEM

Air filter

- Fuel filter
- Full flow lube oil filter All filters have replaceable elements.

3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-ration factors)

4. EXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

5. CIRCUIT BREAKER TYPE Legrand 3 pole MCB. (4 pole is optional)

6. FUEL SYSTEM

The baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

AVAILABLE OPTIONS & ACCESSORIES

We offer a range of optional features and accessories to tailor our generating sets to meet your power needs.

OPTIONS

- ACCESSORIES • A variety of generating set control and synchronizing panels • Genuine spare parts
- Additional protection alarms and shutdowns
- Water fuel seperator
- · Water jacket heater
- · Battery charger

7. ALTERNATOR 7.1 INSULATION SYSTEM The insulation system is Class H

• All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a Special polyester resin. Heavy coat of antitracking varnish additional protection against moisture or condensation

7.2 AUTOMATIC VOLTAGE REGULATOR (AVR) The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at $\pm 0.5\%$. Nominal adjustment by means of a trim pot incorporated on the AVR.

7.3 MOTOR STARTING

An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds, when AREP option is fitted.

8. MOUNTING ARRANGEMENT

8.1 BASE FRAME

The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

8.2 COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator

8.3 ANTI-VIBRATION MOUNTING PADS Anti-Vibration pads are affixed between the Engine / Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

8.4 SAFETY GUARDS

The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

• Auxiliary fuel tanks

Manual & automatic transfer

Load banks

switches

9. FACTORY TESTS

 The Generating set is load tested before dispatch
 All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

10. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and . durability

11. DOCUMENTATIONS

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding instruction leaflets are accompanied with the Generator.

12. QUALITY STANDARDS

The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

13. WARRANTY

13. WARKANT T All of the Generating Sets are covered under a warranty policy for a period of 12 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions. (check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the right to change specifications without notice.



JMG Limited info@jmglimited.com www.jmqlimited.com