

EG-50PE

50 Hz. 400 VAC Diesel Generator
Technical Information



ENERGON
— Keep Life On —



Generator Group

Stand By Power	50	kVA
	40	kW
Prime Power	45	kVA
	36	kW

Continuous Power (CP)

The maximum power which a generating set is capable of delivering continuously whilst supplying a constant electrical load.

Average load can be 100%. The generator must not be overloaded.

Standby Power (ESP)

This rating is for the supply of continuous electrical power at variable load, in the event of utility power failure. No overload is permitted.

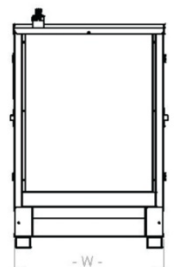
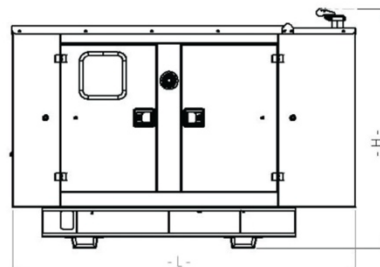
Prime Power (PRP)

This rating is for the supply of continuous electrical power at variable load.

There is no limitation on the annual hours in operation and 10% overload power can be supplied for 1 hour in 12.

Size

	W x L x H mm.	Weight kg.	Fuel Capacity lt.
Open Type	1000 x 2000 x 1230	834	112
Canopied	1000 x 2200 x 1250	1148	112



Optional Equipments

- Automatic fuel filling system
- Fuel tank heaters, oil sump heaters, alternator heaters
- Alternator with PMG and double AVR
- Synchronization systems
- Remote monitoring system
- Circuit breaker
- Automatic Transfer Switch (ATS)
- Seismic solutions
- Trailer

Canopy Features

- Emergency stop button mounted on the canopy
- High-quality corrosion and rust resistant powder coating
- Optimized sound insulation for low noise operation
- Easy-access filling points for coolant and engine fluids
- Optimized airflow design for efficient cooling
- Large service doors for easy maintenance and servicing

Chassis and Fuel Tank

- Heavy-duty welded steel chassis
- Integrated fuel tank with robust structural design
- Lifting lugs for safe transportation and installation
- High-strength steel construction for maximum durability
- Custom chassis configurations available upon request
- Rubber anti-vibration mounts to minimize vibration and ensure stable operation

Diesel Engine

Manufacturer	PERKINS	
Manufacturer Model	1103A-33TG1	
Number of Cylinders	3	pcs.
Cylinders Configuration	INLINE	
Bore	105	mm.
Stroke	127	mm.
Displacement	3,3	lt.
Compression Ratio	17,25:1	
Aspiration	TURBOCHARGED	
Governor Type	MECHANIC	
Cooling Method	WATER	
DC Voltage	12	VDC
Speed /Frequency	1500 rpm / 50 Hz	RPM/Hz.
Rating Power	46,5	kW.
Fuel Consumption ESP %110 Load	12	lt./h.
Fuel Consumption ESP %100 Load	11	lt./h.
Fuel Consumption ESP %75 Load	8	lt./h.
Fuel Consumption ESP %50 Load	6	lt./h.
Max. Exh. Outlet Temperature	537	°C
Lub. Oil Specification	15W/40 - CI4	
Oil Capacity	7,9	lt.
Coolant Liq Capacity	10,2	lt.

Alternator

No of Phases	3
No of Poles	4
No of Leads	12
Power Factor	0,8
No of Bearings	Single
Degree of Protection	IP 23
Insulation Class H-F Degree of Protection	H
Excitation System	Brushless / AVR



D-300 MK2 ADVANCED GENSET CONTROLLER

Functions

- AMF unit
- ATS unit
- Remote start controller
- Manual start controller
- Engine controller
- Remote Monitoring Panel

Communications

- GSM Modem (2G-3G-4G)
- Ethernet 100Mbps
- Wi-Fi
- RS-485 isolated (2400-57600baud)
- RS-232 isolated (2400-57600baud)
- USB Device
- J1939 CANBUS
- Web monitoring
- Web programming
- Central Monitoring through internet
- SMS message sending
- E-mail sending
- PC software: Rainbow Plus
- Central monitoring
- Modbus RTU through RS-485
- Modbus TCP/IP
- Optional with plug-in module

Topologies

- 3 phases 4 wires, star & delta
- 3 phases 3 wires,
- 3 CTs 3 phases 3 wires,
- 2 CTs 2 phases 3 wires
- 1 phase 2 wires

Descriptions

The D-300-MK2 is a next generation genset control unit combining multi-functionality and wide communication possibilities together with a reliable and low cost design. The same controller provides AMF, ATS, Remote Start and Engine Control functionalities. The module comes ready for remote monitoring over GSM or Ethernet with plug-in communication modules. Various plug-in modules provide unlimited expansion capabilities allowing to meet any special requirement. The unit complies and mostly exceeds world's tightest safety, EMC, vibration and environmental standards for the industrial category. Software features are complete with easy firmware upgrade process through USB port. The Windows based PC software allows monitoring and programming through USB, serial and GPRS. The Rainbow Scada central monitoring service allows monitoring and control of an unlimited number of gensets from a single central location.