

# GGW625MA | E3262-LE202 | 500kW COP

INDUSTRIAL SPARK IGNITED GENERATOR SET

PRAMAC | Power Engineering Division

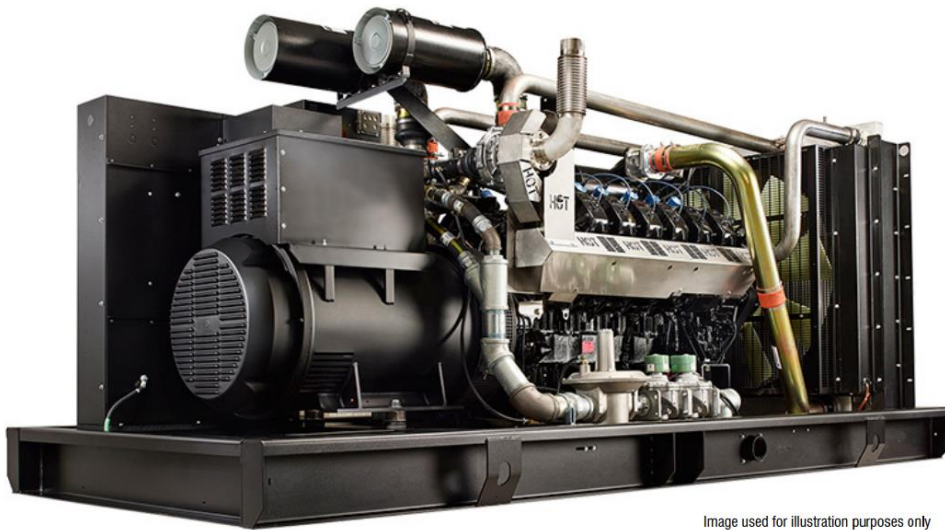


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POWER RATINGS		
GGW625MA	CONTINUOUS	625 kVA / 500 kW

## Codes And Standards

PRAMAC products are designed to the following standards:



BS 5514 and 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC 700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

## ENERGY GENERATION

PRAMAC ensures superior quality and performance by managing all aspects of production, from design to manufacturing.

PRAMAC can trace its roots back to 1966; from then on, it has been expanding its activity in the energy and material-handling sector, continuously growing globally with a wide and flexible product range.

In the field of power generation, PRAMAC offers solutions for every kind of power supply demand: portable and industrial generators for standby and prime power applications, as well as mobile and towable lighting for outdoor needs.

PRAMAC operates through a wide distribution network and provides global coverage even in the most demanding markets.

### STANDARD FEATURES

#### ENGINE SYSTEM

- Oil drain extraction pump
- Heavy Duty Air Cleaner
- Air Filter restriction indicator
- Engine mounted Varifuel Mixer
- Ignition System MOTORTECH
- Stainless Steel Flexible Exhaust Connection
- Factory-Filled Oil And Coolant
- Industrial Exhaust Silencer

#### Fuel System

- Primary And Secondary Fuel Shutoff
- Fuel Line Flanged Connection

#### Cooling System

- Close Coolant Recovery System
- UV/Ozone resistant hoses
- Factory Installed Radiator
- Electric Cooling fan
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

#### Electrical System

- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

#### ALTERNATOR SYSTEM

- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Auxiliary Winding Excitation System
- Sealed Bearing
- Amortisseur Winding
- Full-Load Capacity Alternator

#### GENERATOR SET

- Internal Genset Vibration Isolation
- Wrapped Exhaust Piping (Enclosed Only)
- Bottom (floor) power cable outlet
- Exhaust silencer Mounted in the Discharge Hood (Enclosed Sets)

#### ENCLOSURE (if selected)

- High-Performance Sound Absorbing Material
- Gasketed Doors
- Galvanized Sheet Metal Construction
- Upward Facing Discharge Hood (exhaust)
- Stainless Steel Hinges

### CONTROL SYSTEM



#### ALL-IN-ONE Control System

##### Program Functions

- Programmable Crank Limiter
- RS232/485 Communications
- LAN communication
- 3-Phase sensing Voltage Regulator
- 2-Wire start Capability
- Date/Time Fault History (event Log)
- Isochronous Governor Control
- Standalone or Genset-Parallel
- Audible Alarms and shutdown
- Auto On/Off Manual Switch

- Customizable Alarms, Warnings, Events
- Modbus protocol
- Password Parameter Adjustment Protection
- Single Point Ground
- Alarm Information Automatically Announced on the touchscreen display
- Gas train control
- Combustion control
- Detonation control

##### Full System Status Display

- Power Output (kW)
- Power Factor Cos( $\phi$ )
- kWh total and last run
- Active/Reactive/Apparent Power
- All Phase AC voltage
- All Phase Currents
- Oil Pressure

- Engine Speed
- Battery Voltage
- Frequency

##### Alarms And Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure Alarm
- Engine Over-speed
- Battery Voltage
- Alarms and Warnings times and date stamped
- Snap Shot of key Operation Parameters during Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)
- Multilingual



## OPTIONAL FEATURES

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### ENGINE SYSTEM

- Engine Block heater (forced circulation)
- Lube-Oil make-up system with tank

### ALTERNATOR SYSTEM

- Upsized Alternator
- Anti-Condensation Heaters
- Permanent Magnet (PMG)
- Thermistors on alternator's windings
- Temperature Sensors (PT100) on alternators windings
- Double bearing alternator with flexible joint upgrade

### CIRCUIT BREAKER OPTIONS

- 4-pole Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Differential Protection

### ELECTRICAL SYSTEM

- 10A UL/CE float battery charger

### GENERATOR SET

- Leak proof tray

### CONTROL SYSTEM

- Remote Connection kit with Antenna
- Modular Parallel Panel with MCB upgrade in lieu of standard thermal magnetic breaker

### ENCLOSURE

- Special Color Requirements

## ENGINEERED OPTIONS

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### ENGINE SYSTEM

- Engine Battery Warmer
- Heavy-Duty air filters

### ELECTRICAL SYSTEM

- ATS with transfer inhibition
- Load Shedding control
- 20 Amp Battery charger

### ALTERNATOR SYSTEM

- Class F temperature rise sizing
- Tropical Coating

### CIRCUIT BREAKER OPTIONS

- Special Bus-bars Connections

### GENERATOR SET

- Spring vibration isolators
- Extended containment tray with leak detector

### CONTROL SYSTEM

- Special firmware programming
- Non-Standard language
- Communication programming

### ENCLOSURE

- Motorized louvers
- Sand traps on intake vents
- Non-Standard sheet metal
- Containerized option
- Special sound requirements

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## APPLICATION ENGINEERING DATA

### ENGINE SPECIFICATIONS

#### General

Make..... MAN E3262LE202  
Cylinder # ..... 12  
Type ..... V  
Displacement [L]..... 25.8  
Bore [mm]..... 132  
Stroke [mm]..... 157  
Compression Ratio..... 12:1  
Intake Method..... Turbocharged/After-cooled  
N. of Bearings..... 7  
Connecting Rods..... Steel Alloy  
Cylinder Head..... Cast Iron OHV  
Cylinder Liners ..... Cast Iron Alloy  
Ignition..... Electric  
Piston Type ..... Aluminum Alloy  
Crankshaft Type..... Forged Steel Alloy  
Lifter Type ..... Solid  
Intake Valve Material..... High-Temp. Steel Alloy  
Exhaust Valve Material..... High-Temp. Steel Alloy  
Hardened Valve Seats..... High-Temp. Steel Alloy

#### Engine Governing

Governor ..... Electronic  
Frequency Regulation (steady state).....  $\pm 0,25\%$

#### Lubrication System

Oil Pump..... Gear  
Oil Filter Type ..... Twin Full Flow  
Crankcase Capacity [L] ..... 90

#### Cooling System

Cooling System Type ..... Pressurized Closed Recovery  
Fan Type ..... Pusher  
Fan drive ..... Electric motors

#### Fuel System

Fuel Type ..... Natural Gas  
Carburetor ..... Motortech VARIFUEL  
Secondary Fuel Regulator..... Standard  
Fuel Shutoff Solenoid ..... Standard (Dual)  
Operating Fuel Pressure [kPa] ..... 4-7

#### Engine Electrical System

System Voltage ..... 24V DC  
Battery Charger Alternator..... Standard  
Battery Size ..... See Bulletin  
Battery Voltage..... 2 x 12 VDC  
Ground Polarity ..... Negative

### ALTERNATOR SPECIFICATIONS

Standard Model ..... MeccAlte  
Poles ..... 4  
Field type..... Revolving  
Insulation Class (Rotor)..... H  
Insulation Class (Stator) ..... H  
Total Harmonic Distortion (THD) ..... <5%  
Telephone Interference Factor (TIF) ..... <50

Standard Excitation ..... Auxiliary Winding  
Bearings ..... Single Bearing  
Coupling ..... Direct via Flexible Disc  
Sustained Short Circuit Current..... 300% (20s)  
Number of Sensed Phases..... All  
Regulation Accuracy.....  $\pm 1\%$

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## OPERATING DATA

### POWER RATINGS

	Continuous (Baseload)
Three Phase 400 / 231 V AC @ PF=0,8	625kVA / 500 kW Amps:902

### STARTING CAPABILITIES (SKVA)

		sKVA vs. Voltage Dip											
		400 / 231 V AC						380 / 220 V AC					
Alternator	kVA	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	625	294	460	645	880	1134	1512	268	418	586	800	1030	1374

### FUEL CONSUMPTION RATES\*

Percent Loads	Kg/h
50%	55
75%	78
100%	102

\* Fuel supply installation must accommodate fuel consumption rates at 100% load

### COOLING

		Standby
Air Flow (Combustion and Cooling)	m <sup>3</sup> /min	650
Coolant Flow	l/min	738
Coolant System Capacity	L	55
Heat Rejection To Coolant	kW	278
Maximum Operating Ambient Temperature	°C	40

### COMBSUTION AIR REQUIREMENT

Flow at Rated Power – Kg/h	2648
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### ENGINE

Rated Engine Speed	rpm	1500
Horsepower at rated rpm	bHp	738
Piston Speed	m/s	7,85
BMEP	bar	15

### EXHAUST

Exhaust Flow	M <sup>3</sup> /min	73.3
Max. Backpressure	kPa	4
Exhaust Temp.	°C	402

PRELIMINARY

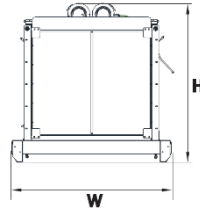
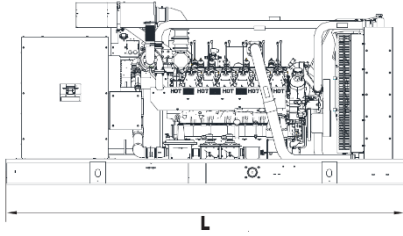
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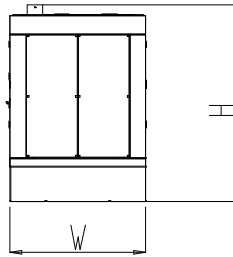
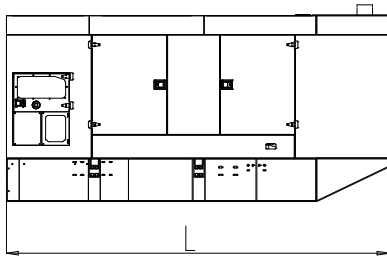


## OPERATING DATA



### OPEN SET (Includes Exhaust Flex)

L x W x H - mm	TBD
Weight - Kg	TBD



### STANDARD ENCLOSURE

L x W x H - mm	5600 x 1950 x 2575
Weight - Kg	8300