

# DIESEL Generator Set



| Service                                 |         | Standby                                 | Prime  |  |  |
|---|---------|---|--------|--|--|
| Power                                   | kVA     | 90                                      | 83     |  |  |
| Frequency                               | Hz      | 50                                      |        |  |  |
| Voltage                                 | V       | 230/400                                 |        |  |  |
| Phase                                   | Cos Phi | 3                                       |        |  |  |
| Fuel                                    |         |   | esel   |  |  |
| Control Panel                           |         | Datako                                  | om 500 |  |  |
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ENMAKSAN has ISO 9001, ISO 14001 and OHSAS 18001 quality certifications. ENMAKSAN gensets are compliant with EC mark which includes the following directives:

• 2006/42/CE Machinery safety.

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- 2014/30/UE Electromagnetic compatibility.
- 2014/35/UE electrical equipment designed for use within certain voltage limits
- 2000/14/EC Sound Power level. Noise emissions outdoor equipment. (amended by 2005/88/EC)
- 97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2002/88/EC & 2004/26/EC)
- EN 12100, EN 13857, EN 60204

Ambient conditions of reference according to ISO 8528-1:2005 normative: 1000 mbar, 25°C, 30% relative humidity. G2 class load acceptance in accordance with ISO 8528-5:2013



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# ENGINE

| Service                                      | Specifications                |  |  |  |
|--|-------------------------------|--|--|--|
| Engine Brand                                 | LISTER PETTER                 |  |  |  |
| Engine Model                                 | LP443EG3                      |  |  |  |
| Model Series                                 | Venüs Max                     |  |  |  |
| Emission                                     | Stage III                     |  |  |  |
| Fuel Type                                    | 4 Stroke – Diesel             |  |  |  |
| Injection Type and System                    | Indirect injection            |  |  |  |
| Aspiration                                   | Turbo Charge & Air-Air Inter- |  |  |  |
| Governor System                              | ECU                           |  |  |  |
| Number of Cylinders                          | 4                             |  |  |  |
| Bore x Stroke                                | 105×124 mm                    |  |  |  |
| Total Displacement                           | 4,3 lt.                       |  |  |  |
| Cooling System                               | Water Cooled                  |  |  |  |
| Compression Ratio                            | 17.3:01                       |  |  |  |
| Fuel Consumption 50% PRP                     | 9,10 lt/s                     |  |  |  |
| Fuel Consumption 75% PRP                     | 13,60 lt/s                    |  |  |  |
| Fuel Consumption 100 % PRP                   | 18,20 lt/s                    |  |  |  |
| Fuel Consumption Standby                     | 20,30 lt/s                    |  |  |  |
| Total oil capacity                           | 13 lt.                        |  |  |  |
| Total coolant capacityTotal coolant capacity | 31 lt.                        |  |  |  |



# **ALTERNATOR**

| Service  | Specifications                   |  |  |
|--|----------------------------------|--|--|
| No of Phases   | 3                                |  |  |
| Power Factor   | 0,8                              |  |  |
| No of Bearings   | Single                           |  |  |
| No of Poles  | 4                                |  |  |
| No of Leads  | 6-12                             |  |  |
| Insulation Class   | Н                                |  |  |
| Degree of Protection   | IP23                             |  |  |
| Excitation System  | AVR                              |  |  |
| No of Bearings<br>No of Poles<br>No of Leads<br>Insulation Class<br>Degree of Protection | Single<br>4<br>6-12<br>H<br>IP23 |  |  |

# **OPTIONAL ALTERNATOR MODELS**

maranello alternator M90

# **Standard Generator Features**

- Heavy duty water cooled diesel engine and brushless alternator
- Solid steel base frame with minimum 8 hours base tank and anti-vibration mountings
- AMF Control panel with digital-automatic main control module
- 50C Tropical radiator
- Battery charge redressor. Lead acid battery
- Residencial type silencer
- Flexible exhaust compensator
- Block water heater unit
- All rotating parts are covered by metal mesh against damages
- · Engine and alternator manufacturer test reports (if provided )
- Factory load, performance and function tests
- User Manual, Electrical Drawing and Gurantee certificate

### Note

All data based on operation to ISO 3046/1, BS 5514 and DIN 6271 standard reference conditions.

# Prime Power (PRP)

According to ISO 8528-1:2005, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24 h of operation shall not exceed 70 % of the PRP.

### **Emergency Standby Power (ESP):**

According to ISO 8528-1:2005, Emergency standby power is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP.



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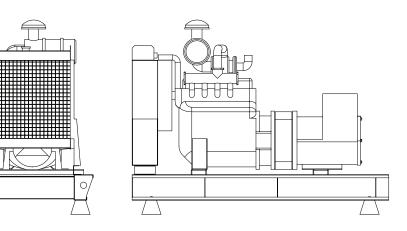
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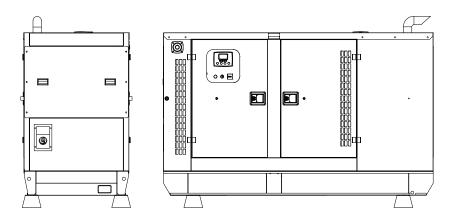


# **DIMENSIONS**



### **OPEN TYPE**

| LxWxH              | mm | 2200x1100x1740 |
|--------------------|----|----------------|
| Weight             | kg | 1000           |
| Fuel Tank Capacity | lt | 300            |



### CANOPIED

| LxWxH              | mm | 2750x1100x1860 |
|--------------------|----|----------------|
| Weight             | kg | 1490           |
| Fuel Tank Capacity | lt | 300            |

### **Sound Proof Canopy Specifications**

- Special design for minimizing acoustic level
- · Galvanized steel construction further protected by polyester powder coat paint
- Black finish stainless steel locks and hinges
- Control panel viewing window in a lockable access door
- Emergency stop push button (red) mounted on enclosure exterior
- Lifting, drag and jacking points on base frame
- · Radiator fill via removable, flush mounted rain cap fitted with compression seal



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# **OPTIONAL GENSET CONTROLLERS**

Next generation single gen-set controllers for Stand-by and Prime power applications combining multi-functionality and wide communication with EFI engines.



|   | Datakom<br>SMART 200 | Datakom<br>D500 | Datakom<br>D500-GSM | Deepsea<br>6120 | Deepsea<br>7320 | ComAp<br>AMF25 | EMKO<br>Trans-AUTO |
|---|----------------------|-----------------|---------------------|-----------------|-----------------|----------------|--------------------|
| Automatic Mains Monitoring                      | ✓                    | ✓               | ✓                   | ✓               | ✓               | ✓              | ✓                  |
| Manuel Start                                    | ✓                    | ✓               | ✓                   | ✓               | ✓               | ✓              | ✓                  |
| Remote Start                                    | OPTIONAL             | OPTIONAL        | ✓                   | Х               | OPTIONAL        | OPTIONAL       | OPTIONAL           |
| Remote Monitoring With Sim Card                 | Х                    | OPTIONAL        | OPTIONAL            | OPTIONAL        | OPTIONAL        | OPTIONAL       | OPTIONAL           |
| 1 Adıtıonal Option (Horn, Oil-Fuel Heater Etc.) | ✓                    | ✓               | ✓                   | ✓               | ✓               | ✓              | ✓                  |
| Light Warning And Mimic Diagram                 | ✓                    | ✓               | ✓                   | ✓               | ✓               | ✓              | ✓                  |
| Battery Charger                                 | ✓                    | ✓               | ✓                   | ✓               | ✓               | ✓              | ✓                  |
| Rs-485 Communication                            | OPTIONAL             | ✓               | ✓                   | X               | ✓               | OPTIONAL       | ✓                  |
| Ethernet (Tcp-Ip) Communication                 | X                    | ✓               | ✓                   | Х               | OPTIONAL        | OPTIONAL       | OPTIONAL           |

### **GENSET CONTROLLERS FOR SYNCHRONIZATION SYSTEMS**

Next generation synchronizing genset controller capable of every communication and functionality.

Datakom D500 MK2



DEEPSEA 8660



Datakom D700



ComAp InteliCompact NT SPtM



DEEPSEA 8610



ComAp InteliGen BaseBox







ComAp InteliGen 200





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