

# DYNAMICA

## MARINE GENSETS

**DIESEL ENGINE**  
**WATER COOLED HEAT EXCHANGER**

### Standard features

- Water cooled diesel engine
- Water cooled generator
- Brushless, AC alternator
- Direct gear-driven salt water pump
- Integral heat exchanger and water-cooled exhaust
- Water-jacketed water injection exhaust elbow
- Air intake silencer
- Oil filter
- Fuel filter/Water separator
- Battery charging DC alternator 180 W output (Mini 40)
- Battery charging DC alternator 150 W output (Mini 60 - Mini 80)
- Electric starting with glow plug preheat
- Oil drain with hose extension
- Coolant recovery system

### Control system

- Unit mounted, drip-proof, vibration isolated console

### Digital Control Unit 12V with:

- Start-run-stop switch
- Manual reset fault relay indicating engine shutdown for:
  - High engine temperature
  - High exhaust temperature
  - Low oil pressure
- Hourmeter
- Plug-in for optional remote panel kit
- Line standard AC circuit breaker

### Gen-set performance

#### Operating Environment:

- Max air ambient temperature 40°C
- Sea water temperature: 38°C

#### Maximum operating angle:

- 25° in any direction, continuous (Mini 40)
- 20° in any direction, continuous (Mini 60 - Mini 80)

#### Frequency Regulation:

- 3Hz (5%) no load to rated load.  
Recovery to stable operation is 3 seconds on application or removal of rated load in one step.

### Alternator details

- Design: Dynamica brushless, revolving field – 2 pole alternator, drip-proof, rigidly coupled to engine through the flywheel
- Insulating system: class F
- Voltage regulation: self-regulated through capacitor 1-phase – 50 Hz  $\pm$  5%
- Cooling: water cooling system

## MINI 40

**kW**  
**3.5**  
**50 Hz**



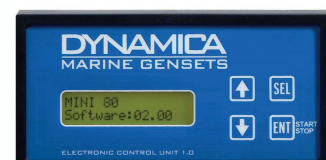
## MINI 60

**kW**  
**5.0**  
**50 Hz**



## MINI 80

**kW**  
**7.0**  
**50 Hz**



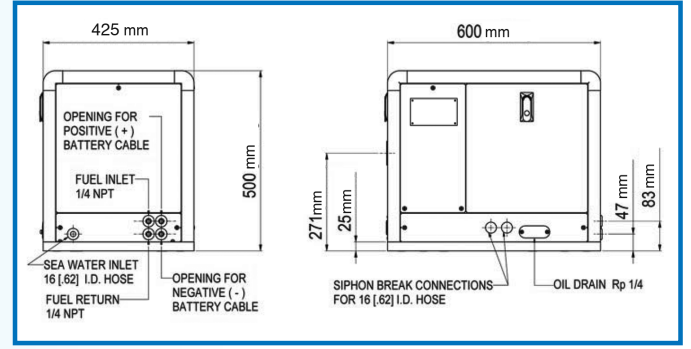
Electronic control unit

## Specifications

### MINI 40 - 3.5 kW

• Output power	: 230 V - 50Hz - 14A
• Continuous duty	: 3.5 kW at 1.0PF
• Engine	: Farymann
• Model	: 18W
• Design	: 4-cycle water-cooled diesel
• Cylinders	: 1 vertical
• Bore	: 85 mm
• Stroke	: 55 mm
• Displacement	: 290 cm <sup>3</sup>
• Compression ratio	: 20 : 1
• Fuel consumption	: 3000 rpm: 0.284 Kg/kWh – 0.206 Kg/HPH 3600 rpm: 0.245 Kg/kWh – 0.177 Kg/HPH
• Lube oil capacity	: 1.25 L
• Coolant capacity	: 3.0 L
• Starting system	: remote 12V, 3 wire negative grounds
• Cooling system	: direct water cooled system, salt water pump self priming 1.5m lift
• Lubrication system	: pressure, trochoid pump, low oil pressure switch
• Fuel system	: electric fuel lift pump

## MINI 40



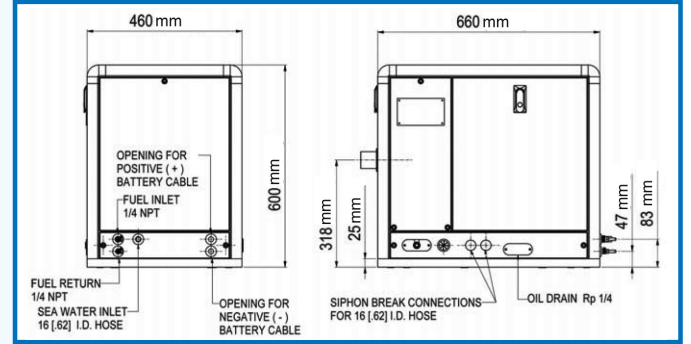
- Sound shield
- Sound level : 57 dB(A) at 3 m
- Dimensions : 600x425x500 mm
- Weight : 96 Kg (with sound shield)
- Waterlift muffler
- Fully functional remote panel, battery condition

## Specifications

### MINI 60 - 5 kW

• Output power	: 230 V - 50Hz - 22A
• Continuous duty	: 5 kW at 1.0PF
• Engine	: Kubota
• Model	: Z482
• Design	: 4-cycle water-cooled diesel
• Cylinders	: 2 vertical
• Bore	: 67 mm
• Stroke	: 68 mm
• Displacement	: 479 cm <sup>3</sup>
• Compression ratio	: 23.5 : 1
• Fuel consumption	: 3000 rpm: 0.265 Kg/kWh – 0.192 Kg/HPH 3600 rpm: 0.285 Kg/kWh – 0.207 Kg/HPH
• Lube oil capacity	: 2.1 L
• Coolant capacity	: 3.0 L
• Starting system	: remote 12V, 3 wire negative grounds
• Cooling system	: heat exchanger raw water cooled, salt water pump self priming 1.5m lift
• Lubrication system	: gear pump-lube oil indicator, low oil pressure switch
• Fuel system	: electric fuel lift pump

## MINI 60



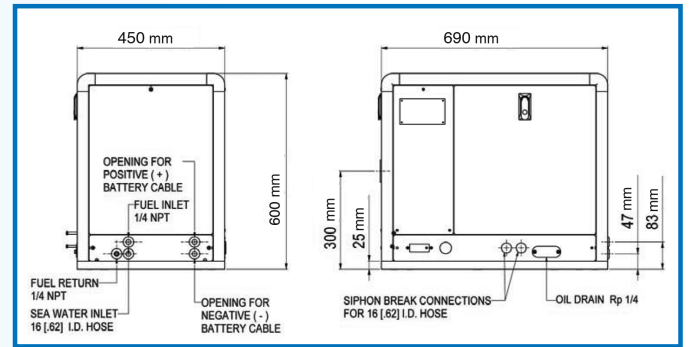
- Sound shield
- Sound level : 57 dB(A) at 3 m
- Dimensions : 660x460x600 mm
- Weight : 164 Kg (with sound shield)
- Waterlift muffler
- Fully functional remote panel, battery condition

## Specifications

### MINI 80 - 7 kW

• Output power	: 230 V - 50Hz - 22A
• Continuous duty	: 7 kW at 1.0PF
• Engine	: Perkins
• Model	: 402C-05
• Design	: 4-cycle water-cooled diesel
• Cylinders	: 2 vertical
• Bore	: 67 mm
• Stroke	: 72 mm
• Displacement	: 507 cm <sup>3</sup>
• Compression ratio	: 23.5 : 1
• Fuel consumption	: 3000 rpm: 0.275 Kg/kWh – 0.199 Kg/HPH 3600 rpm: 0.295 Kg/kWh – 0.214 Kg/HPH
• Lube oil capacity	: 2.1 L
• Coolant capacity	: 2.6 L
• Starting system	: remote 12V, 3 wire negative grounds
• Cooling system	: heat exchanger raw water cooled, salt water pump self priming 1.5m lift
• Lubrication system	: gear pump-lube oil indicator, low oil pressure switch
• Fuel system	: electric fuel lift pump

## MINI 80



- Sound shield
- Sound level : 57 dB(A) at 3 m
- Dimensions : 690x450x600 mm
- Weight : 169 Kg (with sound shield)
- Waterlift muffler
- Fully functional remote panel, battery condition