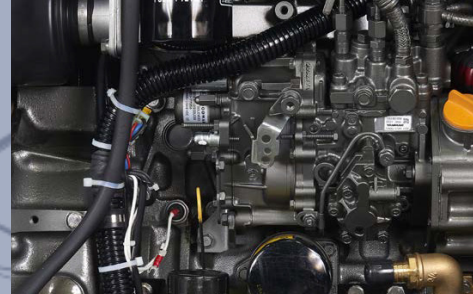


# IS 20 T - IS 23 T



CONTROL PANEL



YANMAR ENGINE



INPUT/OUTPUT FUEL PIPE

**the** intercooler W/A assures the perfect functioning of the generator independently of the external ambient temperature, therefore the alternator and the engine will work at ideal temperature optimizing the performance and reliability of the gen-set. The generator may be installed in any room on the vessel without the need of ventilation blowers. Extremely compact and quiet, the generator is equipped with a double shock absorbing system to increase comfort: the first one absorbs vibrations from engine-alternator to the frame, the second one absorbs residual micro-vibrations from frame to vessel.

We reserve the right to modify the data, images and drawings in this document without prior notice.

For more detailed information, please contact your local distributor or Mase Generators S.p.A.



COMPACT  
DESIGN



EASY  
INSTALLATION



SUPER  
SILENCED



**mase generators spa**

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Tel. +39 0547 354311

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www.masegenerators.com

**mase**  
**GENERATORS**  
*Believing in change.*

## CONTROL PANEL

\_ CBU EVO IL4 device controls and drives the genset. The large display and control pushbuttons allow an easy use and monitoring:

- Manual start
- Voltage Vac
- Frequency Hz
- Hour meter
- Genset Battery voltage
- Low oil pressure alarm
- Engine preheating
- Engine high temperature alarm
- Alternator battery charger failure alarm
- Protection alarm for frequency and rpm
- Alarm history
- Maintenance warning
- General alarm outlet
- RUN outlet
- Ready outlet
- Programmable AUX outlet

\_ Emergency stop button

\_ Magneto-thermal protection

## ENGINE

\_ Easy maintenance access to the feeding and lubrication systems, the sea water pump and the air filter

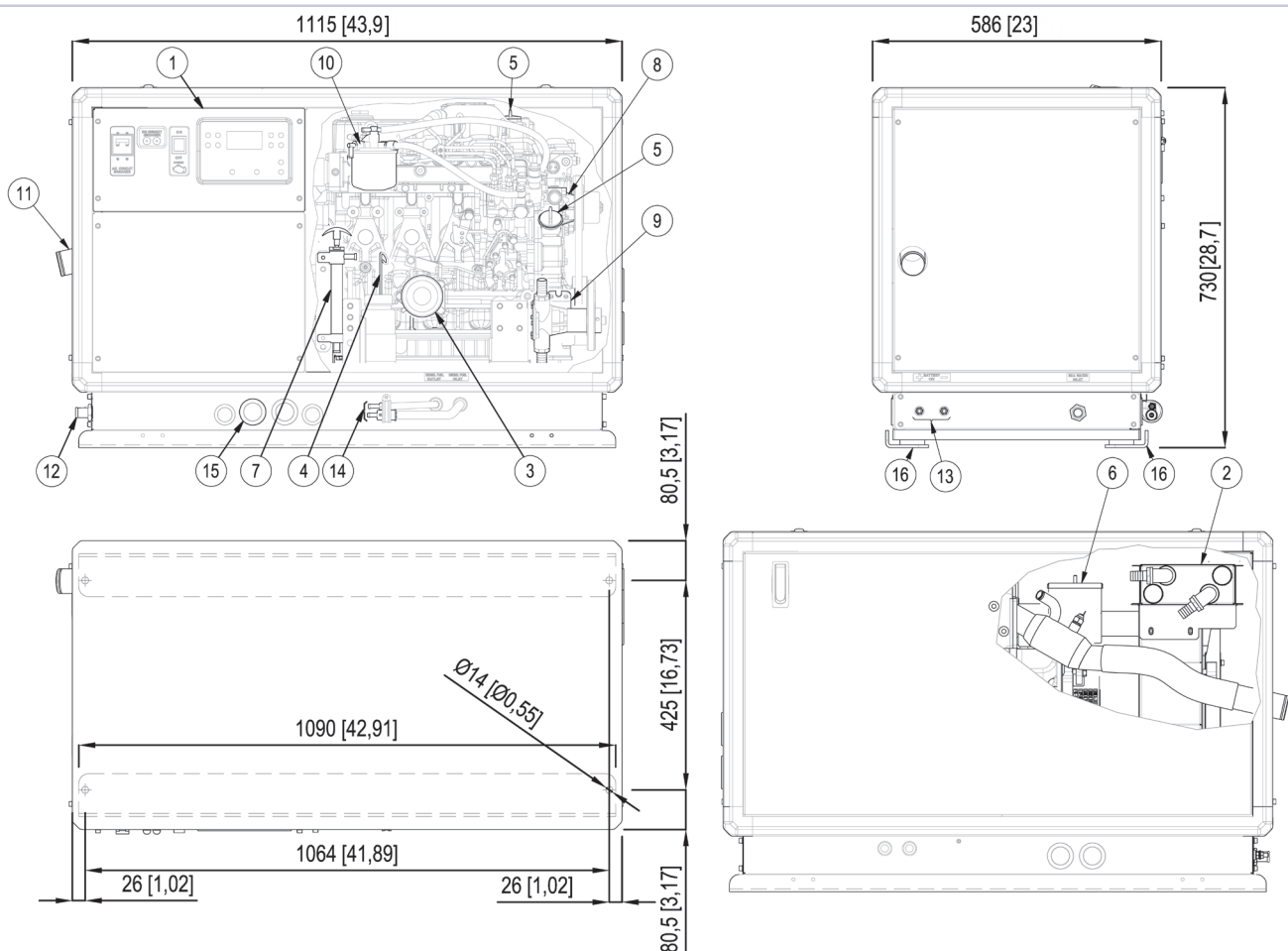
\_ Double vibration dumping system

\_ Oil drain pump

## SOUNDPROOF CABIN

\_ Made of extremely light marine aluminum with very high resistance to external agents

**Insulated poles kit (for metal hull boats), dry exhaust kit and keel cooling kit are available on request**



1. Control panel
2. Air / water exchanger
3. Oil filter cartridge
4. Oil dipstick
5. Engine oil filler

6. Air filter
7. Oil drump pump
8. Fresh water pump
9. Sea water pump
10. Fuel filter

11. Exhaust manifold (d.50 mm)
12. Sea water intake (d.20 mm)
13. Battery connections

14. Fuel tank connections (d.8 mm)
15. Cables outlet
16. Genset fixing brackets

IS 20 T

IS 23 T

**mase**  
**GENERATORS**  
*Believing in change.*

**Three-phase output power 19.2 kW 50 Hz - 23 kW 60 Hz**
**50 Hz****60 Hz**  

AC alternator -

Synchronous, 4 poles, brushless, self-energized, with AVR

Cooling -

Air / Water (Intercooler W / A)

Voltage -

400 V

480 V

Frequency -

50 Hz

60 Hz

Amps -

27.7 A

Max power -

19.2 kVA

23 kVA

Continuous power -

17.1 kVA

20.8 kVA

Power Factor -

cos  $\phi$  0.8

Insulating class -

H

Voltage stability -

 $\pm 2\%$ 

Frequency stability -

 $\pm 5\%$ 

The power is referred to a sea water temperature up to 31°, an atmospheric pressure of 100 KPa and a humidity percentage of 30%

Model -

Yanmar 4TNV88

Type -

Diesel

Cylinders -

nr 4

Cylinder block material -

Cast iron

Bore -

88 mm - 3.47 in

Stroke -

90 mm - 3.55 in

Displacement -

2190 cc - 133.64 CID

Power -

24.5 hp - 18.02 kWm (at 1500 RPM)

29.4 hp - 21.63 kWm (at 1800 RPM)

RPM -

1500

1800

Compression ratio -

19.1:1

Combustion system -

Direct injection

Engine head material -

Cast iron

Speed governor -

Centrifugal mechanical

Lubrication system -

Forced

Oil sump capacity with filter -

6.7 l - 1.89 gl

Engine stop system -

Electromagnet

Fuel pump -

Electronic

Max. fuel pump head -

700 mm - 27.5 in

Fuel consumption -

5.6 l/h - 1.48 gl/h

6.2 l/h - 1.64 gl/h

Air intake -

1300 l/min - 46 cfm

Starting battery -

80 Ah - 12 V

Battery charger -

40 Ah - 12 V

Starter motor -

1.2 kW - 12 V

Max. inclination -

25°

Water pump flow -

25 l/min - 6.6 gl/min

28 l/min - 7.4 gl/min

Sea water inlet pipe  $\varnothing$  -

20 mm - 3/4"

Exhaust pipe  $\varnothing$  -

50 mm - 2"

Input/Output fuel pipe  $\varnothing$  -

8 mm - 5/16"

Dimensions (L x W x H) -

1115 x 585 x 730 mm - 43.9 x 23 x 28.7 in (with soundproof box)

Weight -

430 Kg - 948 lb (with soundproof box)

Noise Level -

50 dBA at 7 mt (23 ft)

52 dBA at 7 mt (23 ft)

## Accessory

## Code

### ACCESSORIES ON REQUEST

|   |        |
|---|--------|
| • Filtering kit: sea water inlet, water filter, valves, fittings D.20 - ref.4 | 016422 |
| • Siphon break kit D.20 - ref.3   | 03796  |
| • Vetus LP50 muffler  | 71148  |
| • Vetus MP50 silencer   | 71751  |
| • Silencer c.71751 with soundproofing sponge                                  | 039866 |
| • Vetus LGS5038 separator   | 71717  |
| • Centek 2" muffler - ref.5   | 71155  |
| • Centek 2" water/gas separator - ref.6                                       | 71156  |
| • Remote START/STOP panel with 20m cable for Comap IL4 - ref.1                | 037561 |
| • Comap IL4 remote start panel with 20m cable - ref.2                         | 039607 |
| • IS Yanmar oil water senders kit   | 011084 |
| • Cruise Kit 2024   | 910507 |



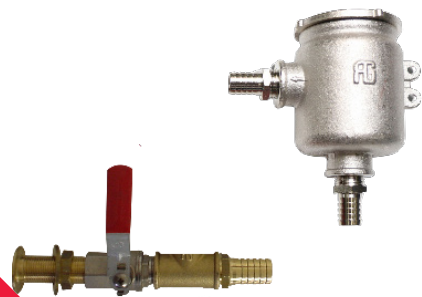
.1



.2



.3



.4



.5



.6