MAN Energy Solutions

Future in the making

Propulsion



MAN L27/38 Mk2

The MAN L27/38 Mk2 is an updated engine variant based on the trusted and reliable Mk1 version. It delivers good performance over the entire load range with quick acceleration and immediate load response. Long time between overhauls (TBO) are also valid for the MAN L27/38 Mk 2 version and no unscheduled maintenance or repair work are expected.

Benefits at a glance

- Reliable and easy operation
- Long time between overhauls
- Easy maintenance
- Updated to newest family design
- Upgraded to @410 kW/cyl @ 900 rpm
- Methanol-ready
- Methanol development project ongoing
- More than 20 years operation experience with bio-fuel oil (power plant)
- Approved for ISO2817:2024



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Propulsion

Dimensions

Cyl. No.		6	7	8	9
L	mm	5,070	5,515	5,960	6,405
L ₁	mm	3,962	4,407	4,852	5,263
Н	mm	3,555	3,687	3,687	3,687
Dry mass	t	29.0	32.5	36.0	39.5

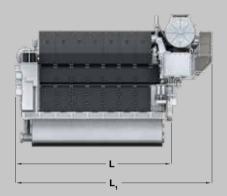
2,035 2,500 H

Output

Speed	rpm	750	900
тер	bar	25.7	23.5
MAN 6L27/38	kW	2,100	2,460
MAN 7L27/38	kW	2,450	2,870
MAN 8L27/38	kW	2,800	3,280
MAN 9L27/38	kW	3,150	3,690

Minimum centerline distance for twin engine installation: 2,500 mm

Last updated July 2024



General

- Engine cycle: four-stroke
- No. of cylinders: 6, 7, 8, 9
- Bore: 270 mm Stroke: 380 mm
- Swept volume per cyl: 21.76 dm3

Fuel consumption at 85 % MCR

- SFOC: 186 g/kWh
- At 750 rpm 184 g/kWh
- At 900 rpm 186 g/kWh

Cylinder output (MCR)

- At 900 rpm: 410 kW/cyl
- Power-to-weight ratio:
- 10,7-13,8 @ 900 rpm

Compliance with emission regulations

- IMO Tier II
- IMO Tier III (with MAN SCR)

Main features

Turbocharging system

 High efficiency constant pressure MAN TCR series exhaust turbocharging system

Engine automation and control

 MAN in-house developed engine attached safety and control system MAN SaCoSone

Fuel system

- Conventional main injection system
- Variable injection system for lowest fuel consumption while meeting IMO Tier II emission limits

Cooling system

2-string high and low temperature cooling water systems

Starting system

- Pressurized air starter (turbine type)

Engine mounting

- Resilient or rigid mounting

Engine design

- "Pipeless engine" design
- Cooling water/lube oil pumps, thermostatic valves integrated in the front-end box

Optional equipment

- 100 % PTO on front-end with build-in bearing enable fire-fighting equipment (Fi-Fi)
- Alternator, and other auxiliary equipment
- Jet assist for improved load response and start up time

MCR = Maximum continuous rating SCR = Selective catalytic reduction SFOC = Specific fuel oil consumption

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