MAN Energy Solutions
Future in the making

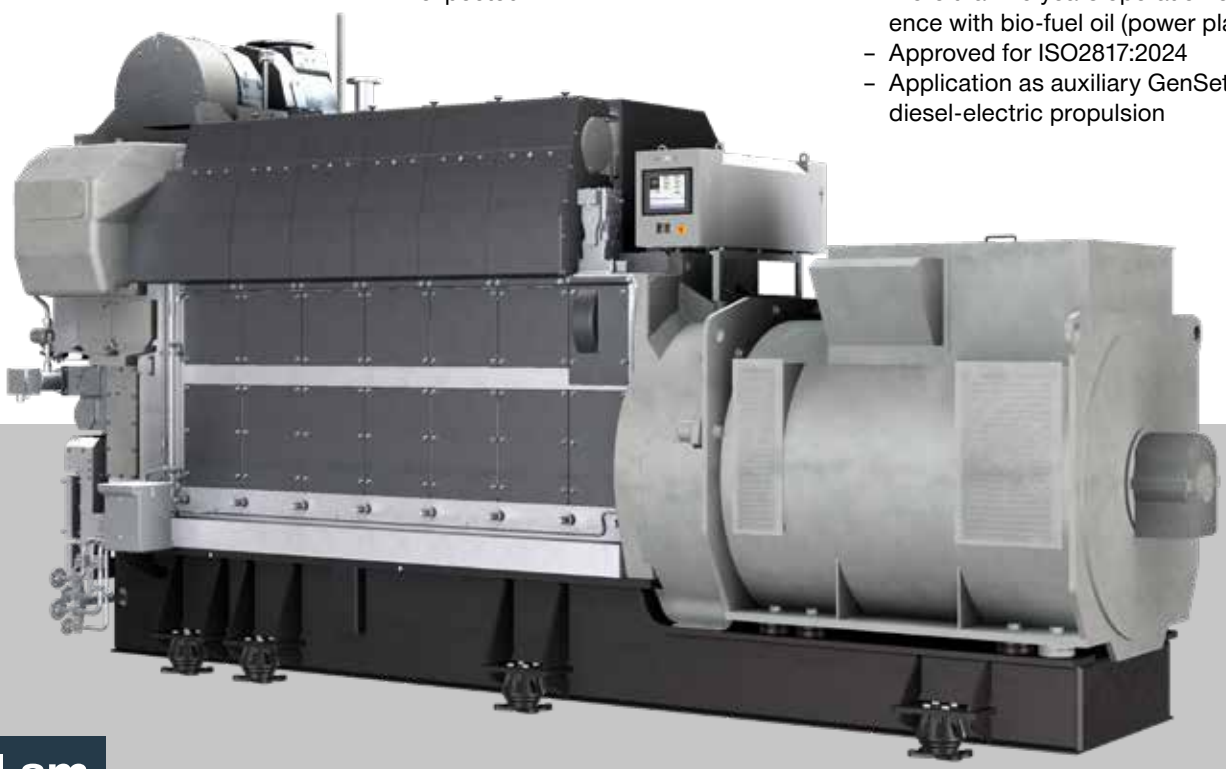
MAN L27/38 Mk2

GenSet

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
- Application as auxiliary GenSet or diesel-electric propulsion

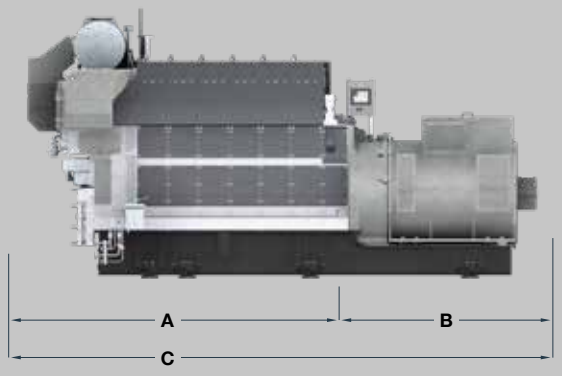


I am
Methanol *ready*

Four-stroke marine systems

MAN L27/38 Mk2

GenSet

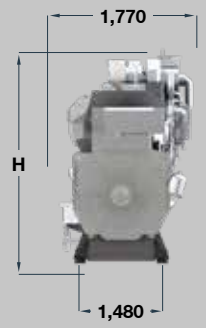


Dimensions

Cyl. No.		6	7	8	9
A	mm	4,791	5,236	5,681	6,126
B	mm	2,766	2,766	2,986	2,986
C	mm	7,557	8,002	8,667	9,112
H	mm	3,712	3,899	3,899	3,899
Dry mass	t	44.5	50.4	58.2	64.7

Output

Speed	rpm	750/720	750/720	900	900
Frequency	Hz	50/60	50/60	50/60	50/60
		Eng.	Gen.*	Eng.	Gen.*
MAN 6L27/38	kW	1,980	1,900	2,460	2,360
MAN 7L27/38	kW	2,310	2,220	2,870	2,755
MAN 8L27/38	kW	2,640	2,535	3,280	3,150
MAN 9L27/38	kW	2,970	2,850	3,690	3,540



*Based on nominal generator efficiencies of 96 %

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

- At 720 rpm: 181 g/kWh
- At 750 rpm: 182 g/kWh
- At 900 rpm: 186 g/kWh

Cylinder output (MCR)

- At 900 rpm: 410 kW/cyl
- At 720 rpm: 330 kW/cyl
- Power-to-weight ratio: 12,1 - 22,5 kg/kW

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 turbo-charging system

Engine automation and control
- MAN in-house developed engine attached safety and control system MAN $SaCoS_{one}$

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

Cooling system
- 1-string high and low temperature cooling water systems

Starting system
- Pressurized air starter (turbine type)

Engine mounting
- Resilient GenSet mounting

Engine design
- Compact engine design with integrated cooling water/lube oil pumps, thermostatic valves and filters in the front-end box
- Jet assist for improved load response and start-up time, plus prevention of black smoke

Optional equipment

- 100 % PTO on front-end with build-in bearing enable fire-fighting equipment (Fi-Fi)
- Preparation for Arctic conditions
- 2-string high and low temperature cooling water systems

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

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