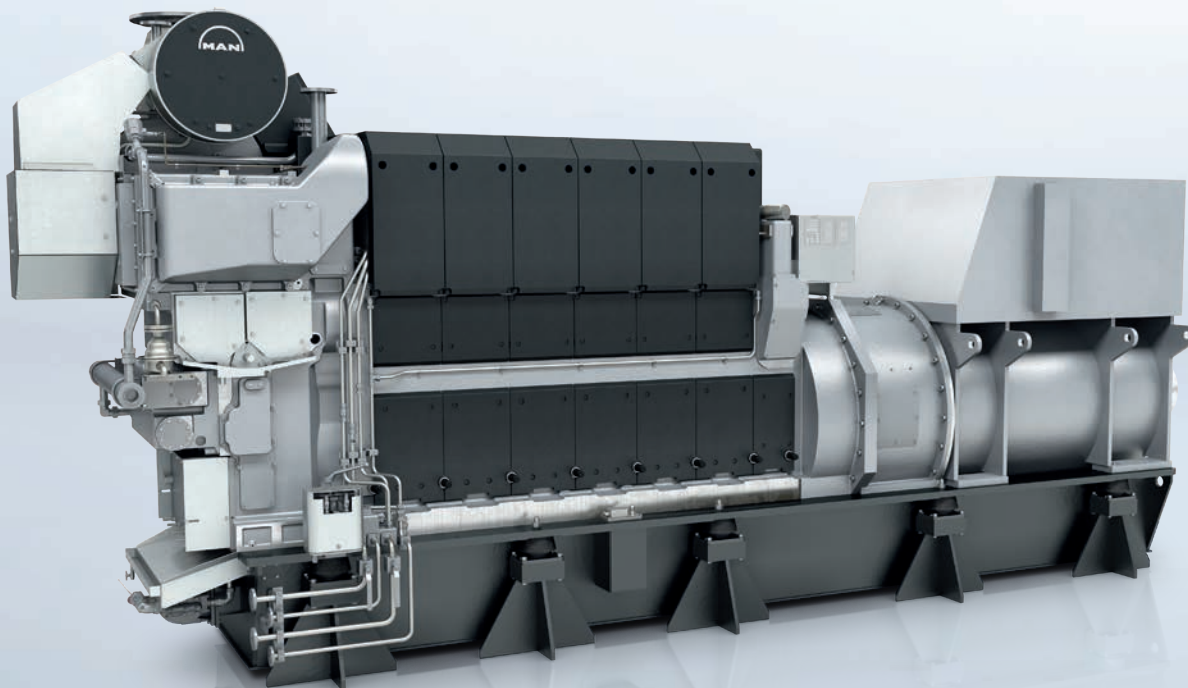


**FOUR
STROKE
MARINE
ENGINES**

MAN L21/31

GENSET



The MAN L21/31 engine is a compact and reliable power source designed to run on heavy fuel oil (HFO). With its outstanding load pick up capabilities and extremely long time between overhauls (TBO), the MAN L21/31 is ideal for many different applications.

Benefits at a glance

- Long time between overhauls
- No unscheduled maintenance and repair work
- Low fuel and lube oil consumption – while fulfilling legal emission limits
- Short installation length

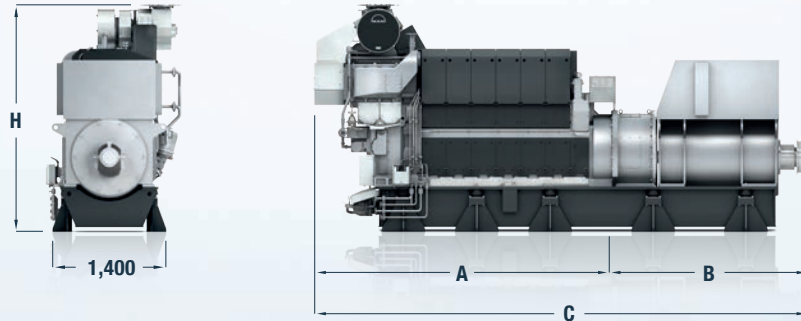
Engineering the Future – since 1758.

MAN Diesel & Turbo



MAN L21/31

GENSET



Dimensions

Cyl. No.	5	6	7	8	9	
A	3,959	4,314	4,669	5,572	5,927	mm
B	1,870	2,000	1,970	2,110	2,135	mm
C	5,829	6,314	6,639	7,682	8,062	mm
H	3,183	3,183	3,289	3,289	3,289	mm
Dry mass	22.5	26.0	29.5	33.0	36.5	t

Output

Speed	900	900	1,000	1,000	rpm
Frequency	60	60	50	50	Hz
	Eng.	Gen.*	Eng.	Gen.*	
MAN 5L21/31	1,000	950	1,000	950	kW
MAN 6L21/31	1,320	1,254	1,320	1,254	kW
MAN 7L21/31	1,540	1,463	1,540	1,463	kW
MAN 8L21/31	1,760	1,672	1,760	1,672	kW
MAN 9L21/31	1,980	1,881	1,980	1,881	kW

*Based on nominal generator efficiencies of 95 %
Last updated August 2016

General

- Engine cycle: Four-Stroke
- No. of cylinders: 5, 6, 7, 8, 9
- Bore: 210 mm – Stroke: 310 mm
- Swept volume per cyl: 10.74 dm³

Fuel consumption at 85 % MCR

- SFOC: 189 g/kWh

Cylinder output (MCR)

- At 900/1000 rpm: 220 kW
- Power-to-weight ratio: 19.4 – 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 turbocharging
system Jet Assist for improved load
response and start up time
- **Engine automation and control**
MAN in-house developed engine attached
Safety and Control System **SaCoS_{one}**

MCR = Maximum Continuous Rating | SCR = Selective Catalytic Reduction | SFOC = Specific Fuel Oil Consumption

Fuel system

Conventional main injection system
Variable 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

Common base frame for engine and
alternator with integrated lube oil service
tank and resilient mounting

Engine design

“Pipeless engine” design. Cooling water/
lub oil pumps, thermostatic valves inte-
grated in the front end box

Optional equipment

- 100 % PTO on front-end with build on
bearing enable Fi-Fi equipment

MAN Diesel & Turbo, 86224 Augsburg, Germany
Phone +49 821 322 0, Fax +49 821 322 3382
info@mandieselturbo.com, www.marine.man.eu