MAN Energy Solutions

Future in the making



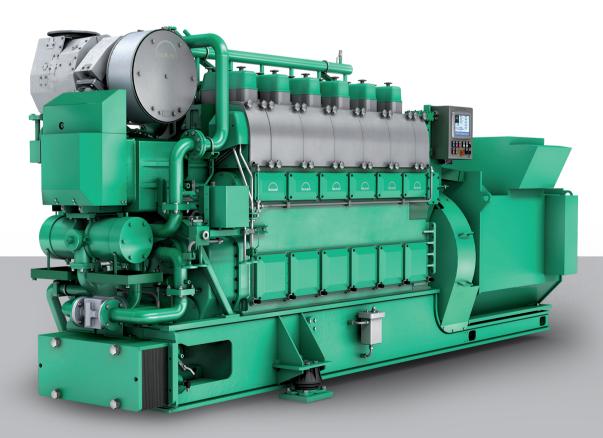
MAN L23/30H Mk. 3 GenSet

More power with proven reliability.

With the same high reliability, the new Mk. 3 version of the well-proven L23/30H GenSet family delivers more power with lower fuel and maintenance costs.

Benefits at a glance

- Increased power output per cylinder
- Compliance with 2020 SO, regulations
- Reduced fuel oil consumption
- Longest TBO in its class
- Marine head design for easy maintenance

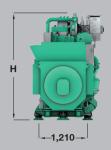


MAN L23/30H Mk. 3

Marine GenSet

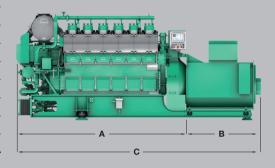
Dimensions

Cyl. No.		5	5	6	6	7	7	8	8	9	9
	r/min	720 ECR	720/750	720/750	900	720/750	900	720/750	900	720/750	900
A	mm	3,379	3,379	3,749	3,749	4,119	4,276	4,489	4,896	4,859	5,266
В	mm	2,202	2,202	2,252	2,252	2,302	2,302	2,352	2,352	2,402	2,402
С	mm	5,581	5,581	6,001	6,001	6,421	6,578	6,841	7,248	7,261	7,668
Н	mm	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621
Dry mass	t	16.8	16.8	18.4	18.6	20.7	20.7	22.5	22.6	24.5	24.5



Output

Speed r/min	750	750	720	720	900	900	
Frequency Hz	50	50	60	60	60	60	
	Eng. kW	Gen. kW*	Eng. kW	Gen. kW*	Eng. kW	Gen. kW*	
5L23/30H Mk. 3 ECR	-	-	500	475	-	-	kW
5L23/30H Mk. 3	885	840	850	810	-	-	kW
6L23/30H Mk. 3	1,062	1,010	1,020	970	1,200	1,140	kW
7L23/30H Mk. 3	1,239	1,180	1,190	1,130	1,400	1,330	kW
8L23/30H Mk. 3	1,416	1,345	1,360	1,290	1,600	1,520	kW
9L23/30H Mk. 3	1,593	1,515	1,530	1,455	1,800	1,710	kW



Emission compliance

IMO's global 2020 sulphur cap requires vessels to use marine fuel oils with maximum 0.5% or 0.1% sulphur, or invest in SO_x reducing technology needing higher auxiliary engine power. The new MAN L23/30H Mk. 3 GenSet supports both solutions.

For shipowners preferring to comply with the 2020 sulphur cap by operating on low-sulphur fuel oils, the new MAN L23/30H Mk. 3 GenSets is a perfect choice. The engine is designed with coated fuel oil pumps to account for the poorer lubricating properties of low-sulphur fuel oils.

Engine room layout

When running on low-sulphur fuel, a major advantage of the MAN L23/30H Mk. 3 GenSet is the increased power output. Typically, the engine can be selected with one cylinder unit less

compared to the Mk. 2 version. This means a shorter and lighter engine.

Thanks to the higher power output, the MAN L23/30H Mk. 3 GenSet is also especially suitable for installation in engine rooms designed with a ${\rm SO_x}$ scrubber.

The engine room for an L23/30H Mk. 3 can be designed with the same cylinder numbers as for a pre-2020 vessel without a SO_x scrubber. This means that only a few changes are necessary in the engine room.

Time between overhaul

Another possibility is to select an MAN L23/30H Mk. 3 GenSets engine with one more cylinder, and thereby reduce the engine speed from 900 to 720 rpm. This solution extends the time between overhaul (TBO) by 4,000 hours, or around one year of operation. The TBOs are the same as for an L23/30H Mk. 2, which are the highest

in its class. The 23/30H Mk. 3, 720/750 rpm and running on low-sulphur fuel, offers a TBO of 32,000 hours, while the 900 rpm version offers 20,000 hours.

New design features

- Connecting rod applies the marine-head-type design that allows dismantling from the crankshaft without opening the crankshaft bearing.
- Self-aligning bedplate installation with only three conical supports.
- SaCoS_{one} safety and control system with built-in electronic speed governor.

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2450 Copenhagen SV, Denmark P +45 33 85 11 00 F +45 33 85 10 49 info-cph@man-es.com www.man-es.com

^{*}Based on nominal generator efficiencies of 95%