



MAN B&W HFO/Diesel Engine & Generator Set

MAN L16/21Series (430KW~940KW)



| 柴油机-机组功率 (kW) Engine-Genset Output (kW) | | 柴油机参数 Data of Engine | | | 外形尺寸 (mm) Overall size (mm) | | | 重量 (kg) Dry Mass (kg) |
|--|----------------|-------------------------|--------------------------------|-----------------|--------------------------------|---------|----------|--------------------------|
| 1000r/min/50Hz | 1200r/min/60Hz | 型号 Type | 缸径/冲程 (mm) Bore/Stroke (mm) | 型式 Structure | 长 Length | 宽 Width | 高 Height | |
| 450-430 | 500-475 | 5L16/24 | 160/240 | 直列 In Line | 4151 | 1000 | 2226 | 9500 |
| 540-515 | 660-625 | 6L16/24 | | | 4516 | | | 10500 |
| 630-600 | 770-730 | 7L16/24 | | | 4886 | | | 11400 |
| 720-685 | 880-835 | 8L16/24 | | | 5256 | | | 12400 |
| 810-770 | 990-940 | 9L16/24 | | | 5531 | | | 13100 |

备注:

- L16/24 柴油机是在柴油发电机组设计上的一种艺术体现，其机组在 450-990kW 功率范围内为世界上最好的柴油发电机组之一。柴油机能满足未来的 IMO 组织对 NO_x 排放的要求，有利环境成本。
- L16/24 柴油机可燃用重油，使在整个功率范围内从零至满负荷运行成本大幅度降低。
- L16/24 柴油机布局简单，且与 MAN B&W 主机的完全相容性，便于更简单的操作和维护。柴油机的无管道设计是零部件数量少，可靠性高。
- L16/24 柴油机采用 Lambda 控制器，保证喷入气缸的燃油均能完全燃烧，在机组增加负荷时减少机器内部污染和降低磨损。
- L16/24 机组振动小，并采用了有效的隔离噪音措施。

Remarks:

- MAN L16/24 diesel engine is an art expression in design of diesel generating set, its generating set in the range of 450-990KW is one of the best generating sets in the world. It can meet the future NO_x emission requirement of IMO, which is beneficial for environment protection.
- MAN L16/24 can be fired by HFO/ Crude Oil, reducing the operating cost to large extent from 0 to full load.
- The layout of L16/24 for generating set is simple, compatible with MAN B&W propulsion engine and makes operation and maintenance more easily. The pipeless design of diesel engine reduces the number of parts and improves its reliability.
- Lambda controller used in L16/24 diesel engine ensures complete combustion of fuel injected into cylinders, which reduces the contamination and wear inside the engine when the generating set load rises.
- MAN L16/24 generating set with little vibration, effective measures are taken to isolate noise.

MAN L21/31 Series (950KW~1980KW)



| 柴油机-机组功率 (kW) Engine-Genset Output (kW) | | 柴油机参数 Data of Engine | | | 外形尺寸 (mm) Overall size (mm) | | | 重量 (kg) Dry Mass(kg) |
|--|----------------|-------------------------|--------------------------------|-----------------|--------------------------------|---------|----------|-------------------------|
| 900r/min/60Hz | 1000r/min/50Hz | 型号 Type | 缸径/冲程 (mm) Bore/Stroke (mm) | 型式 Structure | 长 Length | 宽 Width | 高 Height | |
| 1000-950 | 1000-950 | 5L21/31 | 210/310 | 直列 In Line | 5829 | 1400 | 3183 | 21500 |
| 1320-1254 | 1320-1254 | 6L21/31 | | | 6314 | | 3183 | 23700 |
| 1540-1463 | 1540-1463 | 7L21/31 | | | 6639 | | 3183 | 25900 |
| 1760-1672 | 1760-1672 | 8L21/31 | | | 7274 | | 3289 | 28500 |
| 1980-1881 | 1980-1881 | 9L21/31 | | | 7779 | | 3289 | 30900 |

Remarks:

- L21/31 柴油机的功率范围为 1000-1980kW。其尺寸小，重量轻。
- 在整个负荷范围内，柴油机可非常有效地燃用重油，具有大功率输出，低滑油、燃油消耗率的特点。
- L21/31 柴油机吊缸间隔期为 20000-25000 小时，且每套气缸组件可作为一个单元整体吊出进行维修和更换，无需很高的吊缸空间。
- L21/31 柴油机能满足未来的 IMO 组织对 NO_x 排放的要求，有利环境保护。
- L21/31 柴油机采用集成冷却水系统，确保在整个负荷范围内，从零至满负荷均能达到最佳的温度控制。且空气冷却器配有水雾捕捉器，以减少在冷却器内部冷凝水的数量。

Remarks:

- MAN L21/31 is of small size and light weight, with power range of 1000-1980KW.
- MAN L21/31 can be fired by HFO/Crude Oil in the whole load range and is featured of high output, low consumption of lube oil and fuel.
- The intervals of lifting of engine cylinder is 20000-25000h, and the components of each set of cylinder can be lift out as one unit, requiring no high space.
- MAN L21/31 can meet the future NO_x emission requirement of IMO, which is beneficial for environment protection.
- MAN L21/31 adopts integrated cooling water system to make sure that optimal temperature control is achieved from zero to full load in the whole load range. Additionally, the air cooler is provided with water fog trap to reduce condensed water in the cooler.

