MARINE

Auxiliary gensets

MAN Engines

A RELIABLE DRIVING FORCE

Renowned manufacturers of auxiliary gensets and emergency gensets often use MAN engines. Reliable, durable and economical in operation, MAN engines are designed for applications from 190 kW to 960 kW.

2 Tor Boreas – driven by three MAN D2676 LE327

CONTENTS

4 Magellan Explorer – driven by three MAN D2862 LE328

MAN SERVICE FOR NON-STOP OPERATION

Worldwide service network
most certainly represented in your area

Servicing and maintenance plans
individually for you

Spare parts availability
worldwide available within 24 hours

MAN Genuine Oil
customised for MAN engines

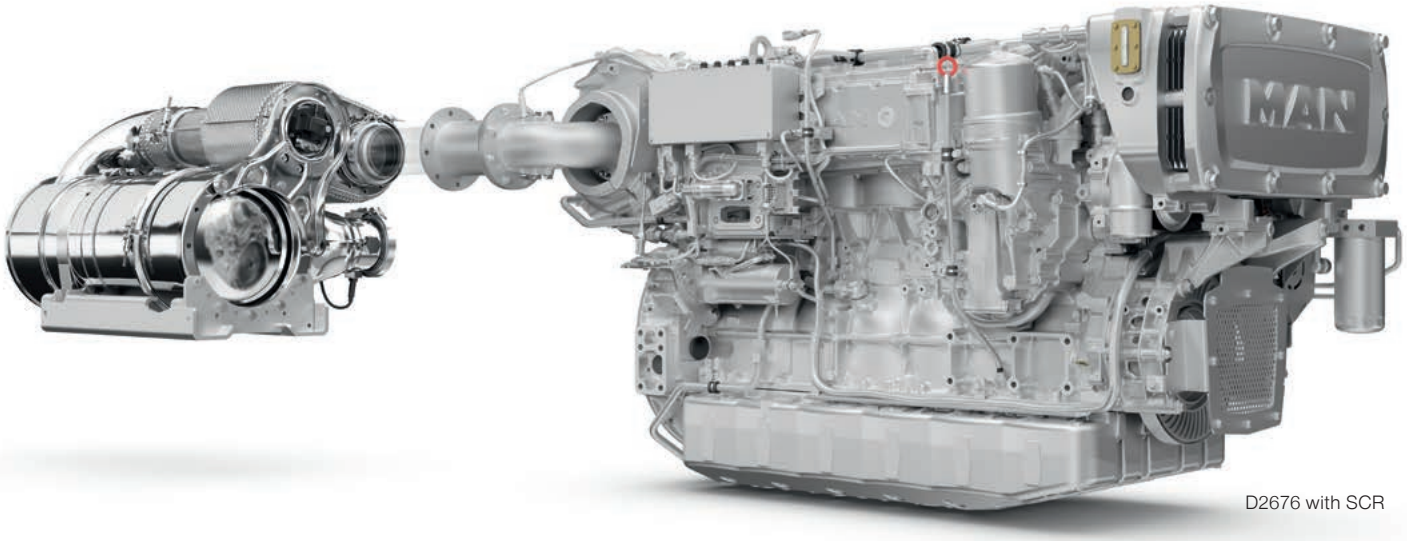
Extended warranty
up to 5 years with Work PLUS

MAN Engine Academy
for a deeper understandig of engines

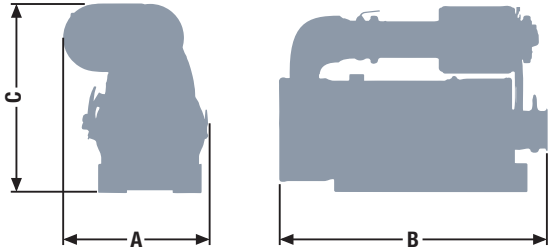
MAN Customer Service
as back-up from the headquarters

EXHAUST AFTERTREATMENT
IMO TIER III (< 1,066 KW) AND EU STAGE V (< 300 KW)

Flexibility makes use of free space – also when it comes to exhaust gas aftertreatment: Individual components of the modular exhaust gas aftertreatment kit from MAN Engines, which can be positioned variably, enable a wide range of installation variants as well as maximum design freedom when installed in machinery and vehicles.



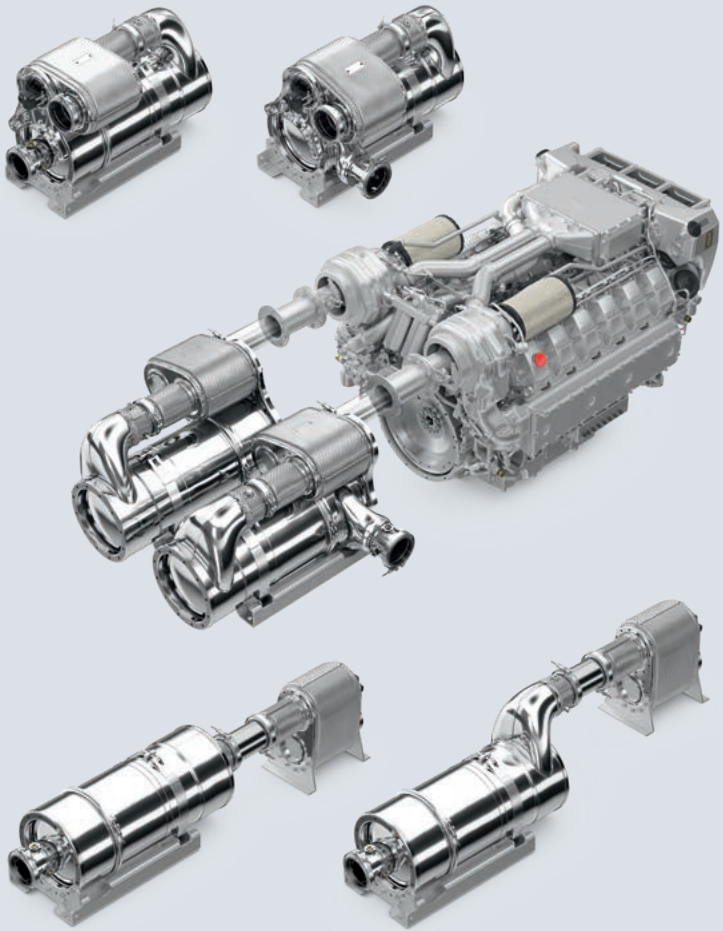
D2676 with SCR



Dimensions

Type designation		SCR system
A-Overall width	mm	500
B-Overall length	mm	950
C-Overall height	mm	655
Average weight of SCR system	kg	115

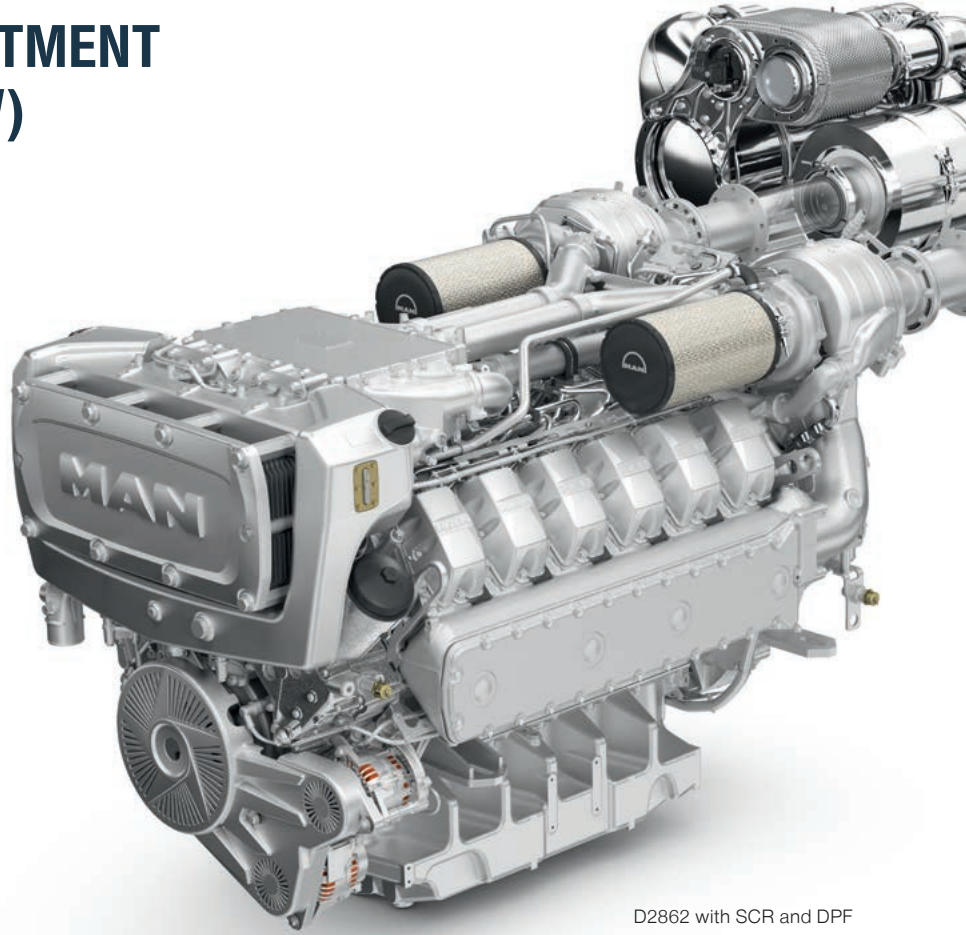
For detailed examinations of installation dimensions, please order drawings from our factory.



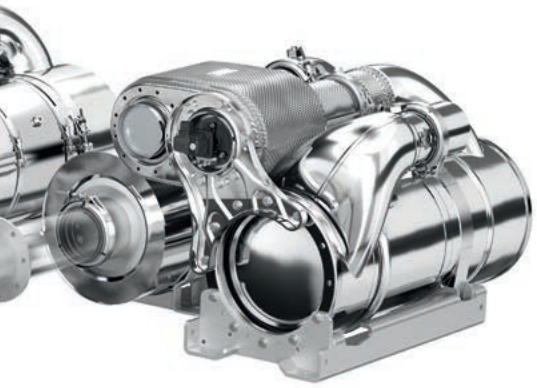
EXHAUST AFTERTREATMENT EU STAGE V (> 300 KW)

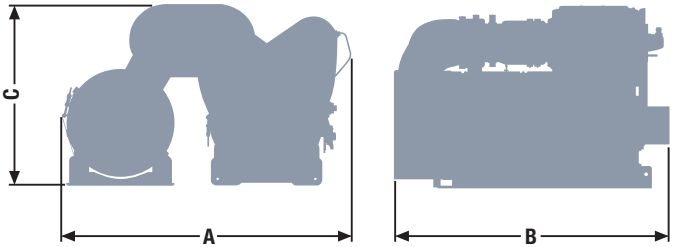
MAN Engines expands its commercial marine engine portfolio to EU Stage V engines for inland waterway transport in a range from 368 kW (500 PS) to 1,066 kW (1,450 PS).

For power ratings above 300 kW MAN Engines relies on selective catalytic reduction (SCR) and diesel particulate filters (DPF) to achieve the emission standards complying with EU Stage V.



D2862 with SCR and DPF





Dimensions EU Stage V

Type designation		SCR + DPF
A-Overall width	mm	960
B-Overall length	mm	950
C-Overall height	mm	620
Average weight of SCR system	kg	180

For detailed examinations of installation dimensions, please order drawings from our factory.

EXTENDED WARRANTY
MORE COMFORT FOR YOUR BUSINESS

All MAN engines for working boats are delivered ex works with a one-year warranty. This warranty is valid for the entire scope of supply from MAN, and is therefore also valid for all engine parts. Wearing parts and components that have to be replaced at regular maintenance intervals are excluded from the warranty.

You have the option of taking out additional coverage for yourself and your investment beyond the one-year warranty: Work PLUS offers an extension of the warranty by up to four additional years, meaning that the total warranty would be up to 5 years. The operating hours of your engine will depend on the application.

! For more information, please contact your local dealer.

Benefits

- Work PLUS extensions cover all MAN components in the engine room, including cost-intensive components such as the electronics and turbo charger
- The transferability of the extension increases the resale value of your vessel
- All repairs are carried out by an authorised MAN service partner
- You can be sure that only MAN Genuine Parts are used

MAN GENUINE PARTS AVAILABLE 24/7 WORLDWIDE

Benefits

- High utilization of your ship and flexibility when organising your journeys
- Quick alternative in original manufacturer quality
- Standard two-year warranty on all MAN Genuine Parts and MAN Genuines Parts ecoline
- Delivery to 2,000 shipping addresses in 95 countries

Of course, the premium quality of MAN engines is also reflected in high-quality MAN Genuine Parts. And because “first class” doesn’t only apply to our products here at MAN Engines, we ensure that our MAN Genuine Parts are available within 24 hours on working days.
This is made possible by our global service network, external warehouses across all the continents, and the logistics network of our MAN utility vehicles. This round-the-clock availability for MAN Genuine Parts applies to working days, and is for all spare parts for maintenance work on MAN engines for commercial shipping, such as filters, turbochargers, seawater pumps, seals and many more.

Our genuine engines deserve MAN Genuine Parts with two-year warranty and worldwide around-the-clock availability.

MAN ENGINE ACADEMY
CUSTOMISED SERVICE CONCEPT

Regular maintenance intervals for marine engines are essential for perfect functioning and a long service life. The MAN Engine Academy offers theoretical and practical training in operation, diagnostic strategies and maintenance. Technically experienced experts train certified service centers as well as the service personnel of sales partners and end customers at the MAN Engine Academy. Course participants have the opportunity to familiarize themselves with the engine in the Academy's modern training environment. The training courses can also be held online and individually adapted to the respective requirements of the participant.

14 David Packard – driven by three MAN D2862 LE427

AUXILIARY GENSETS

Characteristics

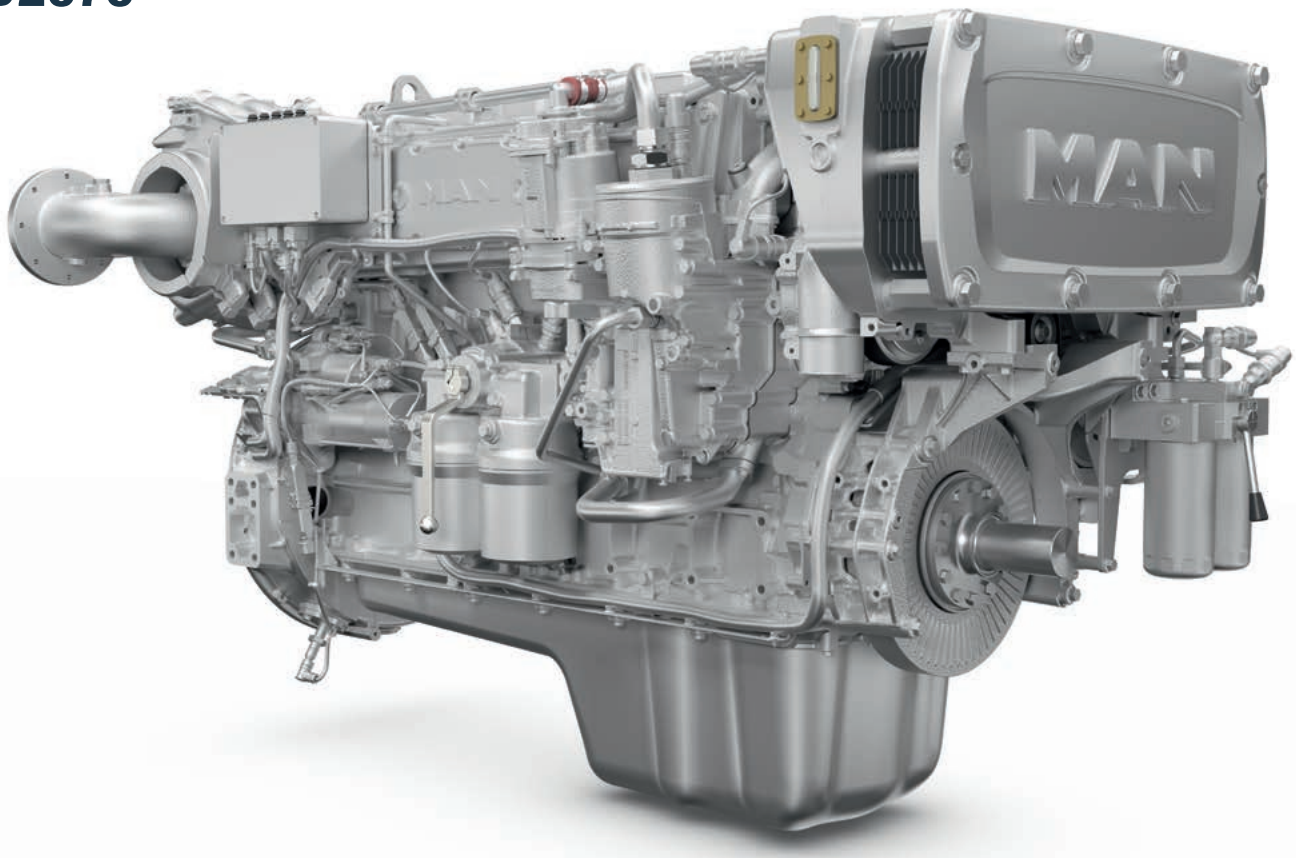
- Annual operating hours: ≤ 5,500 h
- Average load application: ≤ 75 %

EMERGENCY GENSETS

Characteristics

- Annual operating hours: ≤ 1,000 h
- Average load application: unlimited

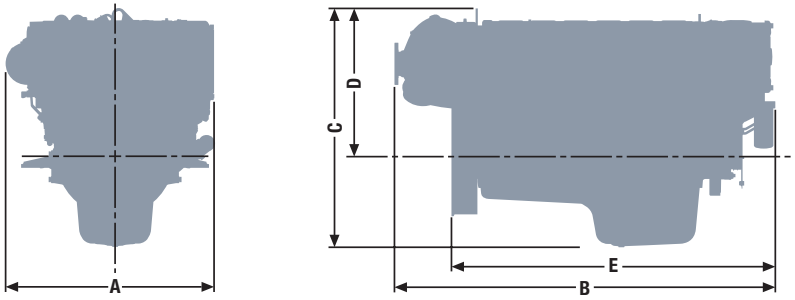
D2676



Characteristics

■ Cylinders and arrangement:	6 cylinders in-line
■ Operation mode:	4-stroke diesel engine, watercooled
■ Turbocharging:	Turbocharger with charge air intercooler and wastegate
■ Number of valves:	4 valves per cylinder
■ Fuel system:	Common Rail direct fuel injection with electronic control
■ Engine block:	High-strength casting with integrated oil and water ducts and replaceable cylinder liners
■ Engine lubrication:	Force-feed lubrication, lubrication oil cooler in cooling water circuit of the engine
■ Type of cooling:	Heat exchanger with engine and seawater circuit or for keel cooling
■ Engine control:	Electronic engine monitoring including diagnostic unit
■ Fuel:	DIN EN 590

D2676



Dimensions

Type designation			LE 321/322/323/327/328/332
A	Overall width	mm	983
B	Overall length	mm	1,763
C	Overall height with standard oil pan	mm	1,103
D	Top of engine to crankshaft centre	mm	686
E	Length from front end to edge of flywheel housing	mm	1,494
	Average weight of engine ready for installation (dry)	kg	1,251

For detailed examinations of installation dimensions, please order drawings from our factory.

Technical features

		Auxiliary gensets			
Type designation		**LE 332**		**LE 322**	
Rated speed	rpm (Hz)	**1,500 (50)**	**1,800 (60)**	**1,500 (50)**	**1,800 (60)**
Displacement	l	12.42	12.42	12.42	12.42
Nominal rating [1]	kW (hp)	190 (258)	220 (299)	280 (381)	330 (449)
Specific fuel consumption					
– at rated power	g/kWh	210	208	203	199
– at 75 % load [1]	g/kWh	213	213	205	201
Classifiable		✓	✓	✓	✓
Exhaust gas aftertreatment		–	–	–	–
Exhaust gas status		IMO Tier II	IMO Tier II	IMO Tier II	IMO Tier II

1) Tolerance +5 % according to DIN ISO 3046-1

D2676

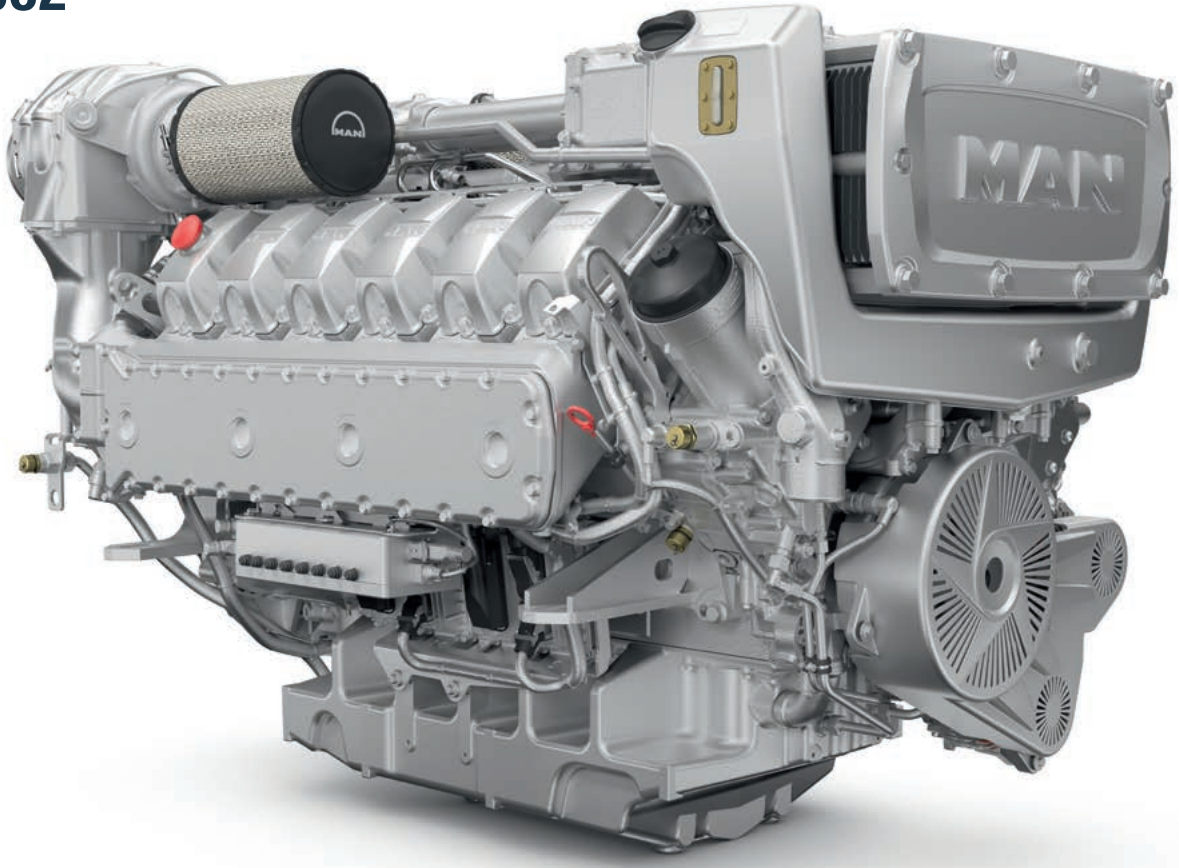
Technical features

		Auxiliary gensets			
Type designation		**LE 328**		**LE 327**	
Rated speed	rpm (Hz)	**1,500 (50)**	**1,800 (60)**	**1,500 (50)**	**1,800 (60)**
Displacement	l	12.42	12.42	12.42	12.42
Nominal rating [1]	kW (hp)	290 (394)	290 (394)	360 (490)	410 (558)
Specific fuel consumption					
– at rated power	g/kWh	197	201	195	202
– at 75 % load [1]	g/kWh	196	201	195	199
Classifiable		✓	✓	✓	✓
Exhaust gas aftertreatment		✓	✓	✓	✓
Exhaust gas status		IMO Tier III, EU Stage V	IMO Tier III, EU Stage V	IMO Tier III	IMO Tier III

1) Tolerance +5 % according to DIN ISO 3046-1

Auxiliary gensets		Emergency gensets	
LE 321		LE 323	
1,500 (50)	**1,800 (60)**	**1,500 (50)**	**1,800 (60)**
12.42	12.42	12.42	12.42
375 (510)	445 (605)	375 (510)	445 (605)
200	198	200	198
200	197	200	197
✓	✓	✓	✓
–	–	–	–
IMO Tier II	IMO Tier II	IMO Tier II	IMO Tier II

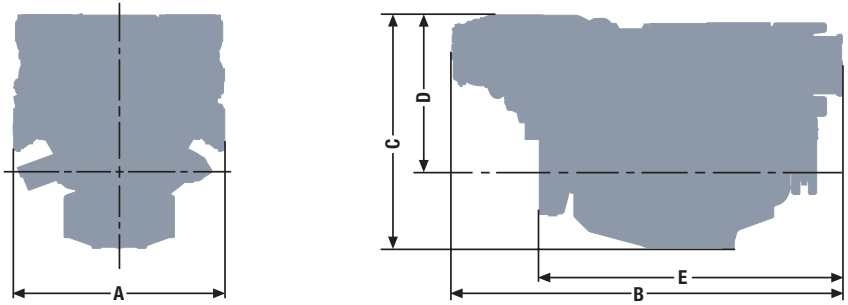
D2862



Characteristics

■ Cylinders and arrangement:	12 cylinders in 90° V arrangement
■ Operation mode:	4-stroke diesel engine, watercooled
■ Turbocharging:	Turbocharger with charge air intercooler and wastegate
■ Number of valves:	4 valves per cylinder
■ Fuel system:	Common Rail direct fuel injection with electronic control
■ Engine block:	High-strength casting with integrated oil and water ducts and replaceable cylinder liners
■ Engine lubrication:	Closed system with forced feeding, oil cooling and filtering
■ Type of cooling:	Plate heat exchanger, seawater circuit or for keel cooling
■ Engine control:	Electronic engine monitoring including diagnostic unit
■ Fuel:	DIN EN 590

D2862



Dimensions

Type designation			LE 321/323	LE 327/32A/32D	LE 322	LE 328/32B/32E
A	Overall width	mm	1,273	1,151	1,273	1,151
B	Overall length	mm	2,129	2,003	2,119	2,023
C	Overall height with standard oil pan	mm	1,282	1,268	1,305	1,281
D	Top of engine to crankshaft centre	mm	815	803	838	816
E	Length from front end to edge of flywheel housing	mm	1,629	1,608	1,629	1,608
	Average weight of engine ready for installation (dry)	kg	2,280	2,280	2,280	2,280

For detailed examinations of installation dimensions, please order drawings from our factory.

Technical features

		Auxiliary gensets			
Type designation		**LE 322**		**LE 328**	
Rated speed	rpm (Hz)	**1,500 (50)**	**1,800 (60)**	**1,500 (50)**	**1,800 (60)**
Displacement	l	24.24	24.24	24.24	24.24
Nominal rating [1]	kW (hp)	600 (816)	700 (952)	600 (816)	700 (952)
Specific fuel consumption					
– at rated power	g/kWh	196	200	195	199
– at 75 % load [1]	g/kWh	198	202	196	199
Classifiable		✓	✓	✓	✓
Exhaust gas aftertreatment		–	–	✓	✓
Exhaust gas status		IMO Tier II	IMO Tier II	IMO Tier III	IMO Tier III

1) Tolerance +5 % according to DIN ISO 3046-1

D2862

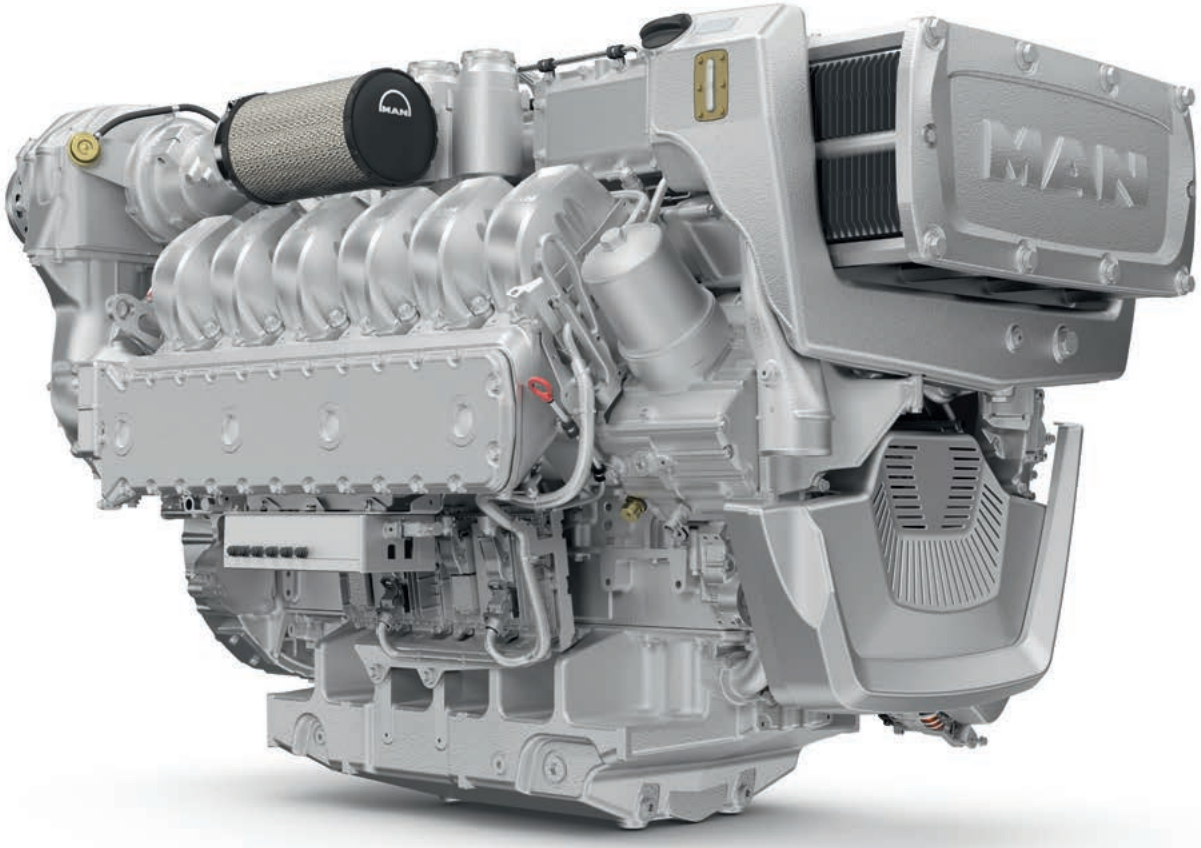
Technical features

		Auxiliary gensets			
Type designation		**LE 32B**	**LE 32E**	**LE 321**	
Rated speed	rpm (Hz)	**1,500 (50)**	**1,800 (60)**	**1,500 (50)**	**1,800 (60)**
Displacement	l	24.24	24.24	24.24	24.24
Nominal rating [1)]	kW (hp)	600 (816)	700 (952)	700 (952)	800 (1088)
Specific fuel consumption					
– at rated power	g/kWh	196	198	197	198
– at 75 % load [1)]	g/kWh	196	198	198	201
Classifiable		✓	✓	✓	✓
Exhaust gas aftertreatment		✓	✓	–	–
Exhaust gas status		IMO Tier III, EU Stage V	IMO Tier III, EU Stage V	IMO Tier II	IMO Tier II

1) Tolerance +5 % according to DIN ISO 3046-1

Auxiliary gensets				Emergency gensets	
LE 327		LE 32A	LE 32D	LE 323	
1,500 (50)	1,800 (60)	1,500 (50)	1,800 (60)	1,500 (50)	1,800 (60)
24.24	24.24	24.24	24.24	24.24	24.24
700 (952)	800 (1088)	700 (952)	800 (1088)	700 (952)	800 (1088)
199 197	202 201	198 197	200 198	197 198	198 201
✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	–	–
IMO Tier III	IMO Tier III	IMO Tier III, EU Stage V	IMO Tier III, EU Stage V	IMO Tier II	IMO Tier II

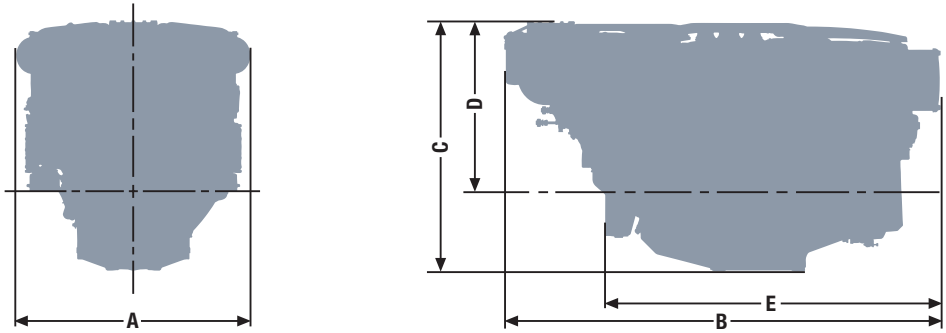
D3872



Characteristics

■ Cylinders and arrangement:	12 cylinders in 90° V arrangement
■ Operation mode:	4-stroke diesel engine, watercooled
■ Turbocharging:	Two-stage turbocharger with charge air intercooler and wastegate
■ Number of valves:	4 valves per cylinder
■ Fuel system:	Common Rail injection system with MD1 control
■ Engine block:	High-strength casting with integrated oil and water ducts and single cylinder heads with wet replaceable cylinder liners
■ Engine lubrication:	Force-feed lubrication by gear pump, lubricating oil cooler in cooling water circuit
■ Type of cooling:	Seawater cooled charge air cooler and plate heat exchanger by rubber impeller pump
■ Engine control:	Electronic injection control (MD1) Electronic engine monitoring including diagnostic unit
■ Fuel:	DIN EN 590

D3872



Dimensions

Type designation			LE 321/324/327/331/334/337
A	Overall width	mm	1,157
B	Overall length	mm	2,105
C	Overall height with standard oil pan	mm	1,294
D	Top of engine to crankshaft centre	mm	829
E	Length from front end to edge of flywheel housing	mm	1,768
	Average weight of engine ready for installation (dry)	kg	2,500

For detailed examinations of installation dimensions, please order drawings from our factory.

Technical features

		Auxiliary gensets					
Type designation		**LE 327**	**LE 321**	**LE 324**	**LE 331**	**LE 334**	**LE 337**
Rated speed	rpm (Hz)	**1,500 (50)**	**1,500 (50)**	**1,500 (50)**	**1,800 (60)**	**1,800 (60)**	**1,800 (60)**
Displacement	l	29.62	29.62	29.62	29.62	29.62	29.62
Nominal rating [1]	kW (hp)	800 (1,088)	840 (1,142)	840 (1,142)	960 (1,305)	960 (1,305)	960 (1,305)
Specific fuel consumption							
– at rated power	g/kWh	194	191	191	199	198	199
– at 75 % load [1]	g/kWh	196	191	194	199	199	201
Classifiable		✓	✓	✓	✓	✓	✓
Exhaust gas aftertreatment		✓	–	✓	–	✓	✓
Exhaust gas status		IMO Tier III, EU Stage V	IMO Tier II	IMO Tier III	IMO Tier II	IMO Tier III	IMO Tier III, EU Stage V

1) Tolerance +5 % according to DIN ISO 3046-1

MAN Truck & Bus SE
Vogelweiherstraße 33
90441 Nürnberg, Germany
www.man-engines.com

D114.658 · wd 07262 · Modifications and errors reserved. Products may vary in their shape, construction, colour shades and included features after the copy deadline for this brochure. The data is provided for informational purposes only and is not guaranteed in any way. Depending on the specific individual projects, the relevant data may be subject to change and will be individually adapted and determined for each project. This depends on the specific characteristics of each individual project, in particular the specific location and operating conditions.