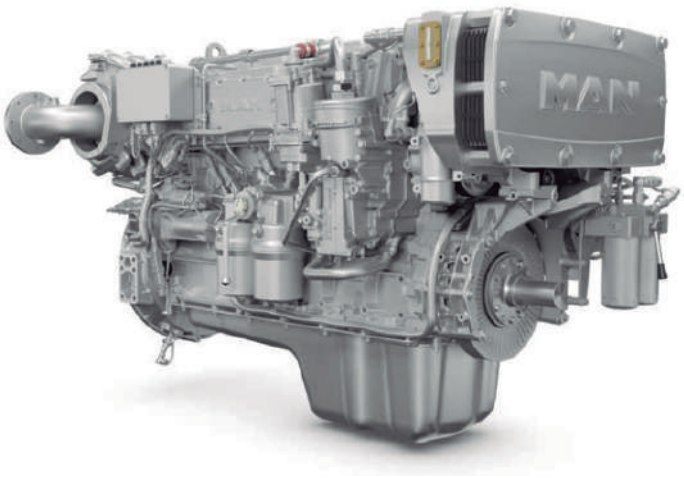
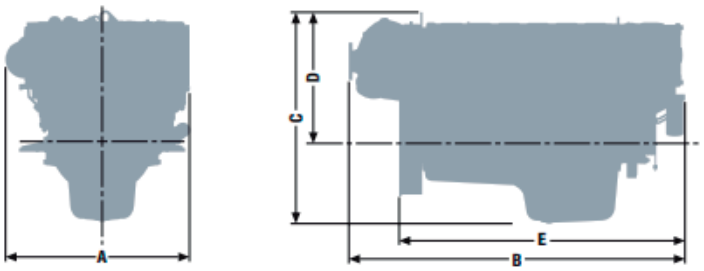
D2676



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 high pressure pump and 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:	Seawater cooled charge air cooler, plate heat exchanger by rubber impeller pump Optional: external keel cooling
Engine control:	Electronic injection control (EDC) with engine monitoring including diagnostic unit
Fuel:	DIN EN 590

DIMENSIONS



Type designation		LE 421/422/424/425/426/428/431/432/ 434/435/438/443/456/477/487/497
A-Overall width	mm	986
B-Overall length	mm	1,795
C-Overall height – standard oil pan	mm	1,096
D-Top of engine to crankshaft centre	mm	674
E-Length of engine from front end to edge of flywheel housing	mm	1,527
Average weight of engine ready for installation (dry)	kg	1,251

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

MEREX

D2676

TECHNICAL DESCRIPTION

		Light duty		
Type designation		**LE 443**	**LE 426**	**LE 456**
Displacement	l	12.42	12.42	12.42
Nominal rating [1]	kW (hp)	537 (730)	588 (800)	625 (850)
Rated speed	rpm	2,300	2,300	2,300
Maximum torque	Nm	2,450	2,685	2,740
at speed	rpm	1,300–2,100	1,300–2,100	1,400–2,100
Lowest specific fuel consumption [1]	g/kWh	199	207	214
Classifiable		✓	–	–
Exhaust gas aftertreatment		–	–	–
Exhaust gas status		IMO Tier II, EPA Tier 3, RCD 2013/53/EC	IMO Tier II, RCD 2013/53/EC, EPA Tier 3	IMO Tier II, RCD 2013/53/EC, EPA Tier 3 [2]

1) [illegible] according to DIN ISO 3046-1 2) For private use only

Medium duty	Medium duty				
LE 432	**LE 435**	**LE 438**	**LE 428**	**LE 422**	**LE 425**
12.42	12.42	12.42	12.42	12.42	12.42
412 (560)	412 (560)	412 (560)	441 (600)	478 (650)	478 (650)
2,100	2,100	2,100	2,100	2,100	2,100
2,065	2,065	2,075	2,214	2,402	2,402
1,100–1,900	1,200–1,900	1,300–1,900	1,400–1,900	1,200–1,900	1,200–1,900
196	204	201	201	197	205
✓	✓	✓	✓	✓	✓
–	–	✓	✓	–	–
IMO Tier II	IMO Tier II, EPA Tier 3, RCD 2013/53/EC	IMO Tier III	IMO Tier III	IMO Tier II	IMO Tier II, EPA Tier 3, RCD 2013/53/EC

		Heavy duty						
Type designation		**LE 487**	**LE 431**	**LE 434**	**LE 497**	**LE 477**	**LE 421**	**LE 424**
Displacement	l	12.42	12.42	12.42	12.42	12.42	12.42	12.42
Nominal rating [1]	kW (hp)	290 (394)	324 (440)	324 (440)	331 (450)	368 (500)	382 (520)	382 (520)
Rated speed	rpm	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Maximum torque	Nm	1,760	1,925	1,925	1,980	2,185	2,275	2,270
at speed	rpm	1,300–1,600	1,100–1,600	1,100–1,600	1,200–1,600	1,300–1,600	1,200–1,600	1,200–1,600
Lowest specific fuel consumption [1] [2]	g/kWh	200	198	204	196	195	197	204
Classifiable		✓	✓	✓	✓	✓	✓	✓
Exhaust gas aftertreatment		✓	–	–	✓	✓	–	–
Exhaust gas status		IMO Tier III, EU Stage V	IMO Tier II	IMO Tier II, EPA Tier 3	IMO Tier III	IMO Tier III	IMO Tier II	IMO Tier II, EPA Tier 3, RCD 2013/53/EC

1) Tolerance +5 % according to DIN ISO 3046-1 2) Consumption at rated power

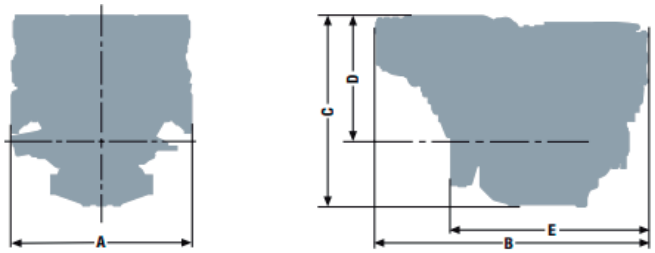
MEREX

D2868

CHARACTERISTICS

Cylinders and arrangement:	8 cylinders in 90° V arrangement
Operation mode:	4-stroke diesel engine, watercooled
Turbocharging:	Turbocharger with charge air intercooler and wastegate (1-stage: D2868 LE 426, 2-stage: D2868 LE 436)
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 cooled Optional: external keel cooling
Engine control:	Electronic injection control (EDC) with engine monitoring including diagnostic unit
Fuel:	DIN EN 590

DIMENSIONS



Type designation		LE 421/422/424/ 425/426/431/443	LE 453	LE 436/466
A-Overall width	mm	1,153	1,153	1,153
B-Overall length	mm	1,745	1,745	1,736
C-Overall height – standard oil pan	mm	1,243	1,222	1,222
D-Top of engine to crankshaft centre	mm	765	811	811
E-Length of engine from front end to edge of flywheel housing	mm	1,243	1,262	1,262
Average weight of engine ready for installation (dry)	kg	1,780	1,941	1,941

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

MEREX

D2868

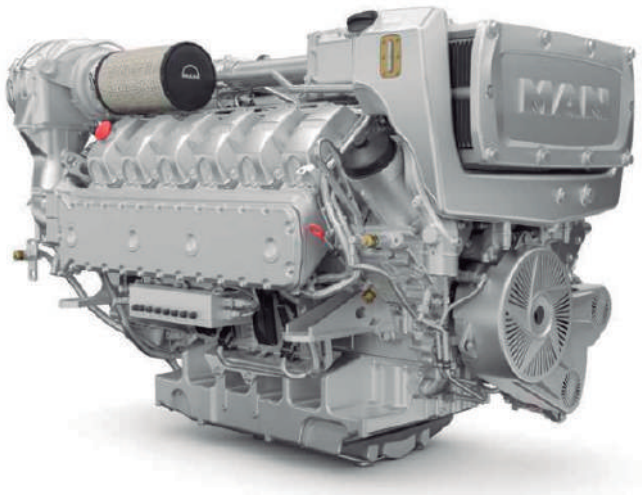
TECHNICAL DESCRIPTION

		Light duty			
Type designation		**LE 426**	**LE 453**	**LE 436**	**LE 466**
Displacement	l	16.16	16.16	16.16	16.16
Nominal rating [1]	kW (hp)	735 (1,000)	824 (1,121)	882 (1,200)	956 (1,300)
Rated speed	rpm	2,300	2,300	2,300	2,300
Maximum torque	Nm	3,340	3,745	4,010	4,350
at speed	rpm	1,300–2,100	1,200–2,100	1,200–2,100	1,300–2,100
Lowest specific fuel consumption [1]	g/kWh	209	206	205	199
Classifiable		–	✓	–	–
Exhaust gas aftertreatment		–	–	–	–
Exhaust gas status		IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC	IMO Tier II	IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC	IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC

1) Tolerance +5 % according to DIN ISO 3046-1 2) For private use only

Medium duty			Heavy duty		
LE 422	**LE 425**	**LE 443**	**LE 421**	**LE 424**	**LE 431**
16.16	16.16	16.16	16.16	16.16	16.16
588 (800)	588 (800)	662 (900)	441 (600)	441 (600)	500 (680)
2,100	2,100	2,100	1,800	1,800	1,800
2,950	2,980	3,325	2,630	2,630	2,985
1,300–1,900	1,400–1,900	1,400–1,900	1,100–1,600	1,100–1,600	1,100–1,600
198	209	201	197	206	199
✓	✓	✓	✓	✓	✓
–	–	–	–	–	–
IMO Tier II	IMO Tier II, EPA Tier 3, RCD 2013/53/EC	IMO Tier II	IMO Tier II	IMO Tier II, EPA Tier 3, RCD 2013/53/EC	IMO Tier II

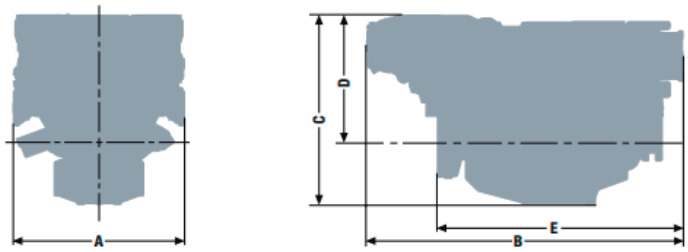
D2862



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 (1-stage: D2862 LE 446/426, 2-stage: D2862 LE 456/436/476/489/483)
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 cooled Optional: external keel cooling
Engine control:	Electronic injection control (EDC) with engine monitoring including diagnostic unit
Fuel:	DIN EN 590

DIMENSIONS



Type designation		LE 426/446/422/432/ 435/463/466/421/431/ 434/441/444/454	LE 436/ 456/459/ 476/496	LE 427/428/ 437/438/ 447/469	LE 483/489
A-Overall width	mm	1,153	1,153	1,157	1,153
B-Overall length	mm	2,130	2,139	1,939	2,139
C-Overall height – standard oil pan	mm	1,230	1,272	1,293	1,272
D-Top of engine to crankshaft centre	mm	765	808	827	808
E-Length of engine from front end to edge of flywheel housing	mm	1,630	1,658	1,608	1,658
Average weight of engine ready for installation (dry)	kg	2,270	2,420	2,270	2,420

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

D2862

TECHNICAL DESCRIPTION

		Light duty						
Type designation		**LE 446**	**LE 426**	**LE 456**	**LE 459**	**LE 436**	**LE 476**	**LE 496**
Displacement	l	24.24	24.24	24.24	24.24	24.24	24.24	24.24
Nominal rating [1]	kW (hp)	1,029 (1,400)	1,140 (1,550)	1,213 (1,650)	1,213 (1,650)	1,324 (1,800)	1,397 (1,900)	1,471 (2,000)
Rated speed	rpm	2,300	2,300	2,300	2,300	2,300	2,300	2,300
Maximum torque	Nm	4,680	5,180	5,510	5,510	6,010	6,220	6,520
at speed	rpm	1,200–2,100	1,200–2,100	1,200–2,100	1,200–2,100	1,200–2,100	1,200–2,100	1,200–2,100
Lowest specific fuel consumption [1]	g/kWh	203	203	195	196	200	200	199
Classifiable		✓	–	✓	✓	–	–	–
Exhaust gas aftertreatment		–	–	–	✓	–	–	–
Exhaust gas status		IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC	IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC	IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC	IMO Tier III	IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC	IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC	IMO Tier II, EPA Tier 3 [2], RCD 2013/53/EC

1) Tolerance +5 % according to DIN ISO 3046-1 2) For private use only

		Medium duty			
Type designation		**LE 422**	**LE 428**	**LE 432**	**LE 435**
Displacement	l	24.24	24.24	24.24	24.24
Nominal rating [1]	kW (hp)	749 (1,019)	749 (1,019)	882 (1,200)	882 (1,200)
Rated speed	rpm	2,100	2,100	2,100	2,100
Maximum torque	Nm	3,780	3,750	4,450	4,450
at speed	rpm	1,300–1,900	1,300–1,900	1,300–1,900	1,400–1,900
Lowest specific fuel consumption [1]	g/kWh	199	199	198	203
Classifiable		✓	✓	✓	✓
Exhaust gas aftertreatment		–	✓	–	–
Exhaust gas status		IMO Tier II	IMO Tier III, EPA Tier 4	IMO Tier II	IMO Tier II, RCD 2013/53/EC

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

Medium duty					
LE 438	**LE 469**	**LE 463**	**LE 466**	**LE 483**	**LE 489**
24.24	24.24	24.24	24.24	24.24	24.24
882 (1,200)	974 (1,325)	1,029 (1,400)	1,029 (1,400)	1,066 (1,450)	1,066 (1,450)
2,100	2,100	2,100	2,100	2,100	2,100
4,440	4,895	5,120	5,180	5,355	5,345
1,400–1,900	1,500–1,900	1,300–1,900	1,300–1,900	1,100–1,900	1,200–1,900
197	203	200	203	197	196
✓	✓	✓	✓	✓	✓
✓	✓	–	–	–	✓
IMO Tier III, EPA Tier 4	IMO Tier III, EPA Tier 4	IMO Tier II	IMO Tier II	IMO Tier II	IMO Tier III, EPA Tier 4

D2862

TECHNICAL DESCRIPTION

		Heavy duty			
Type designation		**LE 431**	**LE 434**	**LE 437**	**LE 454**
Displacement	l	24.24	24.24	24.24	24.24
Nominal rating [1]	kW (hp)	551 (749)	551 (749)	551 (749)	588 (800)
Rated speed	rpm	1,800	1,800	1,800	1,800
Maximum torque	Nm	3,305	3,305	3,300	3,510
at speed	rpm	1,000–1,600	1,000–1,600	1,000–1,600	1,000–1,600
Lowest specific fuel consumption [1]	g/kWh	198	202	196	201
Classifiable		✓	✓	✓	✓
Exhaust gas aftertreatment		–	–	✓	–
Exhaust gas status		IMO Tier II	IMO Tier II, EPA Tier 3, RCD 2013/53/EC	IMO Tier III	IMO Tier II, EPA Tier 3, RCD 2013/53/EC

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

Heavy duty				
LE 421	**LE 427**	**LE 441**	**LE 444**	**LE 447**
24.24	24.24	24.24	24.24	24.24
662 (900)	662 (900)	735 (1,000)	735 (1,000)	735 (1,000)
1,800	1,800	1,800	1,800	1,800
3,955	3,910	4,380	4,380	4,340
1,100–1,600	1,100–1,600	1,100–1,600	1,100–1,600	1,100–1,600
195	193	193	197	193
✓	✓	✓	✓	✓
–	✓	–	–	✓
IMO Tier II	IMO Tier III, EPA Tier 4	IMO Tier II	IMO Tier II, RCD 2013/53/EC	IMO Tier III, EPA Tier 4