## **MAN Energy Solutions** Future in the making



# MAN V32/44CR GenSet

The MAN 32/44CR engine represents the latest technologies in the area of medium speed marine diesel engines. By using electronic injection, high efficiency turbochargers, electronic hardware, and variable valve timing the MAN 32/44CR is a synthesis of the most advanced large engine technologies available.

#### Benefits at a glance

- High efficiency
- High specific power output
- Low emissions
- Low operating and life cycle costs
- Long maintenance intervals and service life
- High reliability



Fourstroke marine systems

# **MAN V32/44CR**

### GenSet

#### Dimensions

Cyl. No.		12	14	16	18	20
A	mm	5,382	6,012	6,642	7,272	7,902
В		4,201	4,201	4,201	4,201	4,201
С		11,338	11,968	12,598	13,228	13,858
н		5,014	5,014	5,014	5,014	5,014
Dry mass	t	117	131	144	159	172

#### Output

Speed	rpm	750	750	720	720
Frequency	Hz	50	50	60	60
		Eng.	Gen.*	Eng.	Gen.*
MAN 12V32/44CR	kW	7,200	6,984	7,200	6,984
MAN 14V32/44CR**	kW	8,120	7,876	8,120	7,876
MAN 16V32/44CR***	kW	9,600	9,312	9,600	9,312
MAN 18V32/44CR	kW	10,800	10,476	10,800	10,476
MAN 20V32/44CR	kW	12,000	11,640	12,000	11,640

\* Based on nominal generator efficiencies of 97 %

\*\*580 kW/cyl

\*\*\* MAN 18V32/44CR available rigidly mounted only

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3,100

#### General

- Engine cycle: four-stroke
- No. of cylinders: 12, 14, 16, 18, 20
- Bore: 320 mm Stroke: 440 mm
- Swept volume per cyl: 35.4 dm<sup>3</sup>

#### Fuel consumption at 85 % MCR\*

- SFOC: 172g/kWh
- SFOC: 173 g/kWh, 580 kW (14 cyl.)

#### Cylinder output (MCR)

- At 750/720 rpm: 600 kW
- At 750/720 rpm: 580 kW (14 cyl.)
- Power-to-weight ratio: 14.3 – 16.3 kg/kW

# Compliance with emission regulations\*

- IMO Tier II
- IMO Tier III (with MAN SCR)
- EPA Tier 2

#### Main features

#### Turbocharging system

 High efficiency constant pressure MAN TCR series exhaust turbocharging system

#### Engine automation and control

 MAN in-house developed engine attached safety and control system MAN SaCoSone

#### **Fuel system**

 Advanced electronic common rail injection system

#### Lube oil system

# Attached lube oil automatic filter Cooling system

 2-string high and low temperature cooling water systems

#### Starting system

 Pressurized air starter (turbine type)

#### Engine mounting

 Direct resilient mounting of the engine on the foundation frame (cone elements)

#### **Optional equipment**

- MAN ECOMAP concept using different IMO Tier II compliant injection maps to improve fuel economy
- Frame auxiliary box (FAB) attached at engine free end

MCR = Maximum continuous rating SCR = Selective catalytic reduction SFOC = Specific fuel oil consumption \*According to IMO E2 test cycle

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