C4.4

MARINE GENSET (ELECTRIC CONTROL SYSTEM)

118 ekW @ 1800 rpm (60 Hz)
99 ekW @ 1800 rpm (60 Hz)
75 ekW @ 1800 rpm (60 Hz)
65 ekW @ 1800 rpm (60 Hz)
99 ekW @ 1500 rpm (50 Hz)
80 ekW @ 1500 rpm (50 Hz)
65 ekW @ 1500 rpm (50 Hz)

C4.4 Marine Genset
Image may not reflect actual product.

ENGINE SPECIFICATIONS

Configuration
In-line 4, 4-stroke-cycle diesel

Emissions
U.S. EPA Tier 3 certified,
EU Stage V certified

Rated Engine Speed
1500/1800 rpm

Bore x Stroke
105 mm x 127 mm / 4.13 in x 5.0 in

Displacement
4.4 Liter
268 cu in

Aspiration
Turbocharged-aftercooled
and turbo only aspiration
(Turbocharged aspiration only for
65ekW (71bkW))

Governor
Electronic (A5 ECM)

Refill Capacity
Lube Oil System w/Oil filter change:
11 L 2.8 gal)

Oil Change Interval
500 hrs

Cooling
Heat exchanger, combined circuit keel cooling, or separate circuit keel cooling

Flywheel Housing
SAE No. 03 with SAE 11.5 flywheel (126 teeth)

FEATURES AND BENEFITS

- Simplicity = Reliability
- Configure the genset how you want it
- Compact genset profile with high power density
- Ease of repower with multiple cooling system options
  - Single circuit keel cooling
  - Separate circuit keel cooling
  - Heat exchanger
- Clean, smooth, and quiet operations
- Advanced fuel system provides excellent fuel consumption and low smoke
- Proven core engine design with millions of operating hours
- Fewer maintenance touchpoints and longer service intervals
- Global dealer network for unparalleled support

STANDARD ENGINE EQUIPMENT

- Common Rail fuel system
- Engine mounted air cleaner and expansion tank
- Gear-driven jacket-water and auxiliary water pumps
- Watercooled exhaust manifold and turbocharger
- Integral plate-type oil cooler
- 12V or 24V starter motor
- Open crankcase ventilation system
- Engine mounted fuel and oil filters
- Engine mounted customer interface and control relays
- 3-phase AREP generators with 300% short circuit capability
- Digital Automatic Voltage Regulator
- Class H generator insulation

OPTIONAL ATTACHMENTS

- MGGP 200 Gauge Panel and interface harness
- Engine shutdown sensors and shutdown controller
- EMCP engine control panel
- MGCP II engine control panel
- Double wall high pressure fuel lines
- AC Voltage Monitoring
- Glow plugs
- Factory installed generator space heater kit
- MCS Certifications

RATING DEFINITION AND CONDITIONS - PRIME POWER

Typical applications: For vessels operating with generator sets that provide power to the propulsion system. All ratings are Prime Ratings according to ISO 8528-1 for unlimited usage per year at a load factor of ≤ 70%. 10% overload capability is required for a maximum of 1 hour out of every 12 and a maximum of 25 hours total per year.

Ratings are based on SAE J3046 and J1349 standard conditions of 100 kPa (29.61 in Hg) and 25°C (77°F). These ratings also apply at ISO8665, ISO3046-1:2002E, DIN6271-3, and BS5514 standard conditions of 100 kPa (29.61 in Hg), 27°C (81°F), and 60% relative humidity.

Fuel rates are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal.).

Marine Auxiliary Engines are mainly used as generator set engines; however, they can be used for electrically driven pumps, winches, conveyors, thrusters, when it is specified. Engines can be radiator cooled or heat exchanger/keel cooled.

FUEL CONSUMPTION - AUXILIARY/GENSET/DEP

Constant Speed Fuel & DEF Consumption 129 bkW (173.0 bhp) @ 1800 rpm					
	Brake Specific Fuel Consumption				
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
100	118.0	173.0	0.356	129	216.7
90	106.2	155.7	0.358	116	218.5
80	94.4	138.4	0.361	103	220.0
70	82.6	121.1	0.366	90	223.0
60	70.8	103.8	0.373	77	227.5
50	59.0	86.5	0.379	65	231.2
40	47.2	69.2	0.398	52	242.5
30	35.4	51.9	0.418	39	255.0
• ISO 3046/1 fluid consumption tolerance of +5%					

Constant Speed Fuel & DEF Consumption 108.6 bkW (145.6 bhp) @ 1800 rpm					
	Brake Specific Fuel Consumption				
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
100	99.0	145.6	0.359	108.6	219.1
90	89.1	131.1	0.366	98	223.0
80	79.2	116.5	0.372	87	226.8
70	69.3	101.9	0.379	76	231.0
60	59.4	87.4	0.386	65	235.5
50	49.5	72.8	0.393	54	239.5
40	39.6	58.3	0.400	43	244.0
30	29.7	43.7	0.416	33	253.5
• ISO 3046/1 fluid consumption tolerance of +5%					

Constant Speed Fuel & DEF Consumption 81.5 bkW (109.3 bhp) @ 1800 rpm					
	Brake Specific Fuel Consumption				
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
100	75.0	109.3	0.375	81.5	228.6
90	67.5	98.4	0.380	73	231.5
80	60.0	87.4	0.385	65	234.5
70	52.5	76.5	0.390	57	237.5
60	45.0	65.6	0.395	49	240.5
50	37.5	54.6	0.400	41	243.6
40	30.0	43.7	0.416	33	253.5
30	22.5	32.8	0.443	24	270.0
• ISO 3046/1 fluid consumption tolerance of +5%					

Note: Consult your local Cat dealer to create a customized engine TCO (Total Cost of Ownership) analysis specific to your vessel.
Dealers (only): Please reference TMI Web for most current information.

Constant Speed Fuel & DEF Consumption 71.1 bkW (95.3 bhp) @ 1800 rpm					
	Brake Specific Fuel Consumption				
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
100	65.0 (turbocharged aspiration)	95.3	0.405	71.1	247.0
90	58.5	85.8	0.408	64	249.0
80	52.0	76.3	0.412	57	251.2
70	45.5	66.7	0.418	50	255.0
60	39.0	57.2	0.427	43	260.4
50	32.5	47.7	0.437	36	266.5
40	26.0	38.1	0.448	28	272.8
30	19.5	28.6	0.463	21	282.0
• ISO 3046/1 fluid consumption tolerance of +5%					

Constant Speed Fuel & DEF Consumption 108.6 bkW (145.6 bhp) @ 1500 rpm					
	Brake Specific Fuel Consumption				
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
100	99.0	145.6	0.363	108.6	221.2
90	89.1	131.1	0.365	98	222.5
80	79.2	116.5	0.367	87	223.7
70	69.3	101.9	0.368	76	224.1
60	59.4	87.4	0.366	65	223.2
50	49.5	72.8	0.364	54	222.1
40	39.6	58.3	0.376	43	229.2
30	29.7	43.7	0.391	33	238.5
• ISO 3046/1 fluid consumption tolerance of +5%					

Constant Speed Fuel & DEF Consumption 86.8 bkW (116.4 bhp) @ 1500 rpm					
	Brake Specific Fuel Consumption				
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
100	80.0	116.4	0.382	86.8	232.8
90	72.0	104.8	0.384	78	234.0
80	64.0	93.1	0.386	69	235.5
70	56.0	81.5	0.387	61	236.0
60	48.0	69.8	0.385	52	234.7
50	40.0	58.2	0.383	43	233.7
40	32.0	46.6	0.394	35	240.2
30	24.0	34.9	0.411	26	250.5
• ISO 3046/1 fluid consumption tolerance of +5%					

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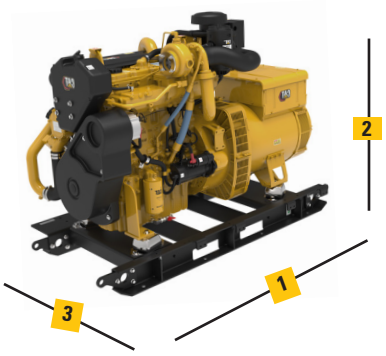
TECHNICAL DATA

C4.4 Marine Genset (Electric Control System)

Constant Speed Fuel & DEF Consumption 108.6 bkW (145.6 bhp) @ 1500 rpm					
	Brake Specific Fuel Consumption				
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
100	65.0 (turbocharged aspiration)	95.3	0.424	71.1	258.6
90	58.5	85.8	0.430	64	262.0
80	52.0	76.3	0.435	57	265.3
70	45.5	66.7	0.439	50	267.5
60	39.0	57.2	0.440	43	268.0
50	32.5	47.7	0.441	36	269.0
40	26.0	38.1	0.447	28	272.5
30	19.5	28.6	0.459	21	280.0
• ISO 3046/1 fluid consumption tolerance of +5%					

DIMENSIONS & WEIGHT

	Length (1)	Height (2)	Width (3)	Engine dry weight
min.	66.4 in / 1687 mm	49 in / 1245 mm	38.3 in / 974 mm	2736 lb / 1241 kg
max.	80.2 in / 2037 mm	78.7 in / 1999 mm	38.3 in / 986 mm	3389 lb / 1537 kg
Note: Do not use these dimensions for installation design. See general dimension drawings for detail.				



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