C18

MARINE AUXILIARY / DIESEL ELECTRIC PROPULSION ENGINE

492 bkW (660 bhp) @ 1500 rpm (50 Hz) 438 bkW (587 bhp) @ 1500 rpm (50 Hz)



C18 Marine Auxiliary Engine/DEP IMO II / III Switchable Image may not reflect actual product.

ENGINE SPECIFICATIONS

Configuration In-line 6, 4-stroke-cycle diesel

Emissions IMO II / III Switchable

Rated Engine Speed 1500 rpm

Bore x Stroke 145 mm x 183 mm / 5.7 in x 7.2 in

Displacement 18 Liter 1098 cu in

Aspiration Turbocharged-aftercooled aspiration

Governor Electronic (A4 ECM) **Refill Capacity**

Lube Oil System w/Oil filter change: 49 L (13 gal) - shallow pan 68 L (18 gal) - deep pan

Oil Change Interval 250 hrs - shallow pan 500 hrs - deep pan

Cooling Heat exchanger or keel cooled

Flywheel Housing SAE No. 0 with SAE No. 18 flywheel (136 teeth)

Rotation Counterclockwise from flywheel end

FEATURES AND BENEFITS

- IMO II/III Switchable technology enables reduced fluid consumption outside emissions-controlled areas
- Separate-circuit aftercooling no sea water in aftercooler
- Reliable electronic controlled unit injector fuel system
- Enhanced control of fuel injection optimized through crank timing and the A4 ECM technology
- Industry leading power reserve
- Wide range of available Marine Society certifications
- Industry-leading warranty coverage for factory packaged components
- Global dealer network for service in any location

STANDARD ENGINE EQUIPMENT

- Separate circuit aftercooled (SCAC)
- Heavy-duty inlet air filter
- Heat exchanger or keel cooling
- Watercooled exhaust manifold and turbocharger
- Deep or shallow sump oil pan
- Oil filler, filter, and dipstick, front service
- MEUI fuel system
- Fuel filter, front service
- Fuel transfer and priming pumps
- Hybrid fuel lines
- Electronic fuel/air ratio control
- Electronic diagnostics and fault logging
- Front support adjustable mounting system
- Front damper guard

LET'S DO THE WORK."

Customer wiring and service tool connector

OPTIONAL ATTACHMENTS

- Starting motors electric or air
- Charging alternator
- Duplex oil filters, front service
- Duplex fuel filters, front service
- Primary fuel/water separator, fuel cooler
- MECP 1 control panel
- MGCP II or MGCP IIIB control panel with Cat Alarm and Protection System
- Closed crankcase fumes disposal
- Power take-offs

AUXILIARY RATING DEFINITION

All Cat Marine Auxiliary engines and generator sets are rated for prime power for continuous electric service according to ISO 8528-1.

Hours per Year Unlimited

Load Factor $\leq 70\%$

Overload Capacity + 10%

maximum of 1 hour in 12 maximum of 25 hours per year



C18 Marine Auxiliary Engine/DEP

FUEL CONSUMPTION - AUXILIARY/GENSET/DEP

	Brake Specific Fuel Consumption					DEF Consumption 32.5% Concentration		DEF Consumption 40% Concentration	
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr	Gal/hr	Liters/hr		Liters/hr
100	-	587	0.337	438	204.8	1.2	4.5	0.9	3.4
90	-	529	0.337	394	205.2	1.0	3.8	0.8	2.9
80	-	470	0.343	350	208.5	0.8	3.0	0.6	2.3
70	-	411	0.344	307	209.2	0.7	2.6	0.5	2.0
60	-	352	0.344	263	209.0	0.6	2.2	0.4	1.6
50	-	294	0.347	219	211.0	0.5	1.7	0.3	1.3
40	-	235	0.360	175	219.1	0.3	1.2	0.2	0.9
30	-	176	0.383	131	233.2	0.2	0.9	0.2	0.7

• Reference 32.5% DEF density of 1.0895 kg/L

Reference 40% DEF density of 1.1120 kg/L

	Brake Specific Fuel Consumption					DEF Consumption 32.5% Concentration		DEF Consumption 40% Concentration	
%Power	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr		Liters/hr		Liters/hr
100	-	660	0.342	492	207.7	1.2	4.4	0.9	3.3
90	-	594	0.343	443	208.9	1.0	3.8	0.8	2.9
80	-	528	0.346	394	210.6	0.9	3.4	0.7	2.6
70	-	462	0.343	344	208.6	0.9	3.2	0.6	2.4
60	-	396	0.345	295	210.1	0.8	3.0	0.6	2.3
50	-	330	0.349	246	212.2	0.7	2.7	0.5	2.0
40	-	264	0.360	197	219.3	0.7	2.5	0.5	1.9
30	-	198	0.381	148	232.0	0.6	2.2	0.4	1.6

• ISO 3046/1 fluid consumption tolerance of +5%

• Reference 32.5% DEF density of 1.0895 kg/L

• Reference 40% DEF density of 1.1120 kg/L

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.





TECHNICAL DATA

C18 Marine Auxiliary Engine/DEP

DIMENSIONS & WEIGHT

	Length (1)	Height (2)	Width (3)	Engine dry weight			
min.	73.3 in/1863 mm	50.1 in/1273 mm	40.6 in/1031 mm	3988 lb/1809 kg			
max.	73.3 in/1863 mm	53.0 in/1348 mm	44.1 in/1120 mm	4215 lb/1912 kg			
Note: Do not use these dimensions for installation design. See general dimension drawings for detail.							



Clean Emissions Module (CEM)

The C18 engine requires Selective Catalyst Reduction (SCR) technology. The compact CAT[®] SCR System is an exhaust gas aftertreatment solution compliant with IMO III emission standards.

- Proven technology to meet IMO III emission standards.
- Maintains engine efficiency, durability and reliability.
- Compact package with minimum impact to vessel design.
- Available for new builds and retrofits.

For detailed dimensions and installation requirements, please refer to latest revision of A&I guide LEBM0103.

DIMENSIONS & WEIGHT

	Length	Height	Width	Weight		
CEM (each)*	40.9 in / 1040 mm	20.8 in / 529 mm	39.5 in / 1004 mm	300 lb / 136 kg		
Dosing Cabinet (each)*	26.9 in / 682 mm	22.5 in / 570 mm	23.3 in / 592 mm	207 lb / 94 kg		
*Two per engine						

