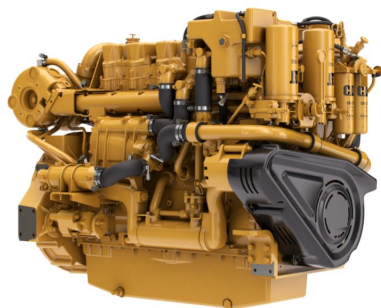




C18 ACERT auxiliary/generator set engines incorporate a separate circuit aftercooling system (SCAC) for all configurations. The primary advantage of the SCAC system is reduced aftercooler corrosion since no sea water circulates through the aftercooler. Many other improvements on these engines also contribute to minimizing owning and operating costs. The IMO II compliant ratings are available with heat exchanger or keel cooled options. All major MCS type approvals are available from the factory.

Specifications

Power Rating		
Minimum Rating	301 bkW	404 bhp
Maximum Rating	492 bkW	660 bhp

Engine Specifications		
Configuration	In-Line 6, 4-Stroke-Cycle Diesel	
Aspiration	TA, TTA	
Bore	145 mm	5.7 in
Stroke	183 mm	7.2 in
Displacement	18.1 L	1106 in ³
Rotation (from flywheel end)	Counterclockwise	

Dimensions & Weights		
Length	1854 mm	73 in
Width	1134 mm	44.6 in
Height	1300 mm	51.2 in
Dry Weight	4299 kg	1950 lb

Standard Equipment

AIR INLET SYSTEM

- Separate circuit after-cooled (SCAC)
- Open Crankcase Ventilation (OCV) system
- Turbocharger, jacket water cooled
- Turbocharger inlet, 152 mm (6 in) OD straight connection

CONTROL SYSTEM

- Programmable low idle

- Electronic diagnostics and fault logging
- Electronic fuel/air ratio control
- Engine Protection Mode for extended ambient conditions - EPA Tier 3 Ratings Only
- 70-pin customer connector
- Three types of throttle inputs (primary/ secondary PWM, 0-5V, 4-20mA)

COOLING SYSTEM

- Separate Circuit After-Cooling (SCAC) for both HEX and Keel cooled engines
- Engine JW and SCAC Shell & Tube Heat Exchangers for HEX cooled engines
- SCAC pump, gear driven, for HEX cooled engines only
- Jacket water pump, gear driven
- Auxiliary water pump, gear driven
- Sea water pump, bronze impeller, gear driven
- SCAC and JW shunt tanks for maintaining proper pump inlet pressures

EXHAUST SYSTEM

- 152 mm (6 in) round flanged outlet
- Water-cooled exhaust manifold & turbocharger

FLYWHEELS & FLYWHEEL HOUSINGS

- Flywheel Housing, SAE No. 0
- Flywheel, 18 inch, 136 teeth
- SAE standard rotation

FUEL SYSTEM

- Front service simplex fuel system
- Fuel transfer pump, gear driven
- Manual fuel priming pump
- Hybrid fuel line design

LUBE SYSTEM

- Front service simplex oil system
- Center sump oil pan:
- Front and top service oil filler locations
- Front service dipstick
- Oil pump, gear driven

MOUNTING SYSTEM

- Front support - adjustable

POWER TAKE-OFFS

- Hydraulic Pump Drive
- Crankshaft Pulleys
- Front Stub Shaft
- Front Enclosed Clutch

GENERAL

- Front damper guard
- Front service engine
- Common electrical bonding point
- Engine does not ship with zinc components
- NOTE: These engines are for constant speed generator set applications only, and NOT to be used for variable speed applications

Optional Equipment

EXHAUST SYSTEM

- Dry Elbows
- Water-Cooled Elbows
- Flexible Fitting
- Flange
- Muffler
- Muffler Spark Arresting

AIR INLET SYSTEM

- Air Inlet Adapter

CHARGING SYSTEM

- Battery Chargers
- Charging Alternators
- Alternator Mounting Group
- Ammeter

CONTROL SYSTEM

- MECP I - Marine Engine Control Panel
- Caterpillar Alarm and Protection
- Load Sharing Attachment

COOLING SYSTEM

- Aux Expansion Tank Flange Kit

FUEL SYSTEM

- Duplex Fuel Filters
- Fuel Cooler
- Primary Fuel Filters
- Flexible Fuel Lines

INSTRUMENTATION

- Instrument Panels
- OEM Wiring Harness
- Gauges

- Oil Level Sensor

LUBE SYSTEM

- Duplex Oil Filters
- Sump Pump

POWER TAKE-OFFS

- Crankshaft Pulleys
- Front Stub Shaft
- Hydraulic Pump Drive Adapter
- Front Enclosed Clutch

PROTECTION SYSTEM

- Marine Classification Society and SOLAS

STARTING SYSTEM

- Electric Starting Motors - Single 24 Volt
- Air Starting Motor
- Air Start Accessories
- Starting Aids - JW Heaters
- Battery Sets - 24 Volt - Dry

MOUNTING SYSTEM

- Front Support
- REAR ENGINE SUPPORT

PACKING

- Engine Protective Cover
- Storage Preservation
- Export Packing

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S-O-S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.