## INDUSTRIAL ENGINE RATINGS GUIDE





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#### Highly Regulated/Lesser Regulated

For purposes of this Guide, "Highly Regulated" refers to engines that meet stringent emission standards in effect in the U.S., Canada, the EU, and Japan. "Lesser Regulated" refers to engines that are available for other regulated and non-regulated areas.

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## **Cat Engines**

#### **Diesel Engine Rating Definitions**

#### Explanation of Ratings A, B, C, D, and E:

For an exact determination of the appropriate rating, contact your local Cat dealer. Engine rating obtained and presented in accordance with ISO3046/1.

#### IND-A (Continuous)

Continuous heavy-duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

#### IND-B

For service where power and/or speed are cyclic (time at full load not to exceed 80%).

#### IND-C (Intermittent)

Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

#### IND-D

For service where maximum power is required for periodic overloads (time at full load not to exceed 10% of the duty cycle).

#### IND-E

For service where maximum power is required for a short time for initial starting or sudden overload. For emergency service where standard power is unavailable (time at full load not to exceed 5% of the duty cycle).

#### **Rating Conditions**

#### Diesel Engines — up to 6.6 liter

All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance measured using fuel to specification EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

#### Diesel Engines — up to 7.1 liter

All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance measured using fuel to EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

#### Diesel Engines — greater than 7.1 liter

All rating conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29°C (84.2°F) with a density of 838.9 g/L.

#### ISO 9001:2000 Certification

Factory-designed systems built at Caterpillar ISO 9001:2000 certified facilities.

## **Cat Engines**

#### Cleaner Fuel and Oils

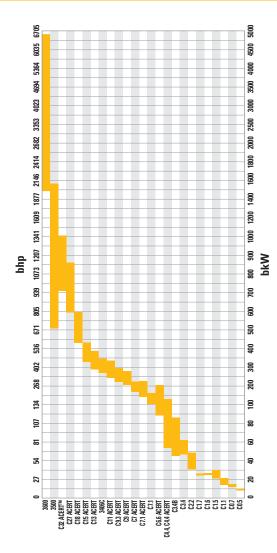
Industry technology requires the use of Ultra Low Sulfur Diesel (ULSD) fuel which contains less than or equal to 15 parts per million sulfur (mg/kg) as well as low sulfated ash oil in U.S. EPA Tier 4 Final, EU Stage IV engines. These cleaner fuels and oils help reduce engine operating costs. Cat U.S. EPA Tier 4 Final, EU Stage IV engines continue to have B20 biodiesel capability when desired or required.

#### **Abbreviations**

ATAAC	Air-to-Air Aftercooled
bhp	brake horsepower
bkW	brake kilowatts
CAT	standard (stoichiometric) engine Catalyst rating
CEM	Clean Emissions Module
DEF	Desel Exhaust Fluid
DOC	Diesel Oxidation Catalyst
DPF	Diesel Particulate Filter
ECU	Electronic Control Unit
FIE	Fuel Injection Equipment
JWAC	Jacket Water Aftercooled
LE	Low Emission
NA	Naturally Aspirated
NRS	NOx Reduction System
NSPS	New Source Performance Standard
PC	Precombustion Chamber
PETU	Pump Electronic Tank Unit
SCAC	Separate Circuit Aftercooled
SCR	Selective Catalytic Reduction
SI	Spark Ignited
SI NSPS	Spark Ignited New Source Performance Standard
STD Sta	ndard (stoichiometric) engine highest power rating
T	Turbocharged
TA	Turbocharged-Aftercooled
TTA	Twin Turbo Aftercooled

## **Cat Engines**

Match a Cat Engine to Your Application



### **Customer Value**

#### **Industrial Engines**

#### Reliability

- Industrial engines have been validated in a wide variety of machines and applications.
- Common design across engine platforms improves reliability at first production.
- Electronic control systems are proven to withstand severe conditions.
- Simple, efficient turbochargers deliver top performance.

#### **Durability**

- · Core engine platforms deliver long life to overhaul.
- Engines are designed to be remanufactured.
- Aftertreatment systems for highly regulated models are built to withstand extreme conditions.

#### Fluid Efficiency

- · Improved net engine fluid consumption
- Flexible regeneration options on applicable highly regulated models maximize fluid efficiency.
- Caterpillar integration expertise optimizes engine performance for maximum efficiency.

#### **Low Cost of Ownership**

- · Value is cumulative over the entire working life of the engine.
- Precise measurement and control enables better fluid efficiency during regeneration.
- Poly-Vee belts extend service intervals.
- · High resale value boosts return on investment.

#### **Maximum Uptime**

- · Ease of service
  - Oil and filter change intervals are consistent across the product line.
  - Diesel Particulate Filters (DPF) for highly regulated models offer flexible service options where ash cleaning is required.
- · Ease of operation
  - Regeneration strategies for highly regulated models are designed to keep customers working
  - Electric priming pump improves convenience
  - Single-belt accessory drive

#### **World-class Product Support**

- Worldwide Cat dealer network, including the Cat Industrial Service Distributor (ISD) second level distributor program, helps extend engine life and reduce maintenance costs.
- Customer Service Agreements (CSA) and Extended Service Coverage (ESC) control costs and protect investment value.
- Remanufactured parts and high parts availability reduce cost and downtime.

### **Customer Value**

#### **Industrial Power Units**

#### Flexibility

- Complete factory-installed power unit plug and play
- Mandatory and optional attachments can include: radiator, air cleaner, alternator, A/C compressor, air compressor, muffler, clutch, control panel, engine base, CEM, CEM support structure.
- · Flexible configurations
- Minimum or no engineering work for equipment manufacturers

#### Reliability

- Common design across engine platforms improves reliability at first production.
- Electronic control systems are proven to withstand severe conditions.
- · Simple, efficient turbochargers deliver top performance.

#### **Durability**

- · Core engine platforms deliver long life to overhaul.
- · Engines are designed to be remanufactured.
- Aftertreatment systems for highly regulated models are built to withstand extreme conditions.

#### Fluid Efficiency

- Improved net engine fluid consumption
- Flexible regeneration options on applicable highly regulated models maximize fluid efficiency.
- Caterpillar integration expertise optimizes engine performance for maximum efficiency.

#### **Low-Cost of Ownership**

- · Value is cumulative over the entire working life of the power unit.
- Precise measurement and control enables better fluid efficiency during regeneration.
- · High resale value boosts return on investment.

#### **Maximum Uptime**

- · Fase of service
- · Ease of operation

#### **World-class Product Support**

- Worldwide Cat dealer network, including the Cat ISD second level distributor program, helps extend power unit life and reduce maintenance costs.
- Customer Service Agreements (CSA) and Extended Service Coverage (ESC) control costs and protect investment value.
- Remanufactured parts and high parts availability reduce cost and downtime.

### **Customer Value**

#### Aftertreatment for Highly Regulated Models

- Advanced NOx Reduction System (NRS) maximizes engine power and fluid efficiency while lowering combustion temperatures and reducing NOx emissions.
- Cat Regeneration System is designed to maximize equipment uptime by providing excellent regeneration capability in a variety of environments, with precise measurement and control to reduce fluid burned during regeneration.
- Diesel Oxidation Catalyst (DOC) facilitates passive regeneration and requires no maintenance.
- Diesel Particulate Filter (DPF) reduces Particulate Matter (PM) with its wallflow design or through-flow design.
- Flexible regeneration options on applicable models maximize fluid efficiency.
- Pump Electronic Tank Unit (PETU) is available in different volume configurations.
- Up to 5 percent net improvement in fluid efficiency for U.S. EPA Tier 4 Final, EU Stage IV over U.S. EPA Tier 4 Interim, EU Stage IIB (including DEF consumption)

## C0.5 | C0.7

ENGINES



#### **Specifications**

 
 C0.5 U.S. EPA Tier 4 Final, EU Stage IIIA
 C0.7 U.S. EPA Tier 4 Final, EU Stage IIIA

 Engine Configuration
 In-Line 2, Diesel.
 In-Line 3, Diesel

 Bore x Stroke
 67 x 72 mm (2.6 x 2.8 in)
 67 x 72 mm (2.6 x 2.8 in)

 Displacement
 0.5 liters (31.0 in²)
 0.76 liters (46.4 in²)

 Ship Weight
 57 kg (126 lbs)
 71 kg (156.5 lbs)

**Approximate Dimensions:** 

 Length.
 407 mm (16.0 in)
 480 mm (18.9 in)

 Width
 371 mm (14.6 in)
 371 mm (14.6 in)

 Height
 523 mm (20.6 in)
 528 mm (20.8 in)

#### CO.5 Ratings

C Rating (Intermittent)				
	bkW	bhp	rpm	
NA				
	8.2	11.0	2800	
	8.8	11.8	3000	
	10.2	13.7	3600	

Available for Europe and, depending on applicable emission standards, may be introduced in other regulated areas.

#### **CO.7 Ratings**

C Rating (Intermittent)				
	bkW	bhp	rpm	
NA				
	12.2	16.4	2800	
	13.2	17.7	3000	
	15.3	20.5	3600	

Available for Europe and, depending on applicable emission standards, may be introduced in other regulated areas.

#### C0.5 U.S. EPA Tier 4 Final Ratings

NA	bkW	C Rating (Intermittent) bhp	rpm	
	5.7	7.6	2000	
	7.3	9.8	2700	
	7.6	10.2	2800	

### CO.7 U.S. EPA Tier 4 Final Ratings

<b>C Rating</b> (Intermittent)				
	bkW	bhp	rpm	
NA				
	9.0	12.0	2200	

Emission standards: U.S. EPA Tier 4 Final. Nonroad engines less than 19 kW (25 hp) are not currently subject to EU emission standards.



C1.1 ENGINE

#### **Specifications**

U.S. EPA Tier 4 Final.

**EU Stage IIIA** 

Engine Configuration . . . In-Line 3, Diesel

Displacement....... 1.1 liters (69 in<sup>3</sup>) 

**Approximate Dimensions:** 

Length...... 491 mm (19.3 in) Width ..... 400 mm (15.7 in) Height..... 576 mm (22.7 in)

#### C1.1 Ratings

#### C Rating (Intermittent)

	bkW	bhp	rpm
NA	Standard	Standard	
	14.7	19.7	2200
	16.1	21.6	2400
	17.2	23.0	2600
	18.5	24.8	2800
	19.7	26.4	3000
	21 በ	28.2	3400

NA	Derate	Derate	
	13.7	18.4	2200
	16.8	22.5	2800
	17.7	23.7	3000

Available for Europe and, depending on applicable emission standards, may be introduced in other regulated areas.

## C1.1 U.S. EPA Tier 4

### **Final Ratings**

	(Intermittent)				
	bkW	bhp	rpm		
NA		-	-		
	9.9	13.3	1800*		
	14.7	19.7	2200		
	18.4	24.7	2800		

C Rating

Emission standards: U.S. EPA Tier 4 Final. Nonroad engines less than 19 kW (25 hp) are not currently subject to EU emission standards.

<sup>\*</sup>Special rating

## C1.1 POWER UNIT



#### **Specifications**

U.S. EPA Tier 4 Final,

EU Stage IIIA

Engine Configuration . . . In-Line 3, Diesel

 Bore x Stroke
 77 x 81 mm (3.0 x 3.2 in)

 Displacement
 1.1 liters (69 in³)

 Ship Weight
 129 kg (284 lbs)

**Approximate Dimensions:** 

 Length
 778 mm (30.6 in)

 Width
 438 mm (17.2 in)

 Height
 730 mm (28.7 in)

#### C1.1 Ratings

# C Rating (Intermittent) bkW bhp rpm NA 17.3 23.2 2800 18.1 24.3 3000

Available for Europe and, depending on applicable emission standards, may be introduced in other regulated areas.

## C1.1 U.S. EPA Tier 4 Final Ratings

	C Rating (Intermittent)			
NA	bkW	bhp	rpm	
ii.	14.7	19.7	2200	_
	18.4	24.7	2800	

Emission standards: U.S. EPA Tier 4 Final. Nonroad engines less than 19 kW (25 hp) are not currently subject to EU emission standards.



## C1.5

#### **Specifications**

U.S. EPA Tier 4 Final.

EU Stage IIIA

Engine Configuration . . . In-Line 3, Diesel

**Approximate Dimensions:** 

 Length.
 572 mm (22.5 in) (NA, T)

 Width
 453 mm (17.8 in) (NA)

#### **EU Stage IIIA Ratings**

#### C Rating (Intermittent)

	(Intermittent)				
	bkW	bhp	rpm		
NA					
	20.9	28.0	2200		
	22.3	29.9	2400		
	23.4	31.4	2600		
	24.4	32.7	2800		
	25.1	33.7	3000		
Т					
	23.1	31.0	2200		
	25.2	33.8	2400		
	27.3	36.6	2600		
	29.4	39.4	2800		
	30.0	40.2	3000		

## U.S. EPA Tier 4 Final Ratings

	bkW	C Rating (Intermittent) bhp	rpm	
NA				
	18.4	24.7	2100	
Т				
	18.4	24.7	1800*	
	25.2	33.8	2400	
	27.0	36.2	2800	
	27.6	37.0	3000	

<sup>\*</sup>Special rating

## C1.5



#### **Specifications**

U.S. EPA Tier 4 Final,

EU Stage IIIA

Engine Configuration . . . In-Line 3, Diesel Bore x Stroke . . . . . . . . . . . 84 x 90 mm (3.3 x 3.5 in)

**Approximate Dimensions:** 

 Length
 820 mm (32.3 in)

 Width
 497 mm (19.6 in)

 Height
 793 mm (31.2 in)

#### **EU Stage IIIA Ratings**

| C Rating (Intermittent) | bkW | bhp | rpm | NA | | 24.2 | 32.5 | 3000 |

#### U.S. EPA Tier 4 Final Ratings

	C Rating (Intermittent)			
	bkW	bhp	rpm	
T				
	27.0	36.0	2800	



## C1.5

#### **Specifications**

U.S. EPA Tier 4 Final

**Approximate Dimensions:** 

#### **Standard Emissions Control Equipment**

- DOC: Diesel Oxidation Catalyst
- DPF: Diesel Particulate Filter with range of outlet options
- · Passive regeneration system with backup

## C1.6 C1.7

ENGINES



#### **Specifications**

Bore x Stroke Displacement	C1.6 EU Stage IIIA In-Line 4, Diesel	In-Line 3, Diesel 84 x 100 mm (3.3 x 3.9 in) 1.66 liters (101 in³)
Approximate Dimensions	S:	
Length	591 mm (23.3 in)	564 mm (22.2 in)
	420 mm (16.5 in)	

#### C1.6 EU Stage IIIA Ratings

		C Rating (Intermittent)		
	bkW	bhp	rpm	
NA				
	24.6	33.0	2800	
	26.5	35.5	3000	

#### C1.7 EU Stage IIIA Ratings

	C Rating (Intermittent)			
	bkW	bhp	rpm	
NA				
	23.6	31.6	2400	
	26.1	35.0	2600	



C2.2

#### **Specifications**

U.S. EPA Tier 4 Final,

EU Stage IIIA, EU Stage IIIB

Engine Configuration . . . In-Line 4, Diesel

 Bore x Stroke
 84 x 100 mm (3.3 x 3.9 in)

 Displacement
 2.2 liters (135 in³)

 Ship Weight
 184 kg (406 lbs) (NA)

194 kg (427.7 lbs) **(T, TA)** 

**Approximate Dimensions:** 

662 mm (26.1 in) (**T, TA**)

Width ... 464 mm (18.3 in) (**NA**)

489 mm (19.3 in) (**T, TA**)

Height ... 676 mm (26.6 in) (**NA**)

698 mm (27.5 in) (**T, TA**)

#### **EU Stage IIIA Ratings**

C Rating (Intermittent)

	bkW	bhp	rpm
NA	Standard	Standard	
	31.0	41.6	2200
	34.1	45.7	2400
	35.7	47.9	2600
	36.4	48.8	2800

## U.S. EPA Tier 4 Final Ratings

#### C Rating (Intermittent) bhp rpm

	bkW	bhp	rpm
NA			
	31.4	42.1	2600
	32.8	44.0	2400
	35.4	47.5	2600
	35.7	47.9	2600
	36.4	48.8	2800-3000

## U.S. EPA Tier 4 Final, EU Stage IIIB Ratings

C Rating (Intermittent) bkW bhp rpm 40.0 53.6 2600 41.5 55.7 2600 44.7 60.0 2800 45.5 61.0 3000

Emission standards: U.S. EPA Tier 4 Final, EU Stage IIIA or EU Stage IIIB

## C2.2 POWER UNIT



#### **Specifications**

U.S. EPA Tier 4 Final, EU Stage IIIA, EU Stage IIIB

Engine Configuration . . . In-Line 4, Diesel

 Bore x Stroke
 84 x 100 mm (3.3 x 3.9 in)

 Displacement
 2.2 liters (135 in³)

 Ship Weight
 218 kg (480 lbs) (NA)

 228 kg (502 lbs) (T)

**Approximate Dimensions:** 

 Length.
 946 mm (37.2 in) (NA)

 973 mm (38.3 in) (T)

 Width
 513 mm (20.2 in) (NA)

#### **EU Stage IIIA Ratings**

C Rating

NA	bkW	bhp	rpm	
	36.4	48.8	2800	
	36.4	48.8	3000	

## U.S. EPA Tier 4 Final Ratings

## U.S. EPA Tier 4 Final, EU Stage IIIB Ratings

C Rating (Intermittent)
bkW bhp rpm

T 44.7 59.9 2800
45.5 61.0 3000



## C2.2

#### **Specifications**

U.S. EPA Tier 4 Final, EU Stage IIIB

**Approximate Dimensions:** 

 Length.
 449 mm (17.6 in)

 Weight.
 16 kg (35.3 lbs)

 Diameter.
 198 mm (7.8 in)

Multiple customizable configuration options available

#### **Standard Emissions Control Equipment**

- **DOC**: Diesel Oxidation Catalyst
- DPF: Diesel Particulate Filter with range of outlet options
- Passive regeneration system with backup

## C3.4



#### **Specifications**

U.S. EPA Tier 4 Interim, EU Stage IIIA

Engine Configuration . . . In-Line 4, Diesel

 Displacement.
 3.3 liters (201 in³)

 Ship Weight
 245 kg (540 lbs) (NA)

 265 kg (584 lbs) (T)

Approximate Dimensions:

821.3 mm (32.3 in) (T)

## U.S. EPA Tier 4 Interim, EU Stage IIIA Ratings

	C Rating (Intermittent)			
NA	bkW	bhp	rpm	
	47	63	2500	
Т				
	55	73.7	2500	



#### **Specifications**

U.S. EPA Tier 4 Final,

EU Stage IIIB < 56 bkW (75 bhp)

Engine Configuration . . . In-Line 4, Diesel

 Bore x Stroke
 99 x 110 mm (3.9 x 4.3 in)

 Displacement
 3.4 liters (207.5 in³)

 Ship Weight
 251 kg (553.4 lbs) (T)

**Approximate Dimensions:** 

 Length.
 747.5 mm (29.4 in)

 Width.
 662 mm (26.1 in)

 Height.
 822 mm (32.4 in)

## U.S. EPA Tier 4 Final, EU Stage IIIB Ratings

C Rating (Intermittent)

(miconinitionit)			110	
T	bkW	bhp	rpm	
	45.0	60.3	2200	
	47.0	63.0	2500	
	50.0	67.0	2200	
	55.4	74.3	2200 & 2500	



#### **Specifications**

Bore x Stroke	U.S. EPA Tier 4 Interim, EU Stage IIIB > 56 bkW (75 bhp) In-Line 4, Diesel	99 x 110 mm (3.9 x 4.3 in)
	251 kg (553.4 lbs)	
Approximate Dimensions	s:	
Length	747.5 mm (29.4 in)	747.5 mm (29.4 in)
	662 mm (26.1 in)	

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

	C Rating (Intermittent)				D Rating	
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm
	63.0	84.5	2200	83.0	111.3	2200
	66.0	88.5	2200 & 2500	86.0	115.3	2500
	70.0	94.0	2200		_	
	75.0	100.6	2200 & 2500		_	

#### U.S. EPA Tier 4 Final, EU Stage IV Ratings

		C Rating (Intermittent)			D Rating	ı
TA	bkW	bhp	rpm	bkW	bhp	rpm
	63.0	84.5	2200	83.0	111.3	2200
	66.0	88.5	2500	86.0	115.3	2500
	70.0	94.0	2200	90.0	120.7	2200
	75.0	100.6	2200 & 2500	_		

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV



#### **Specifications**

U.S. EPA Tier 4 Final, EU Stage IIIB < 56 bkW (75 bhp)

U.S. EPA Tier 4 Interim, EU Stage IIIB > 56 bkW (75 bhp)

 Kengine Configuration
 < 56 bkW (75 bhp)</th>
 > 56 bkW (75 bhp)

 Bore x Stroke
 99 x 110 mm (3.9 x 4.3 in)
 99 x 110 mm (3.9 x 4.3 in)

 Displacement
 3.4 liters (207.5 in²)
 3.4 liters (207.5 in²)

 Ship Weight
 359 kg (791.5 lbs)
 359 kg (791.5 lbs)

**Approximate Dimensions:** 

Rear-Mounted Aftertreatment

 Length.
 1242 mm (48.9 in)

 Width.
 705 mm (27.7 in)

 Height.
 957 mm (37.6 in)

## U.S. EPA Tier 4 Final, EU Stage IIIB Ratings

C Rating (Intermittent)

T bkW bhp rpm

55.4 74 2200

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

 C Rating (Intermittent)

 TA (ATAAC)
 bkW
 bhp
 rpm

 66.0
 88.5
 2200

 75.0
 100.6
 2200

 86.0
 115.0
 2500



#### **Specifications**

U.S. EPA Tier 4 Final, EU Stage IIIB < 56 bkW (75 bhp)

**Approximate Dimensions:** 

 Wall-Flow DPF
 Through-Flow DPF

 Length
 541 mm (21.3 in)
 509 mm (20 in)

 Diameter
 180 mm (7.1 in)
 149 mm (5.8 in)

 Weight
 20 kg (44 lbs)
 14 kg (30.8 lbs)

#### **Standard Emissions Control Equipment**

- DOC: Diesel Oxidation Catalyst
- DPF: Diesel Particulate Filter
- Flex pipe connection kit with straight and 90° options for flexibility

U.S. EPA Tier 4 Interim, EU Stage IIIB

> 56 bkW (75 bhp)

**Approximate Dimensions:** 

 Wall-Flow DPF

 Length.
 541 mm (21.3 in)

 Diameter
 180 mm (7.1 in)

 Weight
 20 kg (44 lbs)

#### **Standard Emissions Control Equipment**

• DPF: Diesel Particulate Filter

• DOC: Diesel Oxidation Catalyst

U.S. EPA Tier 4 Final, EU Stage IV

> 56 bkW (75 bhp)

**Approximate Dimensions:** 

DOC SC

 Length.
 320 mm (12.6 in)
 520 mm (20.47 in)

 Diameter
 196 mm (7.7 in)
 251 mm (9.88 in)

 Weight
 15 kg (33 lbs)
 20 kg (44 lbs)

#### **Standard Emissions Control Equipment**

• DOC: Diesel Oxidation Catalyst

• SCR: Selective Catalytic Reduction



### C4.4 ACERT

ENGINE

#### **Specifications**

Displacement	U.S. EPA Tier 4 Interim, EU Stage IIIB In-Line 4, Diesel	. 105 x 127 mm (4.1 x 5.0 in) . 4.4 liters (268.5 in³)
Approximate Dimensions	s:	
Length	845.1 mm (33.3 in) (TA, TTA)	. 845.1 mm (33.3 in) (TA, TTA)
Width	772.4 mm (30.4 in) (TA)	. 772.4 mm (30.4 in) (TA)
	741.6 mm (29.1 in) ( <b>TTA</b> )	
Height	848.2 mm (33.4 in) (TA)	. 848.2 mm (33.4 in) (TA)
	867.6 mm (3/1.1 in) (TTA)	867.6 mm (3/1.1 in) (TTA)

#### U.S. EPA Tier 4 Interim, Ell Stage IIIR Ratings

Lo Otage IIID Hattings						
-	B Ratin	g		C Ratir		
bkW	bhp	rpm	bkW	bhp	rpm	
TA (ATA	AAC)					
65.9	88.4	2200	61.5	82.5	2200	
70.0	93.9	2200	74.5	100.0	2200	
85.9	115.2	2200	82.0	110.0	2200	
_	_	_	98.0	131.4	2200	
92.5	124.0	2200	102.1	137.0	2200	
_	_	_	106.0	142.1	2200	
	_	_	110.1	147.6	2200	
TTA (A1	ГААС)					
105.1	141.0	2200	117.0	157.0	2200	
112.0	150.0	2200	129.4	173.5	2200	

#### **U.S. EPA Tier 4 Final, EU Stage IV Ratings**

	C Rating (Intermittent)		
bkW	bhp	rpm	
TA			
70.0	93.9	2200	
74.4	99.8	2200	
82.0	109.9	2200	
85.9	115.2	2200	
91.0	122.0	2200	
92.6	124.2	2200	
97.9	131.3	2200	
102.1	136.9	2200	
106.0	142.1	2200	
110.1	147.6	2200	
TTA			
105.0	140.8	2200	
112.0	150.2	2200	
117.0	156.9	2200	
129.4	173.5	2200	
B Ratings to	be added when	available	

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV

### C4.4 ACERT

#### POWER UNIT



#### **Specifications**

U.S. EPA Tier 4 Interim,

**EU Stage IIIB** 

Engine Configuration . . . In-Line 4, Diesel

 Bore x Stroke
 105 x 127 mm (4.1 x 5.0 in)

 Displacement
 4.4 liters (268.5 in³)

 Ship Weight
 650 kg (1433 lbs) (TA)

700 kg (1543 lbs) (TTA)

**Approximate Dimensions:** 

**Length.** 1433 mm (56.4 in) (**TA, TTA**) **Width** 820 mm (32.3 in) (**TA**)

795 mm (31.3 in) (**TTA**)

1150 mm (45.3 in) > 82 bkW (110 bhp) (TA)

1150 mm (45.3 in) (TTA)

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

B Rating			(	C Rating (Intermittent)		
bk	W	bhp	rpm	bkW	bhp	rpm
TA (ATAAC)						
_	_			74.5	100	2200
_	_			82	110	2200
92	.5	124	2200	102.1	137	2200
_		_	_	110	148	2200
TTA (ATAAC)						
_	_	_	_	117	157	2200
_	_	_	_	129.4	173.5	2200

U.S. EPA Tier 4 Final, EU Stage IV power unit information will be available later in 2013.



## C4.4 ACERT

II C EDA Tior / Interim

#### **Specifications**

	EU Stage IIIB	EU Stage IIIB
:	≤ 82 bkW (110 bhp)	> 82 bkW (110 bhp)
Approximate Dimens	sions:	
Length	802.5 mm (31.6 in)	828 mm (32.6 in)
Width	365 mm (14.3 in)	365 mm (14.3 in)
Height	279 mm (11 in)	300.5 mm (11.8 in)
Weight	34 kg (75 lbs)	37 kg (81.6 lbs)
Diameter	244.9 mm (9.6 in)	270.3 mm (10.6 in)

#### **Standard Emissions Control Equipment**

II C EDA Tior / Interim

- DOC: Diesel Oxidation Catalyst
- . DPF: Diesel Particulate Filter
- 3" flex pipe connection kit with straight, 45°, and 90° options for flexibility

#### **Specifications**

	U.S. EPA Tier 4 Final, EU Stage IV ≤ 92.6 bkW (124.2 bhp) DOC/SCR	EU Stage IV	U.S. EPA Tier 4 Final, EU Stage IV DPF/SCR (TTA only)
Approximat	e Dimensions:		
Length	647 mm (25.5 in)	675 mm (25.6 in)	722 mm (28.4 in)
Width	538 mm (21.18 in)	565 mm (22.2 in)	695 mm (27.4 in
Height	335 mm (13.19 in)	355 mm (13.97 in)	430 mm (16.9 in)
Weight	40 kg (88 lbs)	45 kg (99 lbs)	80 kg (176.4 lbs)

#### **Standard Emissions Control Equipment**

- CEM: Clean Emissions Module, including:
  - DOC: Diesel Oxidation Catalyst
  - **DPF**: Diesel Particulate Filter
- SCR: Selective Catalytic Reduction
- 3" flex pipe connection kit with straight, 45°, and 90° options for flexibility

## C6.6 ACERT

ENGINE



#### **Specifications**

U.S. EPA Tier 4 Interim,

**EU Stage IIIB** 

Engine Configuration . . . In-Line 6, Diesel

**Ship Weight** ...... 695 kg (1532 lbs)

**Approximate Dimensions:** 

 Length.
 1063.7 mm (41.9 in)

 Width
 753 mm (29.6 in)

 Height
 907 mm (35.7 in)

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

	C Rating (Intermittent)		
TA (ATAAC)	bkW	bhp	rpm
	89.0	119.3	2200
	116.5	156.2	2200
	129.4	173.5	2200



## C6.6 ACERT

#### **Specifications**

U.S. EPA Tier 4 Interim,

**EU Stage IIIB** 

**Approximate Dimensions:** 

 Length.
 852.7 mm (33.6 in)

 Width
 364.6 mm (14.35 in)

 Height.
 352 mm (13.9 in)

 Weight
 40 kg (88.1 lbs)

 Diameter
 283 mm (11.1 in)

#### **Standard Emissions Control Equipment**

- CEM: Clean Emissions Module, including:
  - DOC: Diesel Oxidation Catalyst
  - DPF: Diesel Particulate Filter
- 3" flex pipe connection kit with straight, 45°, and 90° options for flexibility

## C7.1 ACERT

ENGINE



#### **Specifications**

	U.S. EPA Tier 4 Interim, EU Stage IIIB	U.S. EPA Tier 4 Final, EU Stage IV
Engine Configuration	In-Line 6, Diesel	In-Line 6, Diesel
Bore x Stroke	105 x 135 mm (4.1 x 5.3 in)	105 x 135 mm (4.1 x 5.3 in)
Displacement	7.0 liters (427.7 in <sup>3</sup> )	7.0 liters (427.7 in <sup>3</sup> )
Ship Weight	715 kg (1576 lbs)	715 kg (1576 lbs)
Approximate Dimensions	S:	
Length	1063.7 mm (41.9 in) (TTA)	1063.7 kg (41.9 lbs) (TA, TTA)
Width	820.2 mm (32.3 in) ( <b>TTA</b> )	753 mm (29.6 in) ( <b>TA</b> ) 820.2 mm (32.3 in) ( <b>TTA</b> )
Height	907 mm (35.7 in) <b>(TTA)</b>	907 mm (35.7 in) (TA, TTA)

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

	B Ratin	g		C Rating termitte		D Rating			
bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
TTA (AT	AAC)	•		•	•			•	
140.0	187.7	2200	186.5	250.1	2200	225.0	301.7	2200	
151.0	202.5	2200	205.0	274.9	2200	_	_	_	
158.5	212.5	2200		_	_	_	_	_	
168.0	225.3	2200	_	_	_	_	_	_	
176.5	236.7	2200	_	_	_	_	_	_	

## U.S. EPA Tier 4 Final, EU Stage IV Ratings

		B Rating	I	C Rating (Intermittent)
	bkW	bhp	rpm	bkW bhp rpm
TA (ATAAC)				
	116.0	156.0	2200	151.0 202.0 2200
	129.0	173.0	2200	
TTA (ATAAC)				
	151.0	202.0	2200	186.0 249.0 2200
	168.0	225.0	2200	205.0 275.0 2200
			_	225.0 302.0 2200

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV



### C7.1 ACERT

POWER UNIT

#### **Specifications**

	U.S. EPA Tier 4 Interim, EU Stage IIIB	U.S. EPA Tier 4 Final, EU Stage IV
Engine Configuration	In-Line 6, Diesel	. In-Line 6, Diesel
Bore x Stroke	105 x 135 mm (4.13 x 5.3 in)	. 105 x 135 mm (4.13 x 5.3 in)
Displacement	7.0 liters (427.7 in <sup>3</sup> )	. 7.0 liters (427.7 in <sup>3</sup> )
Ship Weight	1200 kg (2645.5 lbs)	. 1000 kg (2204.0 lbs)
Approximate Dimension	s:	
Length	1902 mm (74.9 in)	. 1804 mm (71.0 in)
Width	916 mm (36.06 in)	. 916 mm (36.06 in)
Height	1617 mm (63.7 in)	. 1474 mm (58.03 in)

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

		B Rating			C Rating (Intermittent)			
TTA (ATAAC	bkW	bhp	rpm	bkW	bhp	rpm		
	151	202	1800-2200	186	250	1800-2200		
	168	225	1800-2200	205	275	1800-2200		

#### U.S. EPA Tier 4 Final, EU Stage IV Ratings

		B Ratin	g		C Rating (Intermittent)			
TTA (ATAAC	bkW	bhp	rpm	bkW	bhp	rpm		
	151	202	1800-2200	186	250	1800-2200		
	168			205	275	1800-2200		

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV

## C7.1 ACERT



#### **Specifications**

U.S. EPA Tier 4 Interim, U.S. EPA Tier 4 Interim, **EU Stage IIIB** EU Stage IIIB ≤ 172 bkW (231 bhp) ≥ 172 bkW (231 bhp) Approximate Dimensions: **Approximate Dimensions:** Length . . . . . . 918.7 mm (36.2 in) **Length.....** 918.7 mm (36.2 in) Width ..... 714.4 mm (28.1 in) Width..... 714.4 mm (28.1 in) Height . . . . . 643.9 mm (25.3 in) Weight . . . . . . . . 124 kg (273.4 lbs) Weight ..... 134 kg (295.4 lbs) Diameter. . . . 337.8 mm (13.3 in) **Diameter** . . . . . . . 287 mm (11.3 in)

#### **Standard Emissions Control Equipment**

- Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - DOC: Diesel Oxidation Catalyst
  - DPF: Diesel Particulate Filter
- NRS: NOx Reduction System
- 3" flex pipe connection kit with straight, 45°, and 90° options for flexibility

#### **Specifications**

#### U.S. EPA Tier 4 Final, EU Stage IV

Approximate Dimensions:

 Length.
 771 mm (30.4 in)

 Width
 793 mm (31.2 in)

 Height.
 468 mm (18.4 in)

 Weight
 90 kg (198 lbs)

#### Standard Emissions Control Equipment

- CEM: Clean Emissions Module, including:
  - DOC: Diesel Oxidation Catalyst
  - DPF: Diesel Particulate Filter
- NRS: NOx Reduction System
- SCR: Selective Catalytic Reduction
- 3" flex pipe connection kit with straight, 45°, and 90° options for flexibility



## **C9.3 ACERT**

ENGINE

#### **Specifications**

Bore x Stroke Displacement	U.S. EPA Tier 4 Interim, EU Stage IIIB In-Line 6, Diesel	9.3 liters (567.5 in <sup>3</sup> )
Approximate Dimension	s:	
Length	1150 mm (45.3 in)	1119 mm (44 in)
Width	827 mm (32.6 in)	1025 mm (40.4 in)
Height	1123 mm (44.2 in)	1066 mm (41.9 in)

#### U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

	Rating ntinuous)	В	Rating	C Rating (Intermittent)		
bkW TA (ATA	bhp rpm	bkW	bhp rpm	bkW	bhp	rpm
224	300 1800-	242	325 1800-	261	350	1800-
	2200		2200			2200

#### U.S. EPA Tier 4 Final, EU Stage IV Ratings

A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating
bkW bhp rpm TA (ATAAC)	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm
224 300 1800-	242 325 1800-	261 350 1800-	290 389 1800-
2200	2200	2200	2200
			298 400 2000

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV

## **C9.3 ACERT**

POWER UNIT



#### **Specifications**

	U.S. EPA Tier 4 Interim,	U.S. EPA Tier 4 Final,
	EU Stage IIIB	EU Stage IV
Engine Configuration	In-Line 6, Diesel	In-Line 6, Diesel
Bore x Stroke	115 x 149 mm (4.53 x 5.87 in)	115 x 149 mm (4.53 x 5.87 in)
Displacement	9.3 liters (567.5 in <sup>3</sup> )	9.3 liters (567.5 in <sup>3</sup> )
Ship Weight	1839 kg (4055 lbs)	1678 kg (3699 lbs)
Approximate Dimensions	<b>3:</b>	
Length	1845 mm (72.6 in)	2042 mm (80.4 in)
MC Id	1110 /440: \	1004 /401: \

#### **U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings**

A Rating (Continuous)			Е	B Rating			C Rating (Intermittent)		
bkW TA (ATAA	bhp (C)	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
224	300	1800-	242	325	1800-	261	350	1800-	
		2200			2200			2200	

#### U.S. EPA Tier 4 Final, EU Stage IV Ratings

0101 11 1101 1 1 11101,					,							
A Rating (Continuous)		В	Ratir	ıg		Ratir		D	Ratin	ıg		
bkW TA (AT		rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
224	300	1800-	242	325	1800-	261	350	1800-	290	389	1800-	
		2200			2200			2200			2200	
	_	_		_	_		_	_	298	400	2000	

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV



# C9.3 ACERT

#### **Specifications**

U.S. EPA Tier 4 Interim,

**EU Stage IIIB** 

**Approximate Dimensions:** 

 Length.
 925.89 mm (36.45 in)

 Width
 714.4 mm (28.12 in)

 Height
 392.21 mm (15.44 in)

 Weight
 130 kg (287 lbs)

 Diameter
 304.8 mm (12 in)

Multiple customizable configuration options available

#### **Standard Emissions Control Equipment**

- · Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - Doc: Diesel Oxidation Catalyst
  - DPF: Diesel Particulate Filter
- · NRS: NOx Reduction System

#### **Specifications**

	U.S. EPA Tier 4 Final, EU Stage IV						
	PETU Configuration up to 48.4 L (51.1 U.S. qt)						
Approximate Dimer	isions:						
Length	885 mm (34.8 in)	854 mm (33.6 in)					
Width	870 mm (34.25 in	287 mm (11.3 in)					
	570 mm (22.4 in)						

#### **Standard Emissions Control Equipment**

- · Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - DOC: Diesel Oxidation Catalyst
  - DPF: Diesel Particulate Filter
- ECU: Aftertreatment Electronic Control Unit
- NRS: NOx Reduction System
- PETU: Pump Electronic Tank Unit
- SCR: Selective Catalytic Reduction

ENGINE



#### **Specifications**

	U.S. EPA Tier 4 Interim, EU Stage IIIB					
Engine Configuration	In-Line 6, Diesel	In-Line 6, Diesel				
Bore x Stroke	130 x 157 mm (5.1 x 6.2 in)	130 x 157 mm (5.1 x 6.2 in)				
Displacement	12.5 liters (762.8 in³)	12.5 liters (762.8 in³)				
Ship Weight	1350 kg (2976 lbs)	1143 kg (2520 lbs)				
Approximate Dimensions:						
Length	1203 mm (47.2 in)	1272 mm (50.1 in)				
Width	933.1 mm (36.7 in)	996 mm (39.2 in)				
Height	1186 mm (46.7 in)	1132 mm (44.6 in)				

#### **U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings**

A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating	E Rating			
bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm			
TA (ATAAC)							
287 385 1800-	309 415 1800-	328 440 1800-	354 475 1800-	388 520 1800-			
2100	2100	2100	2100	2100			

U.S. EPA Tier 4 Final, EU Stage IV Ratings														
	<b>Rati</b> ı ntinu		В	Ratin	ıg		Ratir ermitt		D	Rati	ng	E	Rati	ng
bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA (AT	AAC)													
287	385	1800-	309	415	1800-	328	440	1800-	354	475	1800-	388	520	1800-
		2100			2100			2100			2100			2100

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV



#### **POWER UNIT**

#### **Specifications**

	U.S. EPA Tier 4 Interim, EU Stage IIIB	U.S. EPA Tier 4 Final, EU Stage IV					
Engine Configuration	In-Line 6, Diesel	In-Line 6, Diesel					
Bore x Stroke	130 x 157 mm (5.1 x 6.18 in)	130 x 157 mm (5.1 x 6.18 in)					
Displacement	12.5 liters (762.8 in³)	12.5 liters (762.8 in³)					
Ship Weight	2304 kg (5080 lbs)	2085 kg (4596 lbs)					
Approximate Dimension	Approximate Dimensions:						
Length	2085 mm (82.1 in)	2122 mm (83.5 in)					
Width	1157 mm (45.6 in)	1247 mm (49 in)					
Height	2082 mm (81.9 in)	1928 mm (75.9 in)					

#### **U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings**

	<b>Rati</b> ı ntinu		В	Ratin	g		Ratir rmitt		D	Rating	E	Rating
		rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm	bkW	bhp rpm
TA (AT	AAU)											
287	385	1800-	309	415	1800-	328	440	1800-	354	475 1800-	388	520 1800-
		2100			2100			2100		2100		2100

U.S. EPA Tier 4 Final, EU Stage IV Ratings							
A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating	E Rating			
bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm			
TA (ATAAC)							
287 385 1800-	309 415 1800-	328 440 1800-	354 475 1800-	388 520 1800-			
2100	2100	2100	2100	2100			

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV



#### **Specifications**

Multiple customizable configuration options available

#### **Standard Emissions Control Equipment**

- · Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - **DOC**: Diesel Oxidation Catalyst
  - **DPF**: Diesel Particulate Filter
- NRS: NOx Reduction System

#### **Specifications**

-p	-							
	U.S. EPA Tier 4 Final, EU Stage IV							
PETU Configuration Standard Configuration up to 48.4 L (51.1 U.S. qt								
Approximate Dimen	sions:							
Length	1077 mm (42.4 in)	854 mm (33.6 in)						
Width	1069 mm (42.1 in)	287 mm (11.3 in)						
Height	654 mm (25.7 in)	551 mm (21.7 in)						
	212 kg (467 lbs)							

#### **Standard Emissions Control Equipment**

- Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - **DOC**: Diesel Oxidation Catalyst
  - **DPF**: Diesel Particulate Filter
- ECU: Aftertreatment Electronic Control Unit
- NRS: NOx Reduction System
- PETU: Pump Electronic Tank Unit
- SCR: Selective Catalytic Reduction



ENGINE

#### **Specifications**

	U.S. EPA Tier 4 Interim, EU Stage IIIB	U.S. EPA Tier 4 Final, EU Stage IV				
Engine Configuration	In-Line 6, Diesel	In-Line 4, Diesel				
Bore x Stroke	137 x 171 mm (5.4 x 6.73 in)	137 x 171 mm (5.4 x 6.73 in)				
Displacement	15.2 liters (927.6 in³)	15.2 liters (927.6 in <sup>3</sup> )				
Ship Weight	1666 kg (3673 lbs)	1542 kg (3395.5 lbs)				
Approximate Dimensions:						
Length	1438 mm (56.6 in)	1438 mm (56.6 in)				
Width	943 mm (37.1 in)	969 mm (38.1 in)				

... 1239 mm (48.8 in) .................. 1248 mm (49.1 in)

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating
bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm
TA (ATAAC)			
354 475 1800-	354 475 1800-	403 540 1800-	433 580 1800-
2100	2100	2100	2100

#### U.S. EPA Tier 4 Final, EU Stage IV Ratings A Rating **B** Rating C Rating D Rating (Continuous) (Intermittent) bkW bhp rpm bkW bhp rpm bkW bhp rpm bkW bhp rpm TΑ 354 475 1800-354 475 1800-403 540 1800-433 580 1800-2100 2100 2100 2100

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV

POWER UNIT



#### **Specifications**

Bore x Stroke Displacement	U.S. EPA Tier 4 Interim, EU Stage IIIB In-Line 6, Diesel	In-Line 6, Diesel 137 x 171 mm (5.39 x 6.73 in) 15.2 liters (927.6 in³)
Approximate Dimensions	:	
Length	2172 mm (85.5 in)	2488 mm (98.0 in)
Width	1180 mm (46.5 in)	1229 mm (48.4 in)
Height	1912 mm (75.3 in)	2006 mm (79.0 in)

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating
bkW bhp rpm TA (ATAAC)	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm
354 475 1800-	354 475 1800-	403 540 1800-	433 580 1800-
2100	2100	2100	2100

#### **U.S. EPA Tier 4 Final, EU Stage IV Ratings**

A Rating (Continuous)		В	Ratir	ıg	C Rating D Rat (Intermittent)		Ratii	ng			
bkW I	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
354	475	1800-	354	475	1800-	403	540	1800-	433	580	1800-
		2100			2100			2100			2100

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV



#### **Specifications**

U.S. EPA Tier 4 Interim, EU Stage IIIB

Approximate Dimensions:

 Length.
 1053 mm (41.5 in)

 Width
 779.8 mm (30.7 in)

 Height
 451.3 mm (17.8 in)

 Weight
 180 kg (397 lbs)

 Diameter
 330.2 mm (13 in)

Multiple customizable configuration options available

#### **Standard Emissions Control Equipment**

- Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - Doc: Diesel Oxidation Catalyst
  - **DPF**: Diesel Particulate Filter
- NRS: NOx Reduction System

#### **Specifications**

U.S. EPA Tier 4 Final, EU Stage IV									
	IND-A & IND-B Ratings	IND-C & IND-D Ratings	PETU Configuration up to 48.4 L (51.1 U.S. qt)						
Approximate	Dimensions:								
Length	1077 mm (42.4 in)	1153 mm (45.4 in)	854 mm (33.6 in)						
Width	1069 mm (42.1 in)	1112 mm (43.8 in)	287 mm (11.3 in)						
Height	654 mm (25.7 in)	652 mm (25.7 in)	551 mm (21.7 in)						
Weight	256 kg (564.4 lbs)	268 kg (590.8 lbs)	19.42 kg (42.8 lbs)						
Diameter	330.2 mm (13 in)	355 6 mm (14 in)							

#### **Standard Emissions Control Equipment**

- Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - **DOC**: Diesel Oxidation Catalyst
  - DPF: Diesel Particulate Filter
- ECU: Aftertreatment Electronic Control Unit
- NRS: NOx Reduction System
- PETU: Pump Electronic Tank Unit
- SCR: Selective Catalytic Reduction

## C18 ACERT

#### ENGINE



#### **Specifications**

Bore x Stroke	U.S. EPA Tier 4 Interim, EU Stage IIIB In-Line 6, Diesel	In-Line 6, Diesel 145 x 183 mm (5.71 x 7.2 in) 18.1 liters (1104.5 in³)
<b>Approximate Dimensions</b>	:	
Length	1438 mm (56.6 in)	1438 mm (56.6 in)
Width	943-1132 mm (37.1-44.6 in)	969-1132 mm (38.1-44.6 in)
Height	1239-1356 mm (48.8-53.4 in)	1248-1356 mm (49.1-53.4 in)

#### U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

	A Rating (Continuous)			E	3 Ratii	ng	C Rating (Intermittent)		
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA (ATAAC)									
	447	600	1800-1900	447	600	1800-1900	470	630	1800-1900
TTA (ATAAC)									
	_	_	_	_	_	_	522	700	1800-1900

#### **U.S. EPA Tier 4 Interim Ratings**

C Rating (Intermittent)				D R	D Rating		
TTA (ATAAC)	bkW	bhp	rpm	bkW t	ahc	rpm	
	563	755	1800-1900	597 8	00	1800-1900	

#### U.S. EPA Tier 4 Final, EU Stage IV Ratings

A Rating (Continuous)			E	3 Ratin	g	C Rating (Intermittent)			
bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm		
TA (ATAAC)									
429	575 1	800-2000	447	600	1800-2000	470	630 1800-2000		

#### **U.S. EPA Tier 4 Final Ratings**

	C Rating (Intermittent)				Rating	g
TTA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm
	563	755	1800	597	800	1800

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV. Nonroad engines greater than 560 kW (750 hp) are not currently subject to EU emission standards.



### C18 ACERT

POWER UNIT

#### **Specifications**

	U.S. EPA Tier 4 Interim, EU Stage IIIB	U.S. EPA Tier 4 Final, EU Stage IV
Engine Configuration	In-Line 6, Diesel	In-Line 6, Diesel
Bore x Stroke	145 x 183 mm (5.71 x 7.2 in)	145 x 183 mm (5.71 x 7.2 in)
Displacement	18.1 liters (1104.5 in <sup>3</sup> )	18.1 liters (1104.5 in <sup>3</sup> )
Ship Weight	2113 kg (4658 lbs)	2650 kg (5842 lbs)
Approximate Dimension	s:	
Length	2172 mm (85.5 in)	2532 mm (99.7 in)
Width	1180 mm (46.5 in)	1241 mm (48.9 in)
Height	1912 mm (75.3 in)	2006 mm (79.0 in)

## U.S. EPA Tier 4 Interim, EU Stage IIIB Ratings

A Rating (Continuous)							C Rating termitte	ating mittent)	
bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
TA (ATAA	C)								
447	600	1800-	447	600	1800-	470	630	1800-	
		1900			1900			1900	

#### U.S. EPA Tier 4 Final, EU Stage IV Ratings

A Rating (Continuous)			E	Ratin	g	C Rating (Intermittent)				
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
	TA (ATAA	C) .	•			-		•	-	
	429	575	1800-	447	600	1800-	470	630	1800-	
			2000			2000			2000	

Emission standards: U.S. EPA Tier 4 Interim or U.S. EPA Tier 4 Final, EU Stage IIIB or EU Stage IV

# C18 ACERT



#### **Specifications**

Multiple customizable configuration options available

#### **Standard Emissions Control Equipment**

- · Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - **DOC**: Diesel Oxidation Catalyst
  - **DPF**: Diesel Particulate Filter
- NRS: NOx Reduction System

#### **Specifications**

	U.S. EPA Tier 4 Final, EU Stage IV						
	Standard Configuration	PETU Configuration up to 48.4 L (51.1 U.S. qt)					
Approximate Dimer	isions:	•					
Length	1153 mm (45.4 in)	854 mm (33.6 in)					
Width	1112 mm (43.8 in)	287 mm (11.3 in)					
	652 mm (25.7 in)						

#### **Standard Emissions Control Equipment**

- · Cat Regeneration System
- CEM: Clean Emissions Module, including:
  - DOC: Diesel Oxidation Catalyst
  - DPF: Diesel Particulate Filter
- ECU: Aftertreatment Electronic Control Unit
- NRS: NOx Reduction System
- PETU: Pump Electronic Tank Unit
- SCR: Selective Catalytic Reduction



# Fire Pump

#### **Specifications**

C18 ACERT

Engine Configuration . . . In-Line 6, Diesel

 Bore x Stroke
 145 x 183 mm (5.71 x 7.2 in)

 Displacement
 18.1 liters (1104.53 in³)

 Ship Weight
 1953 kg (4306 lbs)

**Approximate Dimensions:** 

 Length.
 1889 mm (74.4 in)

 Width.
 1081.7 mm (42.6 in)

 Height.
 1379.6 mm (54.3 in)

## C18 ACERT Fire Pump Ratings FM Approved, UL Listed

1500 rpm bkW bhp Tier 2	1750 bkW	•	1900 bkW	rpm bhp	2100 rpm bkW bhp
	597	800	597	800	597 800
Tier 3					
	522	700	522	700	522 700
	447	600	447	600	447 600

Emission standards: U.S. EPA Tier 3 or U.S. EPA Tier 2 emission standards for stationary emergency fire pump engines. FM, UL, and NFPA standards.

## C27 ACERT | C32 ACERT

ENGINES

C32 ACERT™



#### **Specifications**

Bore x Stroke Displacement	C27 ACERT U.S. EPA Tier 4 Interim V-12, Diesel	V-12, Diesel 145.0 x 162 mm (5.71 x 6.38 in) 32.1 liters (1959 in³)
Width	1874 mm (73.8 in)	1600 mm (63.0 in)

#### **C27 ACERT U.S. EPA Tier 4 Interim Ratings**

A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating
bkW bhp rpn TA (ATAAC)	n bkW bhp rp	m bkW bhp rpm	bkW bhp rpm
597 800 180	0- 653 875 180	00- 709 950 1800	)- 783 1050 1800-
210	0 21	00 2100	2100

# C32 ACERT U.S. EPA Tier 4 Interim Ratings

B Rating		C Rating D Ratin (Intermittent)		Ratin	g			
bkW TA (AT		rpm	bkW	bhp	rpm	bkW	bhp	rpm
709	950	1800-	839	1125	1800-	895	1200	1800-
		2100			2100			2100

Emission standards: U.S. EPA Tier 4 Interim. Nonroad engines greater than 560 kW (750 hp) are not currently subject to EU emission standards.



C0.5 C0.7

ENGINES

#### **Specifications**

Bore x Stroke Displacement	C0.5 U.S. EPA Tier 4 Interim Equivalent In-Line 2, Diesel	In-Line 3, Diesel 67 x 72 mm (2.6 x 2.8 in 0.76 liters (46.4 in <sup>3</sup> )
Approximate Dimension	s:	
Length	407 mm (16.00 in)	480 mm (18.9 in)
Width	371 mm (14.60 in)	371 mm (14.6 in)
Height	523 mm (20.60 in)	528 mm (20.8 in)

#### C0.5 U.S. EPA Tier **4 Interim Equivalent Ratings**

		C Rating (Intermittent)	
	bkW	bhp	rpm
NA			
	8.2	11.0	2800
	8.8	11.8	3000
	10.2	13.7	3600

#### CO.7 U.S. EPA Tier **4 Interim Equivalent** Ratings

C Rating (Intermittent)				
	bkW	bhp	rpm	
NA				
	12.2	16.4	2800	
	13.2	17.7	3000	
	15.3	20.5	3600	

Emission standards: U.S. EPA Tier 4 Interim equivalent Available using EPA (U.S.) Flexibility, and for other regulated and non-regulated areas.

## C1.1 C1.5

ENGINES



#### **Specifications**

	C1.1 U.S. EPA Tier 4 Interim Equivalent	C1.5 U.S. EPA Tier 4 Interim Equivalent
Engine Configuration	. In-Line 3, Diesel	
	. 77 x 81 mm (3.0 x 3.2 in)	*
Displacement	. 1.1 liters (69 in <sup>3</sup> )	. 1.496 liters (91 in³)
Ship Weight (NA)	. 87 kg (191 lbs)	. 149 kg (328 lbs) <b>(NA)</b> 156.5 kg (345 lbs) <b>(T)</b>
<b>Approximate Dimensio</b>	ns:	_
Length	. 491 mm (19.33 in)	. 572 mm (22.50 in) (NA, T)
Width	. 400 mm (15.7 in)	. 453 mm (17.8 in) (NA)
		512 mm (20.2 in) (T)
Height	. 576 mm (22.7 in)	. 643 mm (25.30 in) (NA. T)

#### C1.1 U.S. EPA Tier 4 Interim Equivalent **Ratings**

# C Rating

	(Intermittent)				
	bkW	bhp	rpm		
NA	Std/Derate	Std/Derate			
	14.7 / 13.7	19.7 / 18.4	2200		
	17.3 / 16.1	23.2 / 21.6	2600		
	18.5 / 16.8	24.8 / 22.6	2800		
	19.7 / 17.7	26.4 / 23.7	3000		
	21 በ	28.2	3400		

#### C1.5 U.S. EPA Tier **4 Interim Equivalent Ratings**

		C Rating (Intermittent)		
	bkW	bhp	rpm	
NA				
	20.9	28	2200	
	22.3	29.9	2400	
	23.4	31.4	2600	
	24.4	32.7	2800	
	25.1	33.7	3000	
T				
	23.1	31	2200	
	25.2	33.8	2400	
	27.3	36.6	2600	
	29.4	39.4	2800	
	30.0	40.2	3000	

Emission standards: U.S. EPA Tier 4 Interim equivalent

# C1.1 | C1.5

#### **POWER UNITS**

#### **Specifications**

	C1.1 U.S. EPA Tier 4 Interim Equivalent	C1.5 U.S. EPA Tier 4 Interim Equivalent
Engine Configuration	. In-Line 3, Diesel	In-Line 3, Diesel
Bore x Stroke	. 77 x 81 mm (3.0 x 3.2 in)	84 x 90 mm (3.3 x 3.5 in)
Displacement	. 1.1 liters (69 in <sup>3</sup> )	1.496 liters (91 in <sup>3</sup> )
Ship Weight (NA)	. 129 kg (284 lbs)	175 kg (385.8 lbs)
Approximate Dimension	is:	
Length	. 778 mm (30.6 in)	820 mm (32.3 in)
Width	. 438 mm (17.2 in)	497 mm (19.6 in)
Height	. 730 mm (28.7 in)	793 mm (31.2 in)

#### C1.1 U.S. EPA Tier 4 Interim Equivalent Ratings

C Rating (Intermittent)				
NA	bkW	bhp	rpm	
	17.9	24	3000	

#### C1.5 U.S. EPA Tier 4 Interim Equivalent Ratings

(Intermittent)					
NA	bkW	bhp	rpm		
	24.2	32.5	3000		

Emission standards: U.S. EPA Tier 4 Interim equivalent

## C1.6 C1.7

ENGINES



#### **Specifications**

Bore x Stroke Displacement	C1.6 U.S. EPA Tier 4 Interim Equivalent In-Line 4, Diesel	In-Line 3, Diesel 84 x 100 mm (3.3 x 3.9 in) 1.66 liters (101 in <sup>3</sup> )
Approximate Dimension	s:	
Length	591 mm (23.30 in)	564 mm (22.2 in)
Width	420 mm (16.5 in)	453 mm (17.8 in)
Height	576 mm (22.70 in)	654 mm (25.7 in)

#### C1.6 U.S. EPA Tier 4 Interim Equivalent Ratings

C Rating (Intermittent)						
bkW bhp rpm						
NA				_		
	24.6	33.0	2800			
	26.5	35.5	3000			

#### C1.7 U.S. EPA Tier 4 Interim Equivalent Ratings

	C Rating (Intermittent)				
bkW bhp rpm					
NA					
	23.6	31.6	2400		
	26.1	35.0	2600		

Emission standards: U.S. EPA Tier 4 Interim equivalent



C3.4

C2.2 C3.4

ENGINES

#### **Specifications**

C2.2 U.S. EPA Tier 4 C3.4 U.S. EPA Tier 3 Interim Equivalent. Equivalent, EU Stage IIIA EU Stage IIIA Equivalent Equivalent Engine Configuration . . In-Line 4, Diesel. . . . . . . . .. In-Line 4, Diesel Ship Weight . . . . . . . . 184 kg (406 lbs) (NA) 194 kg (427.7 lbs) (T, TA) . . . . 265 kg (584 lbs) (T)

Approximate Dimensions:

660 mm (26.0 in ) (T. TA)

... 459 mm (18.1 in) (NA) ...... 590 mm (23.2 in) High Turbo 531 mm (21.0 in) (T, TA) . . . . . 649 mm (25.5 in) Low Turbo

769 mm (30.3 in) Low Turbo

#### C2.2 U.S. EPA Tier 4 Interim Equivalent, **EU Stage IIIA Equivalent Ratings**

C Rating (Intermittent) hkW bhp rpm NA Std/Derate Std/Derate 31.0 41.6 2200 34 1 45 7 2400 35.7 / 31.4 47.9 / 42.1 2600 37.3 / 32.8 50.0 / 43.9 2800 38.0 / 34.0 51.0 / 45.6 3000 т 40 / 36.3 53.3 / 48.7 2800 43 57 7 2600 447 60 0 2800 45.5 61 0 3000 TA (ATAAC) 49.3 66.1 2800

#### C3.4 U.S. EPA Tier 3 Equivalent, EU Stage **IIIA Equivalent Ratings**

C Rating (Intermittent)							
т	bkW	bhp	rpm				
	62	83	2500				

Emission standards: U.S. EPA Tier 4 Interim equivalent or U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent

Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

# C2.2 POWER UNIT

#### **Specifications**

U.S. EPA Tier 4 Interim Equivalent,

EU Stage IIIA Equivalent

 Engine Configuration
 In-Line 4, Diesel

 Bore x Stroke
 84 x 100 mm (3.3 x 3.9 in)

 Displacement
 2.2 liters (135 in³)

 Ship Weight
 218 kg (480 lbs) (NA)

 228 kg (502 lbs) (T)

Approximate Dimensions:

 Length.
 946 mm (37.24 in) (NA)

 973 mm (38.3 in) (T)

 Width
 513 mm (20.3 in) (NA)

 590 mm (23.23 in) (T)

 Height
 854 mm (33.62 in) (NA)

 973 mm (38.3 in) (T)

#### U.S. EPA Tier 4 Interim Equivalent, EU Stage IIIA Equivalent Ratings

	(	C Rating Intermittent	t)
NA	bkW	bhp	rpm
	37	49.6	3000
Т			
	41.7	55.9	2800

Emission standards: U.S. EPA Tier 4 Interim equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.



# 3054C

#### **Specifications**

U.S. EPA Tier 2 Equivalent,

EU Stage II Equivalent

Engine Configuration . . . In-Line 4, Diesel

 Displacement
 4.4 liters (269 in³)

 Ship Weight
 291 kg (640 lbs) (NA)

306 kg (674.6 lbs) (**T, TA**)

**Approximate Dimensions:** 

620 mm (24.4 in) (**TA**)

#### U.S. EPA Tier 2 Equivalent, EU Stage II Equivalent Ratings

		C Rating (Intermittent	)
NA	bkW	bhp	rpm
	52-64	69.7- 85.8	2000-2400
T			
	62-74.5	83-99.9	2000-2400
TA (ATAAC)			
	78-97	104.5-130	2000-2300

Emission standards: U.S. EPA Tier 2 equivalent, EU Stage II equivalent Available for other regulated and non-regulated areas.

# C4.4



#### **Specifications**

U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent
Engine Configuration ... In-Line 4, Diesel
Bore x Stroke ... ... 105 x 127 mm (4.1 x 5.0 in)
Displacement ... 4.4 liters (269 in³)
Ship Weight ... 291 kg (640 lbs) (NA)
306 kg (674.6 lbs) (T, TA)
Approximate Dimensions:

 Length
 663 mm (26.1 in) (NA, T, TA)

 Width
 470 mm (18.5 in) (NA)

 597 mm (23.5 in) (T)
 620 mm (24.4 in) (TA)

 Height
 810 mm (31.9 in) (NA, T)

 775 mm (30.5 in) (TA)

#### U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

		C Rating (Intermittent)	
NA	bkW	bhp	rpm
	54-56	72.4-75	2200
T			
	55.5-74.5	74.4-99.9	2200-2400
TA (ATAAC)			
	68-83	91.2-111.3	2200-2400

Emission standards: U.S. EPA Tier 3 equivalent (T, TA), EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas. Naturally Aspirated ratings available using EU Flexibility.

# C4.4

#### **Specifications**

U.S. EPA Tier 3 Equivalent,

**EU Stage IIIA Equivalent** 

Engine Configuration . . . In-Line 4, Diesel

Bore x Stroke . . . . . . . . . 105 x 127 mm (4.1 x 5.0 in)

 Displacement
 4.4 liters (269 in³)

 Ship Weight
 465 kg (1025 lbs) (NA)

**Approximate Dimensions:** 

 Length
 1260 mm (49.6 in)

 Width
 734 mm (28.9 in)

 Height
 964 mm (38 in)

#### U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

C Rating (Intermittent)				
bkW	bhp	rpm		
61-68	81.8-91	2200		
74.5-81	99.9-108.6	2200		
	61-68	<b>bkW bhp</b> 61-68 81.8-91		

Emission standards: U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

# **C4.4 ACERT**

ENGINE



#### **Specifications**

U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 4, Diesel

**Approximate Dimensions:** 

 Length
 631 mm (24.8 in) (T, TA)

 Width
 626 mm (24.65 in) (T, TA)

 Height
 823.5 mm (32.4 in) (T)

 958 mm (37.72 in) (TA)

#### U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

	C Rating (Intermittent)				
	bkW	bhp	rpm		
T					
	61.5-74.5	82.5-99	2200		
TA (ATAAC)	·				
	74.5-106	99.5-142	2200		

Emission standards: U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

# C4.4 ACERT

**POWER UNIT** 

#### **Specifications**

U.S. EPA Tier 3 Equivalent,

EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 4, Diesel

Bore x Stroke . . . . . . . 105 x 127 mm (4.1 x 5.0 in)

 Displacement
 4.4 liters (269 in³)

 Ship Weight
 520 kg (1146 lbs)

**Approximate Dimensions:** 

 Length
 1358 mm (53.5 in)

 Width
 749 mm (29.5 in)

 Height
 963 mm (37.9 in)

#### U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

		C Rating (Intermittent)		
	bkW	bhp	rpm	
TA (ATAAC)				
	96.5	129.4	2200	

Emission standards: U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

### **C6.6 ACERT**

ENGINE



U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent

Engine Configuration. . . In-Line 6, Diesel

**Bore x Stroke** . . . . . 105 x 127 mm (4.1 x 5.0 in))

**Approximate Dimensions:** 

 Length.
 929 mm (36.6 in)

 Width
 668 mm (26.3 in)

 Height
 797 mm (31.4 in)

#### U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

Emission standards: U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

<sup>\*</sup>Specific Application

# C6.6 ACERT

POWER UNIT

#### **Specifications**

U.S. EPA Tier 3 Equivalent,

EU Stage IIIA Equivalent

Engine Configuration. . . In-Line 6. Diesel

Ship Weight (TA) . . . . . 709 kg (1563 lbs)

**Approximate Dimensions:** 

 Length.
 1708 mm (67.23 in)

 Width
 767 mm (30.2 in)

 Height
 1144 mm (45.0 in)

#### U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

C Rating (Intermittent) bkW bhp rpm TA (ATAAC) 129.5 173.7 2200 130 174.3 2500 151 202.5 1800 151 202.5 2200 168 225.3 2200

Emission standards: U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

### **C7 ACERT**

ENGINE



#### **Specifications**

China Stage II,

U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 6, Diesel

 Displacement
 7.2 liters (442 in³)

 Ship Weight
 588 kg (1296 lbs)

Approximate Dimensions:

 Length
 1053 mm (41.5 in)

 Width
 758 mm (29.8 in)

 Height
 1032 mm (40.6 in)

#### China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

B Kating		(Intermittent)		D Kating					
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
	TA (AT	AAC)							
Ī	168	225	1800-	186	250	1800-	224	300	2100-
			2200			2200			2200
Ī	_	_	_	205	275	1800-	_	_	_
						2200			

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

# C7 ACERT

#### **Specifications**

China Stage II.

U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 6. Diesel

 Displacement
 7.2 liters (442 in³)

 Ship Weight
 1250 kg (2756 lbs)

**Approximate Dimensions:** 

 Length.
 2029.5 mm (79.9 in)

 Width
 974.8 mm (38.4 in)

 Height
 1986.3 mm (78.2 in)

#### China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

B Rating			C Rating (Intermittent)		D Rating			
bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA (AT	AAC)							
168	225	1800-	186	250	1800-	_	_	
		2200			2200			
_	_	_	205	275	1800-	_	_	
					2200			

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

# C7.1



#### **Specifications**

China Stage II,

U.S. EPA Tier 2 Equivalent EU Stage II Equivalent

Engine Configuration . . . In-Line 6, Diesel

 Displacement
 7.01 liters (427.7 in³)

 Ship Weight
 506 kg (1115 lbs)

**Approximate Dimensions:** 

 Length.
 929 mm (35.5 in)

 Width
 668 mm (26.2 in)

 Height
 797 mm (31.4 in)

#### China Stage II, U.S. EPA Tier 2 Equivalent, EU Stage II Equivalent Ratings

C Rating (Intermittent)							
	bkW	bhp	rpm				
TA		-	-				
	105	140	2200				
	112	150	1950				
	129	172	2200				
	137	183	2200				
	145	194	2200				
	162	220	2200				



# C7.1 ACERT

ENGINE

#### **Specifications**

China Stage II,

U.S. EPA Tier 3 Equivalent EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 6. Diesel

Bore x Stroke . . . . . . 105 x 135 mm (4.13 x 5.3 in)

 Displacement
 7.01 liters (427.7 in³)

 Ship Weight
 524 kg (1155 lbs)

Approximate Dimensions:

 Length
 929 mm (36.5 in)

 Width
 725 mm (28.5 in)

 Height
 835 mm (32.87 in)

#### China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

		C Rating (Intermittent)		
	bkW	bhp	rpm	
TA				
	116	156	2200	
	129	173	2200	
	130	174	2500	
	151	202	2200	
	159	215	2200	
	162	217	2200	
	168	225	2200	
	186	250	2200	
	205	275	2200	

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent. In production October, 2013.

## **C9 ACERT**

ENGINE



#### **Specifications**

China Stage II, U.S. EPA Tier 3 Equivalent or

U.S. EPA Tier 2 Equivalent, EU Stage IIIA Equivalent

or EU Stage II Equivalent

Engine Configuration . . . In-Line 6, Diesel

**Bore x Stroke..........** 112 x 149 mm (4.41 x 5.87 in)

 Displacement
 8.8 liters (537 in³)

 Ship Weight
 864 kg (1905 lbs)

**Approximate Dimensions:** 

 Length
 1091 mm (43 in)

 Width
 827 mm (32.6 in)

 Height
 1023 mm (40.3 in)

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating
bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm
TA (ATAAC)			
205 275 1800-	223 300 1800-	242 325 1800-	280 375 1800-
2200	2200	2200	2200
		261 350 1800-	
		2200	

### China Stage II, U.S. EPA Tier 2 Equivalent, EU Stage II Equivalent Ratings

	A Rating (Continuous)				C Rating (Intermittent)			
	bkW	bhp	rpm	bkW	bhp	rpm		
TA (ATAAC	)							
	223	300	1800-2200	261	350	1800-2200		

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent or U.S. EPA Tier 2 equivalent, EU Stage IIIA equivalent or EU Stage II equivalent

Available for other regulated and non-regulated areas. U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent also available using EPA (U.S.) Flexibility and EU Flexibility.

# C9 ACERT

#### **Specifications**

China Stage II, U.S. EPA Tier 3 Equivalent or

U.S. EPA Tier 2 Equivalent, EU Stage IIIA Equivalent

or EU Stage II Equivalent

Engine Configuration . . . In-Line 6, Diesel

 Displacement
 8.8 liters (537 in³)

 Ship Weight
 1490 kg (3285 lbs)

**Approximate Dimensions:** 

 Length.
 2174.4 mm (85.81 in)

 Width.
 987.8 mm (38.89 in)

 Height.
 2008.1 mm (79.06 in)

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

	A Rating B (Continuous)			Rati	Rating (I			C Rating Intermittent)		
bkW TA (AT			bkW	bhp	rpm	bkW	bhp	rpm		
205	275	1800-2200	223	300	1800-2200	242	325	1800-2200		
_	_	_	_	_	_	261	350	1800-2200		

### China Stage II, U.S. EPA Tier 2 Equivalent, EU Stage II Equivalent Ratings

A Rating (Continuous)					i <b>ng</b> ttent)	
	bkW	bhp	rpm	bkW	bhp	rpm
TA (ATAAC	;)					
	223	300	1800-2200	261	350	1800-2200

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent or U.S. EPA Tier 2 equivalent, EU Stage IIIA equivalent or EU Stage II equivalent

Available for other regulated and non-regulated areas. U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent also available using EPA (U.S.) Flexibility and EU Flexibility.

# C11 ACERT

ENGINE



#### **Specifications**

China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 6, Diesel

Bore x Stroke . . . . . . 130 x 140 mm (5.12 x 5.51 in)

 Displacement
 11.1 liters (677 in³)

 Ship Weight
 930 kg (2050 lbs)

**Approximate Dimensions:** 

 Length.
 1203 mm (47.4 in)

 Width
 1054 mm (41.5 in)

 Height
 1186 mm (46.7 in)

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

A Rating (Continuous)	B Rating	C Rating (Intermittent)	D Rating	E Rating	
bkW bhp rpm TA (ATAAC)	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	
242 325 1800-	261 350 1800-	287 385 1800-	313 420 1800-	336 450 1800-	
2100	2100	2100	2100	2100	

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

# C11 ACERT

**POWER UNIT** 

#### **Specifications**

China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 6, Diesel

 Approximate Dimensions (engine only):

 Length.
 1203 mm (47.4 in)

 Width
 1054 mm (41.5 in)

 Height.
 1186 mm (46.7 in)

### China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

		<b>Ratin</b> ntinuo		В	B Rating		C (Int			
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
TA (ATAAC)										
	242	325	1800-	261	350	1800-	287	385	1800-	
			2100			2100			2100	

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

ENGINE



#### **Specifications**

China Stage II, U.S. EPA Tier 3 Equivalent or

U.S. EPA Tier 2 Equivalent, EU Stage IIIA Equivalent

or EU Stage II Equivalent

Engine Configuration . . . In-Line 6, Diesel

Ship Weight ...... 908.4 kg (2002.7 lbs)

**Approximate Dimensions:** 

 Length.
 1295 mm (50.98 in)

 Width.
 1186 mm (46.69 in)

 Height.
 1053.8 mm (41.49 in)

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

	Ratir ntinu		В	Ratin	ıg		Ratir ermitt		<b>D Rating</b>		E Rating		
bkW TA (AT		rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm	bkW	bhp rpm	
287	385	1800-	310	415	1800-	328	440	1800-	354	475 1800-	388	520 1800-	
		2100			2100			2100		2100		2100	

# China Stage II, U.S. EPA Tier 2 Equivalent, EU Stage II Equivalent Ratings

	В	Ratin	<b>C Rating</b> (Intermittent)				
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	
	310	415	1800-2100	328	440	1800-2100	

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent or U.S. EPA Tier 2 equivalent, EU Stage IIIA equivalent or EU Stage II equivalent

Available for other regulated and non-regulated areas. U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent also available using EPA (U.S.) Flexibility and EU Flexibility.

**POWER UNIT** 

#### **Specifications**

China Stage II, U.S. EPA Tier 3 Equivalent or

U.S. EPA Tier 2 Equivalent, EU Stage IIIA Equivalent

or EU Stage II Equivalent

Engine Configuration . . . In-Line 6, Diesel

Ship Weight ........... 1692 kg (3730 lbs)

**Approximate Dimensions:** 

 Length.
 1295 mm (50.98 in)

 Width
 1186 mm (46.69 in)

 Height
 1053.8 mm (41.49 in)

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

		Ratir ntinuo		B Rating		g	C Rating (Intermittent)		
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA (ATAAC)									
	287	385	1800-	310	415	1800-	328	440	1800-
			2100			2100			2100

# China Stage II, U.S. EPA Tier 2 Equivalent, EU Stage II Equivalent Ratings

В		C Rat termi	ing ttent)			
bkW TA (ATAAC)	bhp	rpm	bkW	bhp	rpm	
	415	1800-2100	328	440	1800-2100	

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent or U.S. EPA Tier 2 equivalent, EU Stage IIIA equivalent or EU Stage II equivalent

Available for other regulated and non-regulated areas. U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent also available using EPA (U.S.) Flexibility and EU Flexibility.

ENGINE



#### **Specifications**

China Stage II, U.S. EPA Tier 3

Equivalent, EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 6, Diesel

Bore x Stroke . . . . . . 137.2 x 171.4 mm (5.4 x 6.75 in)

**Approximate Dimensions:** 

 Length.
 1377 mm (54.2 in)

 Width.
 926 mm (36.5 in)

 Height.
 1226 mm (48.3 in)

### China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

A Rating (Continuous)			B Rating			C Rating (Intermittent)			D Rating			E Rating		
bkW bhp rpm TA (ATAAC)			bkW bhp rpm			bkW bhp rpm			bkW bhp rpm			bkW bhprpm		
328	440	1800-	354	475	1800-	403	540	1800-	433	580	1800-	444	595	1800-
		2100			2100			2100			2100			2100

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

# C15 ACERT

### **Specifications**

China Stage II, U.S. EPA Tier 3

**Equivalent, EU Stage IIIA Equivalent** 

Engine Configuration . . . In-Line 6, Diesel

Bore x Stroke . . . . . . . . 137.2 x 171.4 mm (5.4 x 6.75 in)

**Approximate Dimensions:** 

 Length.
 2447.7 mm (96.4 in)

 Width.
 1316.6 mm (51.8 in)

 Height.
 2629.5 mm (103.5 in)

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

	A Rating (Continuous)			В	Ratin	g	C Rating (Intermittent)		
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
	328	440	1800-	354	475	1800-	403	540	1800-
			2100			2100			2100

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent Available using EPA (U.S.) Flexibility and EU Flexibility, and for other regulated and non-regulated areas.

## C18 ACERT

ENGINE



### **Specifications**

China Stage II, U.S. EPA Tier 3 Equivalent, EPA Tier 2 Equivalent, EU Stage IIIA Equivalent

Engine Configuration . . . In-Line 6, Diesel

**Approximate Dimensions:** 

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

A Rating (Continuous)				B R	ating		C Rating (Intermittent)		
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm	
	429	575	1800-2100	447.5	600	1800-2100	470	630 1800-2100	
TTA (ATAAC)									
							522	700 1800-2100	

### U.S. EPA Tier 2 Equivalent Ratings

D	Ratin	g	E Rating			
bkW		•	bkW	bhp	rpm	
TTA (A)	(AAC	)				
571	765	1800-	597	800	1800-	
		2100			2100	

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent or U.S. EPA Tier 2 equivalent, EU Stage IIIA equivalent, or Non-certified Ratings below 560 bkW (751 bhp) available using EPA (U.S.) Flexibility and EU Flexibility, and for other global regulated and non-regulated areas. Ratings above 560 bkW (751 bhp) available using EPA (U.S.) Flexibility and for other global

regulated and non-regulated areas.

Non-certified Ratings											
	BR	ating		C Rating (Intermittent)							
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm			
	429	575	1800-2100	447.5	600	1800-2100	470	630 1800-2100			
TTA (ATAAC	TTA (ATAAC)										
	_	_	_	_	_	_	522	700 1800-2100			

# C18 ACERT

### **Specifications**

China Stage II, U.S. EPA Tier 3

**Equivalent, EU Stage IIIA Equivalent** 

Engine Configuration . . . In-Line 6, Diesel

 Bore x Stroke
 145 x 183 mm (5.71 x 7.2 in)

 Displacement
 18.1 liters (1104.53 in³)

 Ship Weight
 2197.1 kg (4843.7 lbs)

Approximate Dimensions (engine only):

 Length.
 1388 mm (54.6 in)

 Width
 921 mm (36.3 in)

 Height
 1243 mm (48.9 in)

## China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent Ratings

	A Rating (Continuous)		В	B Rating				C Rating (Intermittent)		
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
,	429	575	1800-	447.5	600	1800-	470	630	1800-	
			2100			2100			2100	

Non-certified Ratings											
	A Rating (Continuous)		B Rating			C Rating (Intermittent)					
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm		
TA (ATAAC)											
	429	575	1800-	447.5	600	1800-	470	630	1800-		
			2100			2100			2100		

Emission standards: China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA equivalent, or Non-certified

Ratings below 560 bkW (751 bhp) available using EPA (U.S.) Flexibility and EU Flexibility, and for other global regulated and non-regulated areas.

## C27 ACERT | C32 ACERT

ENGINES

C32 ACERT



### **Specifications**

2100

Bore x Stroke Displacement	C27 ACERT U.S. EPA Tier 2 Equivalent V-12, Diesel	V-12, Diesel 145.0 x 162 mm (5.71 x 6.38 in) 32.1 liters (1959 in³)
Approximate Dimensions	s:	
Length	1917 mm (75.5 in)	1917 mm (75.5 in)
Width	1464 mm (57.6 in)	1479 mm (58.2 in)
Height	1319 mm (51.9 in)	1319 mm (51.9 in)

C27 ACERT U.S. EPA Tier 2 Equivalent Ratings													
	Ratin ntinuo		В	Ratir	ıg		<b>Ratir</b> ermit	ı <b>g*</b> tent)	D	Ratii	ng	E R	ating
bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW bl	ıp rpm
TA (AT	AAC)												
597	800	1800-	653	875	1800-	708	950	1800-	783	1050	1800-	858 11	50 1800-

2100

C32 ACERT U.S. EPA Tier 2 Equivalent Ratings										
A Rating	A Rating B Rating		D Rating	E Rating						
bkW bhp rpm TA (ATAAC)	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	bkW bhp rpm						
	708 950 1800-	839 1125 1800-	895 1200 1800-	1007 1350 1800-						
	2100	2100	2100	2100						

2100

2100

2100

Emission standards: U.S. EPA Tier 2 equivalent

Available using EPA (U.S.) Flexibility, and for other global regulated and non-regulated areas.

<sup>\*</sup>Available in rear turbo configuration. Dimensions will vary.



# 3406C

### **Specifications**

Non-certified

Engine Configuration . . . In-Line 6, Diesel

Bore x Stroke . . . . . . . 137.2 x 165.1 mm (5.4 x 6.5 in)

 Displacement
 14.6 liters (893 in³)

 Ship Weight
 1300 kg (2866 lbs)

**Approximate Dimensions:** 

 Length.
 1660 mm (65.35 in)

 Width.
 906 mm (35.67 in)

 Height.
 1335 mm (52.56 in)

Non-certified Ratings											
		Ratin ermitt		D Ratin	g						
	bkW	bhp	rpm	bkW	bhp	rpm					
TA											
	298	400	1800	347	465	1800					
	343	460	2100	_	_	_					

# 3406C

### **Specifications**

Non-certified

Engine Configuration . . . In-Line 6, Diesel

Bore x Stroke . . . . . . 137.2 x 165.1 mm (5.4 x 6.5 in)

Displacement...... 14.6 liters (893 in<sup>3</sup>)

#### **Non-certified Ratings Irrigation Rating** C Rating D Rating (Intermittent) bkW bhp bhp rpm rpm bkW bkW bhp rpm TA 269 361 1800 328 440 2000 347 465 1800 306.5 411 1800 343 460 2100

Emission standards: Non-certified; Available for global non-regulated areas



*3512* 

# **3500** ENGINES

### **Specifications**

-		
	3508	3512
<b>Engine Configuration</b>	ı V8, Diesel	V-12, Diesel
Bore x Stroke	170 x 190 mm (6.7 x 7.5 in)	170 x 190 mm (6.7 x 7.5 in)
Displacement	34.5 liters (2105 in³)	51.8 liters (3158 in <sup>3</sup> )
Ship Weight	4309 kg (9500 lbs)	6078 kg (13 400 lbs)
Approximate Dimens	sions:	
Length	2136 mm (84 in)	2676 mm (105 in)

 Width
 1703 mm (67 in)
 1703 mm (67 in)

 Height
 1720 mm (68 in)
 1720 mm (68 in)

3516

 Displacement
 69 liters (4210 in³)

 Ship Weight
 7484 kg (16 499 lbs)

**Approximate Dimensions:** 

 Length
 3366 mm (133 in)

 Width
 1703 mm (67 in)

 Height
 1720 mm (68 in)

### 3508 Ratings

A (Co	Ratir ntinuo	i <b>g</b> ous)	C Rati (Intermit	
bkW	bhp	rpm	bkW bhp	rpm
TA				
507	680	1200	612 820	1300
578	775	1800	634 850	1800
638	855	1800	746 1000	1800

### 3516 Ratings

p rpm
5 1300
0 1800
)

Emission standards: Non-certified; Available for global non-regulated areas

### 3512 Ratings

_								
A Rating (Continuous)				Ratin ermitte				
	bkW	bhp	rpm	bkW	bhp	rpm		
TA	1							
	761	1020	1200	858	1150	1300		
	955	1280	1800	1119	1500	1800		
							Т	

## 3500B | 3500C

ENGINES



### **Specifications**

	3508B	3512B
Engine Configuration	V8, Diesel	V-12, Diesel
Bore x Stroke	170 x 190 mm (6.7 x 7.5 in)	170 x 190 mm (6.7 x 7.5 in)
Displacement	34.5 liters (2105 in <sup>3</sup> )	51.8 liters (3158 in <sup>3</sup> )
Ship Weight	4309 kg (9500 lbs)	6078 kg (13 400 lbs)
Approximate Dimensions	s:	

 Equivalent
 3516B

 Engine Configuration
 V-12, Diesel
 V-16, Diesel

 Bore x Stroke
 170 x 190 mm (6.7 x 7.5 in)
 170 x 190 mm (6.7 x 7.5 in)

 Displacement
 51.8 liters (3158 in³)
 69 liters (4210 in³)

 Ship Weight
 6078 kg (13 400 lbs)
 7484 kg (16 500 lbs)

**Approximate Dimensions:** 

 Length.
 3067 mm (120.8 in).
 3008 mm (119 in)

 Width.
 1785 mm (70.3 in).
 1443 mm (57 in)

 Height.
 1806 mm (71.1 in).
 1980 mm (78 in)

### **Mobile Equipment Ratings**

### 3508B Ratings

A Rating B Rating C Rating (Continuous) (Intermittent) bkW bhp rpm bkW bhp rpm bkW bhp rpm TA (ATAAC)

746 1000 1800 783 1050 1800 820 1100 1800

### 3512B Ratings

A Rating (Continuous)	B Rating	C Rating (Intermittent)
bkW bhp rpm TA(ATAAC)	bkW bhp rpm	bkW bhp rpm
1119 1500 1800	1174 1575 1800	1231 1650 1800

### 3516B Ratings

A Rating (Continuous)	B Rating	C Rating (Intermittent)	
bkW bhp rpm	bkW bhp rpm	bkW bhp rpm	
TA (SCAC)			
1492 2000 1800	1566 2100 1800	1640 2200 1800	

### 3512C U.S. EPA Tier 2 Equivalent Ratings

A Rating (Continuous)

bkW bhp rpm

TA (ATAAC)

1120 1500 1800

Emission standards: U.S. EPA Tier 2 equivalent or Non-certified

U.S. EPA Tier 2 ratings available using EPA (U.S.) Flexibility, and for other regulated and non-regulated areas. Non-certified ratings available for non-regulated areas.



3612

### 3600 ENGINES

### **Specifications**

Bore x Stroke Displacement	<b>3606</b> In-Line 6, Diesel	280 x 300 mm (11 x 11.8 in) 147.8 liters (9018 in³)
Approximate Dimension LengthWidth	3988 mm (157 in)	

<b>3612</b> V-12. Diesel	3616
2626 mm (103 in)	,

Bore x Stroke... 280 x 300 mm (11 x 11.8 in) . . . 280 x 300 mm (11 x 11.8 in) Displacement... 221.7 liters (13 527 in<sup>3</sup>) . . . . . . . 295.6 liters (18 036 in3) Ship Weight ... 25 140 kg (55 300 lbs) ...... 29 950 kg (65 900 lbs)

**Approximate Dimensions:** 

Length	4562 mm (180 in)	5482 mm (216 in
Width	1704 mm (67 in)	1704 mm (67 in)
Height	3231 mm (127 in)	3231 mm (127 in

### 3606 Ratings

#### Distillate A Rating (Continuous) bkW bhp rpm TΑ 1490 750 1998 2092 800 1560 1730 2319 900 1850 2481 1000

### 3612 Ratings

### Distillate A Rating (Continuous)

	bkW	bhp	rpm
TA		-	-
	2980	3996	750
	3120	4184	800
	3460	4640	900
	3700	4962	1000

### 3608 Ratings

### Distillate A Rating (Continuous) bkW bhp rpm TA 2080 2787 800 2300 3080 900 2460 3300 1000

### 3616 Ratings

### Distillate A Rating (Continuous)

	bkW	bhp	rpm	
1	ΓΑ			
	4160	5579	800	
	4600	6169	900	
	4920	6598	1000	

Emission standards: Non-certified: Available for global non-regulated areas

# Fire Pump



### **Specifications**

C18 ACERT

Engine Configuration . . . In-Line 6, Diesel

 Bore x Stroke
 145 x 183 mm (5.71 x 7.2 in)

 Displacement
 18.1 liters (1104.53 in³)

 Ship Weight
 1953 kg (4306 lbs)

Approximate Dimensions:

 Length.
 1889 mm (74.4 in)

 Width
 1081.7 mm (42.6 in)

 Height
 1379.6 mm (54.3 in)

C18 ACERT Fire Pump Ratings FM Approved, UL Listed						
1500 bkW Tier 2	•	1750 bkW	•		rpm bhp	2100 rpm bkW bhp
	_	597	800	597	800	597 800
Tier 3						
	_	522	700	522	700	522 700
	_	447	600	447	600	447 600
Non-c	ertified					

Emission standards: U.S. EPA Tier 3 or U.S. EPA Tier 2 for stationary emergency fire pump engines, or Non-certified. FM, UL, and NFPA standards.

Ratings below 560 bkW (751 bhp) conform with current EPA (U.S.) Tier 3 emission standards for stationary emergency fire pump engines. Ratings above 560 bkW (751 bhp) conform with current EPA (U.S.) Tier 2 emission standards for stationary emergency fire pump engines.

522 700



# Fire Pump

## **3406C Ratings FM Approved, UL Listed**In-line 6

1750 rpm bkW bhp TA		2100 rpm bkW bhp	2300 rpm bkW bhp	
	218* 292*	321* 430*	339 455	
	276 370	359 482		
	313* 420*			
	343 460			

<sup>\*3406</sup>C wet manifolds

Additional 3406C ratings with radiators are available, but not FM approved or III listed

## **3412C Ratings FM Approved, UL Listed**V-12

1750 rpm		1900 rpm		2100 rpm		
bkW bhp		bkW bhp		bkW	bhp	
_1	ΓΑ					
1	Α					

<sup>\*3412</sup>C wet manifolds

### 3508 Ratings Not FM Approved, Not UL Listed V-8

	1460 rpm		1750 rpm	
	bkW bhp		bkW	bhp
TA				
	709	950	794	1065

### 3512 Ratings Not FM Approved, Not UL Listed V-12

	1460 rpm		1750 rpm	
	bkW	bhp	bkW	bhp
TA				
	1066	1430	1193	1600

### 3516 Ratings Not FM Approved, Not UL Listed V-16

	1460 rpm		1750 rpm	
	bkW bhp		bkW	bhp
TA				
	1417	1900	1480	1985

Emission standards: Non-certified. Available for global non-regulated areas. FM, UL, and NFPA standards

# Label and NSPS Regulations

### **Label and NSPS Regulations for Gas Engines**

### **Stationary Use Only Label**

Effective January 2004, the U.S. EPA Non-road Mobile SI rule restricts
the use of SI gas engines within the United States. Cat gas engines are
not certified for mobile applications within the U.S. and are to be used
in stationary use only applications. All gas engines will have this label
attached regardless of the dealer placing the order.

### **U.S. EPA SI Stationary NSPS Rule (40CFR60)**

- · The rule applies to newly built engines.
- This standard regulates NOx, CO, and VOC in the United States for spark ignited natural gas engines. It is the customer's responsibility to coordinate and complete site emissions testing and submit for a U.S. EPA certificate of compliance.
- Effective July 1, 2010, the U.S. EPA will enforce "Stage 2" of the new Spark Ignited New Source Performance Standard (SI NSPS) for stationary engines rated equal to or above 500 bhp. Effective January 1, 2011, this standard will be required for engines rated below 500 hp.



# GAS ENGINES

### **Specifications**

Displacement	<b>G3304 (TA)</b> 121 x 152 mm (4.75 x 6.0 in)	10.5 liters (638 in <sup>3</sup> )
Approximate Dimen		
Length	1158 mm (46 in)	1539 mm (60 in)
Width	744 mm (29 in)	978 mm (38 in)
	1170 mm (46 in)	

### **G3304 Ratings**

	1800 rpm	
	bkW	bhp
Engine — Continuous		
G3304 NA <sup>3</sup>	71	95

### **G3306 Ratings**

1800 rpm		
bkW	bhp	
108	145	
112	150	
151	203	
164	220	
108	145	
151	203	
157	211	
	108 112 151 164 108 151	

Ratings listed are for 25°C (77°F) ambient temperature, 500 ft. altitude, and pipeline quality gas.

Emission standards: Ratings are NSPS site compliant capable with customer-supplied aftertreatment. Some ratings also have standard emission settings available for export only. For specific emission information please refer to engine spec sheet.

<sup>132°</sup>C/90°F water to aftercooler

<sup>254°</sup>C/130°F water to aftercooler

<sup>&</sup>lt;sup>3</sup>With Caterpillar or customer-supplied air fuel ratio control and aftertreatment.

With customer-supplied air fuel ratio control and aftertreatment.

<sup>&</sup>lt;sup>5</sup>Ag Irrigation Ratings

## **G3400** GAS ENGINES

G3408



### **Specifications**

	G3406 (TA)	G3408C LE	G3412C LE				
Bore x Stroke	137 x 165 mm	137 x 152 mm	137 x 152 mm				
	(5.4 x 6.5 in)	(5.4 x 6.0 in)	(5.4 x 6.0 in)				
Displacement	14 liters (893 in <sup>3</sup> )	18 liters (1099 in <sup>3</sup> )	27 liters (1649 in <sup>3</sup> )				
Ship Weight	1362 kg (3000 lbs)	2245 kg (4950 lbs)	2141 kg (4720 lbs)				
Approximate Dimensions:							
Length	1934 mm (76 in)	1756 mm (69.1 in)	2442 mm (96 in)				
Width	1270 mm (50 in)	1563 mm (61.5 in)	1598 mm (63 in)				
Hoight	1/22 mm (56 in)	1758 mm (69.2 in)	1960 mm (77 in)				

### **G3406 Ratings**

	1800	1800 rpm		
	bkW bhp			
Engine — Con	tinuous			
G3406 NA <sup>2</sup>	160	215		
G3406 TA <sup>1, 2</sup>	206	276		
G3406 TA <sup>1, 3</sup>	242	325		

### **G3408 Ratings**

	1500 rpm		1800	rpm	
	bkW bhp		bkW	bhp	
Engine — Continuous					
G3408 NA <sup>2</sup>	_	_	190	255	
G3408 TA <sup>1, 2</sup>	249	332	_	_	
G3408 TA1,3			298	400	
G3408C LE <sup>1</sup>			317	425	

### **G3412 Ratings**

	1800 rpm		
	bkW	bhp	
Engine — Con	tinuous		
G3412 TA <sup>1,3</sup>	448	600	
G3412C LE <sup>1</sup>	475	637	

Ratings listed are for 25°C (77°F) ambient temperature, 500 ft. altitude, and pipeline quality gas.

Emission standards: Ratings are NSPS site compliant capable with customer-supplied aftertreatment. Some ratings also have standard emission settings available for export only. For specific emission information please refer to engine spec sheet.

<sup>154°</sup>C/130°F Water to Aftercooler

With customer-supplied air fuel ratio control and aftertreatment

<sup>&</sup>lt;sup>3</sup>Rating for export only. Not NSPS site compliant capable.



# GAS ENGINES

### **Specifications**

Displacement	<b>G3508B LE</b> 170 x 190 mm (6.7 x 7.5 in)	51.8 liters (3158 in <sup>3</sup> )
Approximate Dimen	isions:	
Length	2522 mm (99 in)	3023 mm (119 in)
Width	2014 mm (79 in)	2220 mm (87.4 in)
Height	2131 mm (84 in)	2136 mm (84.1 in)

Displacement	<b>G3516B LE</b> 170 x 190 mm (6.7 x 7.5 in)	86.3 liters (5263 in <sup>3</sup> )
Width	sions: 3400 mm (133 in) 1844 mm (73 in) 2286 mm (90 in)	1755 mm (69 in)

G3508 Ratings					
	1200	rpm	1400	rpm	
	bkW	bhp	bkW	bhp	
Engine — Co	Engine — Continuous				
G3508 TA <sup>1, 2</sup>	391	524	_	_	
G3508 LE <sup>1</sup>	_	_	500	670	
G3508B LE <sup>1</sup>	_	_	514	690	

G3516 Ratings					
	1200	rpm	1400 rpm		
	bkW	bhp	bkW bhp		
Engine — Co	ontinuo	us			
G3516 NA <sup>2, 3</sup>	492	660			
G3516 TA <sup>1, 2</sup>	783	1050			
G3516 LE <sup>1</sup>	858	1150	1000 1340		
G3516B LE <sup>1</sup>	_	_	1029 1380		

G3512 Ratings						
	1200	rpm	1400	rpm		
	bkW	bhp	bkW	bhp		
Engine — Continuous						
G3512 TA <sup>1, 2</sup>	589	790	_	_		
G3512 LE <sup>1</sup>	642	860	749	1004		
G3512B LE <sup>1</sup>		_	772	1035		

<b>G3520B Ratings</b> 1200 rpm 1400 rpm				
	bkW	bhp	bkW	bhp
Engine — C	ontinuo	us		
G3520B LE <sup>1</sup>	1104	1480	1286	1725
154°C/130°F Water to Aftercooler				
<sup>2</sup> With custor	ner-sup	plied air	fuel rat	io
control and	aftertre	eatment		
3Rating for e	xport or	nly. Not	NSPS si	te
compliant o	anahle			

Ratings listed are for 25°C (77°F) ambient temperature, 500 ft. altitude, and pipeline quality gas.

Emission standards: Ratings are NSPS site compliant capable with customer-supplied aftertreatment. For specific emission information please refer to engine spec sheet.

### G3600 GAS FNGINES



### **Specifications**

G3606 (TA) G3608 (TA) Bore x Stroke . . . 300 x 300 mm (11.8 x 11.8 in) . . . 300 x 300 mm (11.8 x 11.8 in) **Displacement**..... 127.2 liters (37 762 in<sup>3</sup>).......... 169.6 liters (10 350 in<sup>3</sup>) **Ship Weight** . . . . . 15 640 kg (34 560 lbs) . . . . . . . . 19 000 kg (41 888 lbs)

**Approximate Dimensions:** 

G3612 (TA) G3616 (TA)
Bore x Stroke . . . . 300 x 300 mm (11.8 x 11.8 in) . . . . 300 x 300 mm (11.8 x 11.8 in) **Displacement**..... 254.4 liters (15 528 in<sup>3</sup>).......... 339.2 liters (20 698 in<sup>3</sup>) **Ship Weight** . . . . . 25 084 kg (55 300 lbs). . . . . . . . 29 892 kg (65 900 lbs)

Approximate Dimensions:

### G3606 Ratings

	1000	rpm
Engine — Continuous	bkW	bhp
G3606 LE <sup>3</sup>	1324	1775
G3606 LE <sup>2</sup>	1368	1835
G3606 LE <sup>1</sup>	1413	1895

### **G3612 Ratings**

	1000 rpm	
Engine — Continuous	bkW	bhp
G3612 LE <sup>3</sup>	2647	3550
G3612 LE <sup>2</sup>	2733	3665
G3612 LE <sup>1</sup>	2822	3785

### **G12CM34 Ratings**

	/50	rpm
Engine — Continuous	bkW	bhp
G12CM34	4575	6135
G12CM34	6100	8180

132°C/90°F Water to Aftercooler 243°C/110°F Water to Aftercooler 254°C/130°F Water to Aftercooler

### **G3608 Ratings**

	1000 rpm		
Engine — Continuous	bkW	bhp	
G3608 LE <sup>3</sup>	1767	2370	
G3608 LE <sup>2</sup>	1823	2445	
G3608 LE <sup>1</sup>	1879	2520	

### **G3616 Ratings**

	1000	rpm
Engine — Continuous	bkW	bhp
G3616 LE <sup>3</sup>	3531	4735
G3616 LE <sup>2</sup>	3647	4890
G3616 LE¹	3762	5045

Ratings listed are for 25°C (77°F) ambient temperature, 500 ft. altitude, and pipeline quality gas.

Emission standards: Ratings are NSPS site compliant capable with customersupplied aftertreatment. For specific emission information please refer to engine spec sheet.

## **Technology**

### ADEM™ A4 ECU

- · Electronic engine control unit
- · Precise fuel control
- · Smarter controller
- · Password protected
- · Customized engine speed
- · Controls idle levels
- · Precise injection timing



### Cat Messenger

- · Electronic display unit
- Full graphic LCD screen
- Engine status and diagnostic display in one
- · Four easy scroll buttons
- · Monitors engine problems
- · Alerts driver of corrective action
- Schedules engine for service
- Provides diagnostic information, SAE standard codes, and brief text explanation



## Base Tier 4 Engine Control Panel

- Compact engine panel
- · Clear LCD display
- · Cat keyswitch
- Regeneration and throttle controls
- · Stop button
- Warning/fault lamps and codes displayed



For additional information visit www.catelectronics.com

## **Technology**

## Electronic Control Unit (ECU)

- · Electronic engine control unit
- · Precise fuel control
- Smarter controller
- · Password protected
- · Customized engine speed
- · Controls idle levels
- · Precise injection timing



### **Analog Gauge**

- 12V and 24V systems
- Liquid Crystal Display: engine hours/ diagnostic codes
- 2 LED indicators
- 2- or 3-inch diameter dial
- Thread nut mount installed
- Integral 6-pin Deutsch connector
- Displays engine speed, fuel rate, load percent, pressures, and temperatures

### **Control and Display Panels** Engine Monitoring System Display

- · Parameters from engine
- · Audible alarm, diagnostic windows
- SAE standard icons
- -40°C to +85°C

## Mini Industrial Panel Display (MIPD)

- · 15 user-defined screens
- Max 10 parameters per screen
- 8 displays on same J1939 network
- Multiple language compatibility
- · Multiple custom screen options



For additional information visit www.catelectronics.com

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Materials and specifications are subject to change without notice. Rating ranges listed include the lowest and highest available for a specific engine or family of engines. Load factor and time at rated load and speed will determine the best engine/rating match.

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