# 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

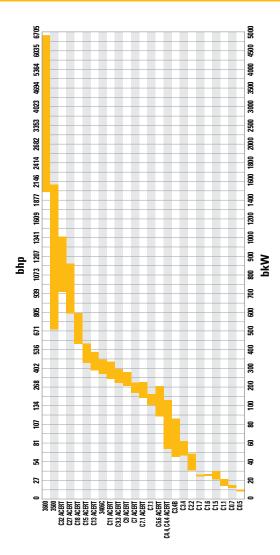
Industry technology requires the use of Ultra Low Sulfur Diesel (ULSD) fuel which contains less than or equal to 15 parts per million sulfur (mg/kg) as well as low sulfated ash oil in U.S. EPA Tier 4 Final, EU Stage IV engines. These cleaner fuels and oils help reduce engine operating costs. Cat U.S. 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	Diesel 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	Standard (stoichiometric) engine highest power rating
$T.\dots\dots\dots\dots\dots$	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**

- · Ease 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 IIIB (including DEF consumption)

# C0.5 | C0.7

ENGINES



## **Specifications**

	CO.5 U.S. EPA Tier 4 Final, EU Stage IIIA	CO.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 in <sup>3</sup> )	0.76 liters (46.4 in <sup>3</sup> )
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)

## C0.5 Ratings

	bkW	C Rating (Intermittent) 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	
	15.2	20.5	3600	

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

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

	C Rating (Intermittent)			
	bkW	bhp	rpm	
NA				
	8.8	11.8	2200	

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



### **Specifications**

U.S. EPA Tier 4 Final,

EU Stage IIIA

3400

Engine Configuration . . . In-Line 3, Diesel

 Displacement
 1.1 liters (69 in³)

 Ship Weight
 87 kg (191 lbs)

**Approximate Dimensions:** 

 Length
 491 mm (19.3 in)

 Width
 400 mm (15.7 in)

 Height
 576 mm (22.7 in)

### C1.1 Ratings

21 N

# C Rating

(Intermittent) bkW bhp rpm NA Standard Standard 147 197 2200 16 1 216 2400 17.3 23.2 2600 18.4 247 2800 197 26.4 3000

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

28 2

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

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

# C1.1 POWER UNIT



## **Specifications**

U.S. EPA Tier 4 Final,

EU Stage IIIA

Engine Configuration . . . In-Line 3, Diesel

 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

NA	bkW	bhp	rpm
	19.7	26.4	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)		
	bkW	bhp	rpm	
NA				
	14.4	19.3	2200	

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



### **Specifications**

U.S. EPA Tier 4 Final,

EU Stage IIIA

Engine Configuration . . . In-Line 3, Diesel

. 13

**Approximate Dimensions:** 

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

 Width
 453 mm (17.8 in) (NA)

## **EU Stage IIIA Ratings**

# C Rating

	(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

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

<sup>\*</sup>Special application



## **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)

 Displacement
 1.496 liters (91 in²)

 Ship Weight
 175 kg (385.8 lbs)

**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 | | 25.1 | 33.7 | 3000 |

# U.S. EPA Tier 4 Final Ratings

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



## **Specifications**

U.S. EPA Tier 4 Final > 19 bkW (25 bhp)

**Approximate Dimensions:** 

- 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 Dimension	s:	
Length	591 mm (23.3 in)	564 mm (22.2 in)
Width	420 mm (16.5 in)	453 mm (17.8 in)
Height	576 mm (22.7 in)	654 mm (25.7 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

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



ENGINE

### **Specifications**

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

In-Line 4. Diesel

Engine Configuration... Bore x Stroke . . . . . . . . . . 84 x 100 mm (3.3 x 3.9 in)

Displacement..... 2.2 liters (135 in<sup>3</sup>) Ship Weight ..... 184 kg (406 lbs) (NA)

194 kg (427.7 lbs) (T)

**Approximate Dimensions:** 

Length.... 660 mm (26 in) (NA, T) Width ..... 459 mm (18 in) (NA) 531 mm (20.9 in) (T) 725 mm (28.5 in) (NA, T) Height...

### **EU Stage IIIA Ratings**

# **EU Stage IIIB Ratings**

C Rating

C Rating (Intermittent) hkW bhp rpm NA Standard Standard 31.0 41.6 2200 34.1 45.7 2400 35.7 47.9 2600 48.7 36.3 2800

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

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

C Rating (Intermittent) hkW bhp rpm NA 35 4 47 5 2600 35.7 47.9 2600 36 4 48 8 2800 & 3000

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

C Rating (Intermittent) hkW bhp rpm 36.4 2600 & 2800 48.8 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



## **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)

 Width
 513 mm (20.2 in) (NA)

 590 mm (23.2 in) (T)

 Height
 854 mm (33.6 in) (NA)

973 mm (38.3 in) **(T)** 

### **EU Stage IIIA Ratings**

C Rating (Intermittent) bkW bhp

 bkW
 bhp
 rpm

 NA
 36.3
 48.7
 2800

# U.S. EPA Tier 4 Final Ratings

| C Rating (Intermittent) | bkW | bhp | rpm | NA | 36.4 | 48.8 | 3000 |

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



# 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

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



## **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)	
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**

	U.S. EPA TIEF 4 IIILETIIII,	U.S. EPA Her 4 Fillal,
	EU Stage IIIB	EU Stage IV
	> 56 bkW (75 bhp)	> 56 bkW (75 bhp)
Engine Configuration	In-Line 4, Diesel	In-Line 4, Diesel
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 in <sup>3</sup> )	3.4 liters (207.5 in <sup>3</sup> )
Ship Weight	251 kg (553.4 lbs)	251 kg (553.4 lbs)
Approximate Dimension		-
Length	747.5 mm (29.4 in)	747.5 mm (29.4 in)
Width	662 mm (26 1 in)	662 mm (26 1 in)

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

	0.0. I. 7. 1.0. 4					
C Rating (Intermittent)					D Rating	
TA	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

0.0.	0.5. LIA Hei 4 i mai, Lo Stage IV natings					
	(	C Rating Intermitte			D Rating	
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
EU Stage IIIB
EU Stage IIIB
EU Stage IIIB

 < 56 bkW (75 bhp)</td>
 > 56 bkW (75 bhp)

 Engine Confguration.
 In-Line 4, Diesel
 In-Line 4, Diesel

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

 Displacement
 34 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**

<b>U</b> .U.			O, _O			
C Rating (Intermittent)					D Rating	
TA	bkW	bhp	rpm	bkW	bhp	rpm
	66.0	88.5	2200	86.0	115.0	2500
	75.0	100 6	2200	_		



### **AFTERTREATMENT**

### **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)

### **Standard Emissions Control Equipment**

• DOC: Diesel Oxidation Catalyst

• **DPF**: Diesel Particulate Filter

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

> 56 bkW (75 bhp)

**Approximate Dimensions:** 

DOC SCR

 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)

- 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 Dimension	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) (TTA)	. 741.6 mm (29.1 in) (TTA)
Height	848.2 mm (33.4 in) (TA)	. 848.2 mm (33.4 in) (TA)
	867.6 mm (34.1 in) (TTA)	. 867.6 mm (34.1 in) (TTA)

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

	- J				
B Rating			C Rating (Intermittent)		
bkW	bhp	rpm	bkW	bhp	rpm
TA					
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
92.6	124.0	2200	102.1	137.0	2200
_	_	_	106.0	142.1	2200
_	_	_	110.1	147.6	2200
TTA					
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

LO Stage IV Hattings					
B Rating			C Rating (Intermittent)		
bkW	bhp	rpm	bkW	bkW bhp rp	
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	150.0	2200	_	_	
_	_	_	117.0	156.9	2200

B Ratings to be added when available

129.4 173.5 2200

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	. In-Line 4, Diesel
Bore x Stroke	. 105 x 127 mm (4.1 x 5.0 in)	. 105 x 127 mm (4.1 x 5.0 in)
Displacement	. 4.4 liters (268.5 in3)	. 4.4 liters (268.5 in³)
Ship Weight	. 650 kg (1433 lbs) (TA)	. 650 kg (1433 lbs) (TA)
	700 kg (1543 lbs) (TTA)	. 700 kg (1543 lbs) (TTA)
Approximate Dimens	sions:	
Length	. 1433 mm (56.4 in) (TA, TTA)	. 1433 mm (56.4 in) (TA)
		1455 mm (57.3 in) (TTA)
Width	. 820 mm (32.3 in) (TA)	. 820 mm (32.3 in) (TA)
	795 mm (31.3 in) (TTA)	870 mm (34.3 in) (TTA)
Height	. 1126 mm (44.3 in)	. 1210 mm (47.6 in)
, and the second	< 82 bkW (110 bhp) (TA)	< 93 bkW (125 bhp) (TA)
	1150 mm (45.3 in)	1215 mm (47.8 in)
	> 82 bkW (110 bhp) (TA)	102.1-110 bkW (134-148 bhp) (TA)
	1212 mm (47.7 in) (TTA)	1280 mm (50.4 in) (TTA)

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

Rating rmitte ohp	
hp	rpm
100	2200
110	2200
137	2200
148	2200
157	2200
73.5	2200
	110 137 148

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

В	B Rating			C Rating (Intermittent)		
bkW	bhp	rpm	bkW	bhp	rpm	
TA						
_	_	_	74.5	100	2200	
	_		82.0	110	2200	
92.6	124.2	2200				
	_		102.1	137	2200	
_	_	_	110.0	148	2200	
TTA						
_	_	_	117.0	157.0	2200	
_	_	_	129.4	173.5	2200	

# C4.4 ACERT



# **Specifications**

	EU Stage IIIB	EU Stage IIIB
	≤ 82 bkW (110 bhp)	> 82 bkW (110 bhp)
Approximate Dimen	isions:	
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**

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

### **Specifications**

	DOC/SCR	U.S. EPA Tier 4 Final, EU Stage IV > 92.6 bkW (124.2 bhp) DOC/SCR	U.S. EPA Tier 4 Final, EU Stage IV DPF/SCR (TTA only)
Approximat	te 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)

- 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

		(IIILeIIIIILLeIIL)		
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)

- 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**

Bore x Stroke Displacement	105 x 135 mm (4.1 x 5.3 in) 7.0 liters (427.7 in³)
Approximate Dimensions LengthWidth	1063.7 kg (41.9 lbs) ( <b>TA, TTA</b> ) 753 mm (29.6 in) ( <b>TA</b> ) 820.2 mm (32.3 in) ( <b>TTA</b> )

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

	B Rating			(1)	<b>C Rating</b> (Intermittent)			
TTA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm		
	140.0	187.7	2200	186.5	250.1	2200		
	151.0	202.5	2200	205.0	274.9	2200		
	158.5	212.5	2200	225.0	301.7	2200		
	168.0	225.3	2200	_	_	_		
	176.5	236.7	2200	_	_	_		

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

U.S. EPA	Her 4	rınaı,	EU 3	tage IV na	ıtıngs			
		B Rating			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 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.

# C7.1 ACERT

**POWER UNIT** 



## **Specifications**

U.S. EPA Tier 4 Final,

**EU Stage IV** 

Engine Configuration ... In-Line 6, Diesel

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

 Displacement
 7.0 liters (427.7 in³)

 Ship Weight
 1000 kg (2204.0 lbs)

**Approximate Dimensions:** 

 Length
 1461 mm (57.5 in)

 Width
 1769 mm (69.6 in)

 Height
 916 mm (36.1 in)

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

		B Rating	I	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		
	168	225	1800-2200	205	275	1800-2200		

Emission standards: U.S. EPA Tier 4 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.



# C7.1 ACERT

### **Specifications**

	U.S. EPA Tier 4 Interim, EU Stage IIIB ≤ 172 bkW (231 bhp)	U.S. EPA Tier 4 Interim, EU Stage IIIB ≥ 172 bkW (231 bhp)
Approximate Dime	nsions:	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	. 618.5 mm (24.3 in)	Height 643.9 mm (25.3 in)
Weight		Weight 134 kg (295.4 lbs)
Diameter		Diameter 337.8 mm (13.3 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	PETU Configuration
Approximate Dimen	nsions:	
Length	771 mm (30.4 in)	610 mm (24 in)
Width	793 mm (31.2 in	459 mm (18 in)
Height	468 mm (18.4 in)	280 mm (11 in)

- CEM: Clean Emissions Module, including:
  - **DOC**: Diesel Oxidation Catalyst
    - DPF: Diesel Particulate Filter
- NRS: NOx Reduction System
- PETU: Pump Electronic Tank Unit
- 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	U.S. EPA Tier 4 Interim, EU Stage IIIB In-Line 6, Diesel	115 x 149 mm (4.53 x 5.87 in) 9.3 liters (567.5 in³)
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

			•		- J			<b>J</b>		
		<b>Ratin</b>		E	Ratir	g	C Rating (Intermittent)			
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
	224	300	1800- 2200	242	325	1800- 2200	261	350	1800- 2200	

U.S. EPA Tier 4 Final, EU Stage IV Ratings												
	A Rating (Continuous)		В	B Rating			C Rating (Intermittent)			D Rating		
	bkW	bhp rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
TA (ATAAC)												
	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 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.



# C9.3 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	
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	s:	
Length	1845 mm (72.6 in)	2042 mm (80.4 in)
Width	1118 mm (44.0 in)	1094 mm (43.1 in)
Height	1554 mm (61.2 in)	1741 mm (68.5 in)

U.S. EPA T	ier 4 I	nter	im, El	J Sta	ge	IIIB	Rating	gs			
		A Rating (Continuous)			Ratii	1g		C Rating (Intermittent)			
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm		
TA (ATAAC)											
	224	300	1800-	242	325	1800-	261	350	1800-		
			2200			2200			2200		

U.S. EPA Tier 4 Final, EU Stage IV Ratings												
		<b>Rati</b> ntinu		B Rating		C Rating (Intermittent)			D Rating			
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA (ATAAC)												
	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 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.

# C9.3 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 Dimen	sions:							
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)							

<sup>\*</sup>Depending on configuration

- · 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 in <sup>3</sup> )
Ship Weight	1350 kg (2976 lbs)	1143 kg (2520 lbs)
Approximate Dimensions	s:	
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 Ratin	g	C Rat		D	Rating	E Rating			
	bhp rpm	bkW bhp	rpm	bkW bh	p rpm	bkW	bhp rpm	bkW	bhp rpm		
TA (AT	AAC)										
287	385 1800	)- 309 415	1800-	328 44	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)		В	B Rating			C Rating (Intermittent)			Rating	E Rating		
bkW TA (AT		rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm	bkW	bhp rpm
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 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.

**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 in <sup>3</sup> )
Ship Weight	2304 kg (5080 lbs)	2085 kg (4596 lbs)
Approximate Dimensions	S:	
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

0.0.						, -		<b></b>	<del>9</del> ~ -		9	•	
	A Rating (Continuous)		B Rating			C Rating (Intermittent)			D	Rating	E Rating		
bkW bhp rpm		rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm	bkW	bhp rpm	
TA (AT	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															
	A Rating B Rating (Continuous)						C Rating (Intermittent)			D Rating			E Rating		
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 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.



#### **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**

Stage IV										
PETU Configuration ndard Configuration up to 48.4 L (51.1 U.S. qt)										
•										
854 mm (33.6 in)										
287 mm (11.3 in)										
551 mm (21.7 in)										
19.42 kg (42.8 lbs)										

<sup>\*</sup>Depending on configuration

#### 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 6, 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	K.	
Length	1438 mm (56.6 in)	1438 mm (56.6 in)
Width	943 mm (37.1 in)	969 mm (38.1 in)
Height	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	U.S. EPA Tier 4 Final, EU Stage IV Ratings											
	<b>Ratin</b>		B Rating			C Rat (Intermi		D Rating				
	bkW	bhp	rpm	bkW	bhp	rpm	bkW bhp	rpm	bkW	bhp	rpm	
TA												
	354	475	1800-	354	475	1800-	403 540	1800-	433	580	1800-	
			2100			2100		2100			2100	

Emission standards: U.S. EPA Tier 4 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.



POWER UNIT

### **Specifications**

Bore x Stroke	U.S. EPA Tier 4 Interim, EU Stage IIIB In-Line 6, Diesel	137 x 171 mm (5.39 x 6.73 in) 15.2 liters (927.6 in³)
	: 2172 mm (85.5 in)	

## Height 1912 mm (75.3 in) 2006 mm (79.0 in) U.S. EPA Tier 4 Interim. EU Stage IIIB Ratings

		Ratin		В	Rati	ng		ng tent)					
TA (ATAAC)	bkW			bkW	bhp	rpm	bkW			bkW	bhp	rpm	
	354	475	1800- 2100	354	475	1800- 2100	403	540	1800- 2100	433	580	1800- 2100	

U.S. EPA Tier 4 Final, EU Stage IV Ratings												
		A Rati ontinu		В	Ratii	ng		<b>Rati</b> i ermit		D	Rati	ng
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA												
	354	475	1800-	354	475	1800-	403	540	1800-	433	580	1800-
			2100			2100			2100			2100

Emission standards: U.S. EPA Tier 4 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.

#### **AFTFRTRFATMFNT**



#### **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 & Ratings	IND-B	IND-C & IND-D	PETU Configuration up to 48.4 L (51.1 U.S. qt)						
Approximate Dimen	sions:								
<b>Length</b> 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 258-272	kg (569-600 lbs)*	258-272 kg (569-600 lbs)*	19.42 kg (42.8 lbs)						
Diameter 330.2 mn	n (13 in)	355.6 mm (14 in)	-						

<sup>\*</sup>Depending on configuration

#### 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



FNGINE

### **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)
Width	s: 1438 mm (56.6 in)	969-1132 mm (38.1-44.6 in)

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

	A Rating (Continuous)		В	B Rating			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	Ratio	ıg		
TTA (ATAAC)	(Int <b>bkW</b>	ermit <b>bhp</b>	tent) <b>rpm</b>	bkW	bhp	rpm	
	563	755	1800-1900	597	800	1800-1900	

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

	A Rating (Continuous)		B Rating				C Rating (Intermittent)		
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
IA (AIAAO)	429	575	1800-2000	447	600 1	800-2000	470	630	1800-2000

U.S. EPA Tier	4 Final Ra	ating	gs				
		Ratin ermitte	•	D	Ratin	g	
TTA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	
	563	755	1800	597	800	1800	

Emission standards: U.S. EPA Tier 4 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings. Nonroad engines greater than 560 bkW (750 bhp) are not currently subjected to EU emission standards.

**POWER UNIT** 



### **Specifications**

F : 0 " "	U.S. EPA Tier 4 Interim, EU Stage IIIB	U.S. EPA Tier 4 Final, EU Stage IV
	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 in³)	18.1 liters (1104.5 in <sup>3</sup> )
Ship Weight	2113 kg (4658 lbs)	2650 kg (5842 lbs)
Approximate Dimensions	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)		B Rating			C Rating (Intermittent)			
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
	447	600	1800-1900	447	600	1800-1900	470	630	1800-1900

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

	_		-				-	_	
	A Rating (Continuous)			B Rating			C Rating (Intermittent)		
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
	429	575	1800-2000	447	600	1800-2000	470	630	1800-2000

Emission standards: U.S. EPA Tier 4 Final, EU Stage IV. EPA/EU Flexibility: U.S. EPA Tier 4 Interim and EU Stage IIIB equivalent ratings.



#### **Specifications**

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

**Approximate Dimensions:** 

 Length.
 1097 mm (43 in)

 Width
 762 mm (30 in)

 Height.
 468 mm (18 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

PETU Configuration up to 48.4 L (51.1 U.S. at)

Approximate Dimensions:

 Length.
 1153 mm (45.4 in)
 854 mm (33.6 in)

 Width
 1112 mm (43.8 in)
 287 mm (11.3 in)

 Height
 652 mm (25.7 in)
 551 mm (21.7 in)

 Weight
 258-272 kg (569-600 lb)\*
 19.42 kg (42.8 lbs)

Standard Configuration

#### **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

<sup>\*</sup>Depending on configuration

## Fire Pump

ENGINE



### **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	1750 rpm bkW bhp	1900 rpm bkW bhp	2100 rpm bkW bhp
Tier 2				•
		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**

	C27 ACEKI	C32 ACERI
	U.S. EPA Tier 4 Interim	U.S. EPA Tier 4 Interim
Engine Configuration	V-12, Diesel	V-12, Diesel
Bore x Stroke	137.2 x 152.4 mm (5.4 x 6.0 in)	145.0 x 162 mm (5.71 x 6.38 in)
Displacement	27 liters (1649.5 in³)	32.1 liters (1959 in <sup>3</sup> )
Ship Weight	3004 kg (6625 lbs)	3004 kg (6625 lbs)
Annroximate Dimensions	•	

Length	1874 mm (73.8 in)	1874 mm (73.8 in)
	1600 mm (63.0 in)	
Height	1370 mm (53.9 in)	1370 mm (53.9 in)

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

O=2-1-0-	<u></u>									
	A Rating (Continuous)		В	B Rating C Rating D Rat (Intermittent)		Rating				
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp rpm	bkW	bhp rpm
	597	800	1800-	653	875	1800-	709	950 1800-	783	1050 1800-
			2100			2100		2100		2100

#### C32 ACERT II S EDA Tier 4 Interim Retings

UJE AUL		<b>5.</b> 3	···		<b>-</b>		natin	yə	
	E	3 Rati	ng		Ratir ermitt		D	Ratin	g
TA (ATAAC)	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
	709	950	1800-2100	839	1125	1800-2100	895	1200	1800-2100

Emission standards: U.S. EPA Tier 4 Interim. Nonroad engines greater than 560 bkW (750 bhp) 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 in³)
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)

### CO.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	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 in³)	1.496 liters (91 in <sup>3</sup> )
Ship Weight (NA)	87 kg (191 lbs)	149 kg (328 lbs) (NA)
		156.5 kg (345 lbs) <b>(T)</b>
Approximate Dimension	is:	
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					
	20.7	27.8	2200		
	22.3	29.9	2400		
	23.4	31.4	2600	_	
	24.4	32.7	2800	_	
	25.1	33.7	3000	Ī	
T				_	
	23.1	31	2200	Ī	
	25.2	33.8	2400	Ī	
	27.3	36.6	2600	Ī	
	29.4	39.4	2800	Ī	
	30.0	40.2	3000	Ī	

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

#### **POWER UNITS**

### **Specifications**

	C1.1 U.S. EPA Tier 4	C1.5 U.S. EPA Tier 4
	Interim Equivalent	Interim Equivalent
<b>Engine Configuration</b> .	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 in³)	. 1.496 liters (91 in <sup>3</sup> )
Ship Weight (NA)	129 kg (284 lbs)	. 175 kg (385.8 lbs)
Approximate Dimension	ons:	-
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

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



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 in³)
Approximate Dimensions		
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)						
NA	bkW	bhp	rpm			
	24.6	33.0	2800			
	26.5	35.5	3000			

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

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

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

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

## C2.2

C3.4



#### **Specifications**

C2.2 U.S. EPA Tier 4 Interim Equivalent,

EU Stage IIIA Equivalent

194 kg (427.7 lbs) (T, TA)

 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)

**Approximate Dimensions:** 

 Length.
 664 mm (26.14 in) (NA)

 660 mm (26.0 in ) (T, TA)

 Width
 459 mm (18.1 in) (NA)

 531 mm (21.0 in) (T, TA)

 Height
 725 mm (28.5 in) (NA, T, TA)

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

bkW	bhp	rpm	
Std/Derate	Std/Derate		
31.0	41.6	2200	
34.1	45.7	2400	
35.7 / 31.4	47.9 / 42.1	2600	
36.4	48.8	2800 & 300	
40 / 36.3	53.3 / 48.7	2800	
43	57.7	2600	
44.7	60.0	2800	
45.5	61.0	3000	
49.3	66.1	2800	
	31.0 34.1 35.7 / 31.4 36.4 40 / 36.3 43 44.7 45.5	Std/Derate         Std/Derate           31.0         41.6           34.1         45.7           35.7 / 31.4         47.9 / 42.1           36.4         48.8           40 / 36.3         53.3 / 48.7           43         57.7           44.7         60.0           45.5         61.0	Column

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

#### **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:

973 mm (38.3 in) (T)

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

		C Rating (Intermittent)		
NA	bkW	bhp	rpm	
	37	49.6	3000	
T				
	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 Dissel

 Engine Configuration
 In-Line 4, Diesel

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

 Displacement
 4.4 liters (269 in²)

 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 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

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

Approximate Dimensions:

620 mm (23.5 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
Т			
	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 POWER UNIT

#### **Specifications**

U.S. EPA Tier 3 Equivalent,

**EU Stage IIIA Equivalent** 

Engine Configuration . . . In-Line 4, Diesel

 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)				
NA	bkW	bhp	rpm		
	61-68	81.8-91	2200		
TA (ATAAC)					
	74.5-81	99.9-108.6	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

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)				
NA	bkW	bhp	rpm		
	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)			
TA (ATAAC)	bkW	bhp	rpm	
	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

#### **Specifications**

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) **Displacement** . . . . . 6.6 liters (402.8 in<sup>3</sup>)

Ship Weight (TA) . . . . . 506 kg (1116 lbs)

**Approximate Dimensions:** 

**Length**...... 929 mm (36.6 in)

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

	C Rating (Intermittent)				
TA (ATAAC)	bkW	bhp	rpm		
	89	119.0	2200		
	95	128.0	2200		
	116.5	156.2	2200		
	129	173.0	2500		
	129.5	173.7	2200		
	130	174.3	2500		
	136	182.4	2200		
	140	187.7	2200		
	144	193.1	2200		
	146	195.8	2200		
	151	202.5	1800		
	151	202.5	2200		
	158.5	212.6	2200		
	159	213.2	2200		
·	168	225.3	2200		
	176.5	236.7	2200*		
·	186	249.4	2200		
	205	274.9	2200*		

<sup>\*</sup>Specific Application

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

#### 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)				
TA (ATAAC)	bkW	bhp	rpm		
	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

### **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 Rating		C Rating (Intermittent)		D Rating		ng		
TA (ATAAC)	kW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
	168	225	1800-2200	186	250	1800-2200	224	300	2100-2200
	—	_	_	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)						
TA	bkW	bhp	rpm					
	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 TA bhp rpm 116 156 2200 129 173 2200 151 202 2200 159 215 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.

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

### **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

 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

		Ratin ntinuo		C Rating (Intermittent)
TA (ATAAC)	bkW	bhp	rpm	bkW bhp rpm
	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 E (Continuous)		B Rating			C Rating (Intermittent)				
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA (ATAAC)									
	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)	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.

## 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)

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

### Specifications

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

Engine Configuration . . . In-Line 6, Diesel

 Displacement
 11.1 liters (677 in³)

 Ship Weight
 1692 kg (3730 lbs)

 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

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

	A Rating (Continuous)		В	B Rating		C Rating (Intermittent)			D Rating		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

	B Rating			(	C Rating (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.

#### **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

**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

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

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

	B Rating			C Rating (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.

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.

### **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)

**Ship Weight** . . . . . . . . . 2055 kg (4531.5 lbs)

**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	Rati	ng	C Rating (Intermittent)		
()	bkW	bhp rpn	n	bkW	bhp	rpm	bkW	bhp	rpm
TA (ATAAC)									
	328	440 1800-	2100	354	475	1800-2100	403	540	1800-2100

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, EPA Tier 2 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
 1673 kg (3688 lbs)

**Approximate Dimensions:** 

1257 mm (49.5 in) (TTA)

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

2100

A Rating (Continuous)			B Rating			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	g	E	E Rating				
bkW	•	•	bkW	bhp	rpm		
TTA (A1	AAC)						
571	765	1800-	597	800	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 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									
A Rating (Continuous)			B Rating			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	

## 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)		
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm
TA (ATAAC)									
	429	575	1800-2100	447.5	600	1800-2100	470	630 1	800-2100

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

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**

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 Dimension	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								
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)								
597 800 1800-	653 875 1800-	708 950 1800-	783 1050 1800-	858 1150 1800-				
2100	2100	2100	2100	2100				

C32 ACERT U.S. EPA Tier 2 Equivalent Ratings								
A Rating	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				
	708 950 1800-	839 1125 1800-	895 1200 1800-	1007 1350 1800-				
	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**

	<u> </u>				
C Rating (Intermittent)			D	Rating	
bkW	bhp	rpm	bkW	bhp	rpm
		-		-	•
298	400	1800	347	465	1800
343	460	2100	_	_	_
	(Int <b>bkW</b> 298	(Intermitte bkW bhp 298 400	(Intermittent) bkW bhp rpm  298 400 1800	(Intermittent) bkW bhp rpm bkW  298 400 1800 347	(Intermittent) bkW bhp rpm bkW bhp  298 400 1800 347 465

## 3406C

#### **Specifications**

Non-certified

Engine Configuration . . . In-Line 6, Diesel

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

Approximate Dimensions (engine only):

 Length
 1660 mm (65.35 in)

 Width
 906 mm (35.67 in)

 Height
 1335 mm (52.56 in)

Non-certified Ratings										
Irrigation Rating				C Ration		D	Ratin	g		
	bkW	bhp	rpm	bkW	bhp	rpm	bkW	bhp	rpm	
TA										
	269	361	1800	328	440	2000	347	465	1800	
	306.5	411	1800	343	460	2100	_	_	_	



3512

## **3500** ENGINES

#### **Specifications**

	3508	3512
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 in³)	51.8 liters (3158 in <sup>3</sup> )
Ship Weight	4309 kg (9500 lbs)	6078 kg (13 400 lbs)
Approximate Dimensions	S:	
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 Rating (Intermittent)			
bkW	bkW bhp rpm			bhp	rpm		
<u>TA</u>							
507	680	1200	612	820	1300		
578	775	1800	634	850	1800		
638	855	1800	746	1000	1800		

#### 3516 Ratings

A Rating (Continuous)			C Rating (Intermittent)
bkW TA	bhp	rpm	bkW bhp rpm
	1355	1200	1242 1665 1300
1275	1710	1800	1492 2000 1800

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

#### 3512 Ratings

_	70 · = ···········							
A Rating (Continuous)				<b>C</b> (Inte	Ratin ermitte	<b>g</b> ent)		
	bkW	bhp	rpm	bkW	bhp	rpm		
Γ/	١							
	761	1020	1200	858	1150	1300		
	955	1280	1800	1119	1500	1800		
							_	

## 3500B 3500C

**FNGINES** 



#### **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:	
Length	2462 mm (97 in)	3067 mm (120 8 in)

3512C U.S. EPA Tier 2 Equivalent

Engine Configuration . . . V-12. Diesel . . . . . . . . . V-16. Diesel Ship Weight ........... 6078 kg (13 400 lbs) ......... 7484 kg (16 500 lbs)

**Approximate Dimensions:** 

3008 mm (119 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 B Rating C Rating (Continuous) (Intermittent) bkW bhp rpm bkW bhp rpm bkW bhp rpm TA (ATAAC) 1119 1500 1800 1174 1575 1800 1231 1650 1800

#### 3516B Ratings

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

3516B

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 nonregulated areas. Non-certified ratings available for nonregulated 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 Length	s: 3988 mm (157 in)	4828 mm (190 in)
Width	1748 mm (69 in)	1748 mm (69 in)

	3612	3616
Engine Configuration	V-12, Diesel	V-16, Diesel
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 in <sup>3</sup> )
Ship Weight	25 140 kg (55 300 lbs)	29 950 kg (65 900 lbs)
Approximate Dimension	s:	
Length	4562 mm (180 in)	5482 mm (216 in)
Width	1704 mm (67 in)	1704 mm (67 in)

#### 3606 Ratings

Distillate A Rating (Continuous)							
	bkW bhp rpm						
TA			<u>-</u>				
	1490 1998 750						
	1560 2092 800						
	1730	2319	900				
	1850	2481	1000				

#### 3612 Ratings

#### Distillate A Rating (Continuous) hkW bhp rpm TΑ 2980 3996 750 3120 4184 800 3460 4640 900 3700 4962 1000

#### 3608 Ratings

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

#### 3616 Ratings

(Continuous)						
bkW bhp rpm						
TA						
	4160 5579 800					
	4600	6169	900			
	4920	6598	1000			

Nictillate A Rating

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

## Fire Pump

ENGINES



#### **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	rnm	1750	rnm	1900	rnm	2100	nm
	bkW	•	bkW	bhp	bkW	•	bkW	bhp
Tier 2								
	_	_	597	800	597	800	597	800
Tier 3								
		_	522	700	522	700	522	700
	_	_	447	600	447	600	447	600
Non-certified								
	522	700		_		_		_

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.



## 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 and without radiators are available, but not FM approved or UL listed.

#### 3412C Ratings Not FM Approved, Not UL Listed V-12

1750 rpm		1900	1900 rpm		rpm	
	bkW	bhp	bkW	bhp	bkW	bhp
1	ΓΑ					
	476*	638*	551*	739*	551	739*

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

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

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

#### 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 bhp.



# GAS ENGINES

#### **Specifications**

•		
Displacement	<b>G3304 (TA)</b> 121 x 152 mm (4.75 x 6.0 in)	10.5 liters (638 in³)
Width	<b>15ions:</b> 1158 mm (46 in)	978 mm (38 in)

#### **G3304 Ratings**

	1800 rpm	
	bkW b	
Engine — Continuous		
G3304 NA <sup>2</sup>	71	95

#### **G3306 Ratings**

	1800 rpm	
	bkW bhp	
Engine — Continuous		
G3306B NA <sup>2</sup>	108	145
G3306B TA <sup>1, 2</sup>	151	203
G3306B TAA <sup>1, 2</sup>	157	211

<sup>2</sup>With Caterpillar or customer-supplied air fuel ratio control and aftertreatment. 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

## 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 Dime	ensions:		
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)
Height	1/33 mm (56 in)	1758 mm (69.2 in)	1960 mm (77 in)

#### **G3406 Ratings**

	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				
_	_	190	255	
249	332	_	_	
_		298	400	
_		317	425	
	bkW ontinuo	bkW bhp ontinuous	bkW bhp bkW ontinuous 190 249 332 — 298	

#### **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 Dimer	nsions:	
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	<b>18ions:</b> 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	ontinuo	us			
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	1200 rpm		rpm	
	bkW	bhp	bkW	bhp	
Engine — Co	ontinuo	us			
G3516 NA <sup>2,3</sup>	492	660	_	_	
G3516 TA1,2	783	1050	_	_	
G3516 LE <sup>1</sup>	858	1150	1000	1340	
G3516B LE <sup>1</sup>			1029	1380	
G3510B LE			1029	IJ	

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	

G3520B Ratings 1200 rpm 1400 rpm				
	bkW	•	bkW	bhp
Engine — C	ontinuo	us .		•
G3520B LE <sup>1</sup>	1104	1480	1286	1725
154°C/130°F	Water t	o Afterc	ooler	
<sup>2</sup> With customer-supplied air fuel ratio				
control and aftertreatment				
<sup>3</sup> Rating for export only. Not NSPS site				
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



#### **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 in³)	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:**

Length	4638 mm (183 in)	5465 mm (215 in)
Width	1744 mm (69 in)	1868 mm (74 in)
Height	2921 mm (115 in)	2922 mm (115 in)

#### 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 in³)	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:**

Length	4735 mm (186 in)	5661 mm (223 in)
Width	2380 mm (94 in)	2380 mm (94 in)
Height	3220 mm (127 in)	3208 mm (126 in)

#### **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

<sup>1</sup>32°C/90°F Water to Aftercooler <sup>2</sup>43°C/110°F Water to Aftercooler <sup>2</sup>54°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 LE <sup>1</sup>	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**

### Premium Control Panel for Tier 4 Final, Stage IV C9.3 ACERT - C18 ACERT

- 12V and 24V systems and integrated circuit protection
- J1939 throttle and regeneration control
- · Color display
- · Available with English or metric units
- · Five languages supported
- Integrated LED indicators: engine warning, engine shutdown, emissions malfunction, low DEF level, DES active
- Active diagnostic codes displayed with description
- 4-position key switch



### Standard Control Panel for Tier 4 Final, Stage IV C9.3 ACERT - C18 ACERT

- 12V and 24V systems and integrated circuit protection
- · J1939 throttle and regeneration control
- Analog gauges: engine speed, coolant temperature, oil pressure, fuel pressure, DEF level
- LCD: engine hours, diagnostic codes, fuel rate, voltage, time until regeneration
- Integrated LED indicators: engine warning, engine shutdown, emissions malfunction, low DEF level, DES active
- · 4-position key switch



### Mini Industrial Panel Display (MIPD)

- 15 user-defined screens
- Max 10 parameters per screen
- · 8 displays on same J1939 network
- Multiple language compatibility
- Tier 3 and Tier 4 Interim Compatible



### **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 kevswitch
- · Regeneration and throttle controls
- Stop button
- Warning/fault lamps and codes displayed



### **Notes**

## **Notes**

## **Notes**

#### Caterpillar. Your Local Resource. Worldwide.

Your Cat dealer can answer any questions you have about Cat Power Systems, customer support, parts, or service capability anywhere in the world. For the name and number of the Cat dealer nearest you, call us or visit our website.

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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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