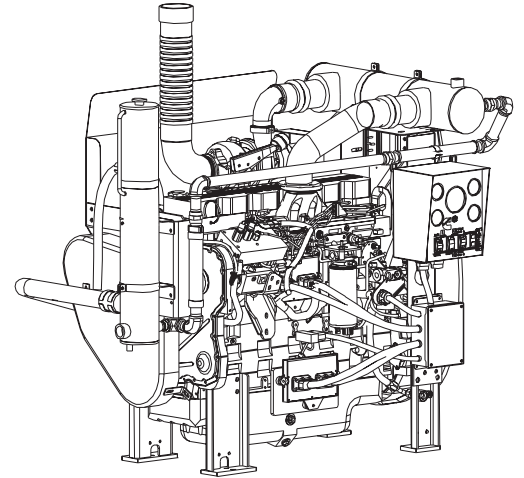
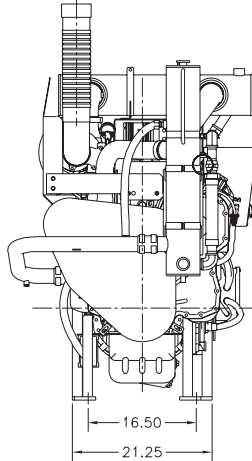
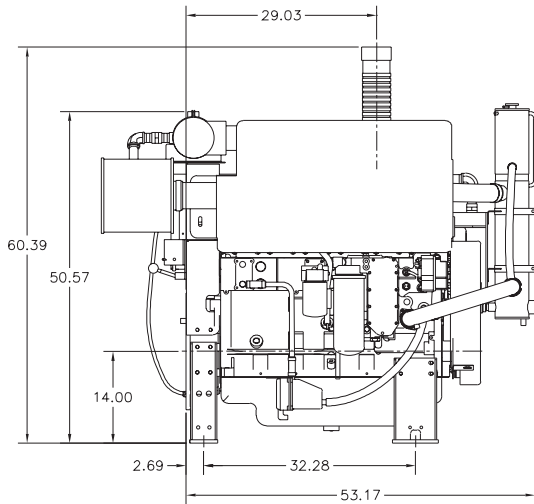




Fire Power

Fire Pump Drivers MODEL: CFP8E Series



ENGINE EQUIPMENT

- Air Cleaner - (S) Direct Mounted, Disposable, Indoor Service
(O) Disposable, Treated for High Humidity, Indoor Service
(O) Outdoor Type
- Alternator - (S) 12V-DC, 60 AMPS; With Belt Guard
(O) 24V-DC, 40 AMPS; With Belt Guard
- Exhaust Protection - (S) Metal Guards on Manifolds & Turbo
- Exhaust Flex Connection - (O) SS Flex, NPT
- Ilywheel Power Take Off - (S) Flywheel w/ Mounting for Coupler
(O) Drive Shaft System
(O) Stub Shaft
- Fuel Connections - (S) Fire Resistant Flexible Supply & Return Lines
- Fuel Injection System - (S) Direct Injection
- Fuel Filter - (S) Primary Filter w/Priming Pump
- Engine Heater - (S) 120 V-AC, 1500 Watt
(O) 240 V-AC, 1500 Watt
- Governor, Speed - (S) Constant Speed
- Heat Exchanger - (S) Tube & Shell Type, 60 PSI w/NPTF Connections
- Instrument Panel - (S) English & Metric, Tachometer, Hourmeter, Water Temperature, Oil Pressure & Two (2) Voltmeters
- Junction Box - (S) Integral with Instrument Panel; For DC Wiring Interconnection to Engine Controller
- Lube Oil Cooler - (S) Engine Water Cooled, Plate Type
- Lube Oil Filter - (S) Full Flow w/By-Pass Valve
- Lube Oil Pump - (S) Gear Driven
- Manual Start Controls - (S) On Instrument Panel
- Overspeed Control - (S) Electronic w/Reset & Test on Instrument Panel
- Raw Water Solenoid Operation - (S) Automatic from Engine Controller & from Emergency Local Control
- Run-Stop Control - (S) On Instrument Panel With Control Position Warning Light
- Run Solenoid - (S) 12 V-DC, (O) 24 V-DC
- Starter - (S) 12 V-DC, (O) 24 V-DC
- Throttle Control - (S) Adjustable Speed Control
- Water Pump - (S) Poly-Vee Belt Drive w/Guard

| Operating Speed (RPM) | | |
|-----------------------|----------|----------|
| Model | 1760 | 2100 |
| CFP8E-F10 | 298(222) | 306(228) |
| | •HP(kW) | |

(O) Optional Equipment (S) Standard Equipment



LISTED



SPECIFICATIONS

| Item | CFP8E-F10 |
|---------------------------|------------------------|
| Aspiration | T/A |
| Rotation | Clockwise |
| Weight -lb. (kg) | 1792(813) |
| Compression Ratio | 17:1 |
| Displacement- cu. In. (l) | 505 (8.3) |
| Engine Type | 4 Stroke Cycle- Inline |
| Bore & Stroke- in. (mm) | 4.49(114)x5.31(135) |
| Installation Drawing | 8711 |
| Wiring Diagram | 8512 |
| Engine Series | Cummins QSC8.3L Series |

ENGINE RATINGS BASELINES

Engines are rated at standard SAE conditions of 29.61 in. (7521mm) Hg barometer and 77°F (25°C) inlet air temperature (approximates 300ft. (91.4 m) above sea level) by the testing laboratory (see SAE Standard J 1349).

A deduction of 3 percent from engine horsepower rating at standard SAE conditions shall be made for diesel engines for each 1000 ft. (305 m) altitude above 300 ft. (91.4 m).

A deduction of 1 percent from engine horsepower rating as corrected to standard SAE conditions shall be made for diesel engines for every 10°F above 77°F (24°C) ambient temperature.

Note: Engines certified at any speed between 1760 & 2100 RPM.

*Subject to change without notification.

CERTIFIED POWER AT ANY SPEED

Although FM-UL Certified BHP ratings are shown at specific speeds, Cummins engines can be applied at any intermediate speed. To determine the intermediate certified power, make a linear interpolation from the Cummins FM-UL certified power curve. Contact Cummins NPower or your pump OEM representative to obtain details.



875 Lawrence Drive
DePere, WI 54115

920-337-9750 / 800-236-9750 / 920-337-9746 (Fax)

www.cumminsfirepower.com



Engine Performance Curve

Cummins Fire Power

DePere, WI 54115

<http://www.cumminsfirepower.com>

Basic Engine Model:

CFP8E-F10

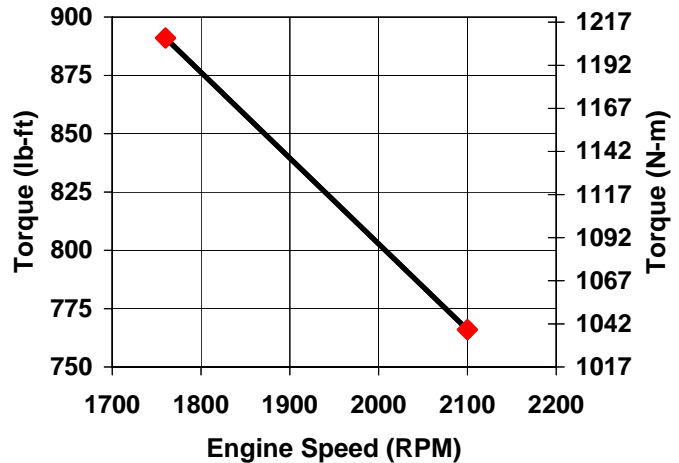
Curve Number: FR - 91061

Date: 11/2004

| | | | |
|--------------------|-------------------------------|-------------------------|--------------------------------------|
| Engine Family: | Industrial | CPL Code: | 8151 |
| Displacement: | 506 cu.in. (8.3 litre) | Emission Certification: | 2002 EPA/CARB Tier-2 |
| Dry Weight: | 1595 lb. (723) kg) | Aspiration: | Turbocharged, Chrg Air Cooled |
| Compression Ratio: | 17.1:1 | Engine Configuration: | D143032CX03 |
| No. of Cylinders: | 6 | Minimum rating | 299 HP @ 1760 RPM |
| Fuel System: | C.A.P.S. | Maximum rating | 306 HP @ 2100 RPM |

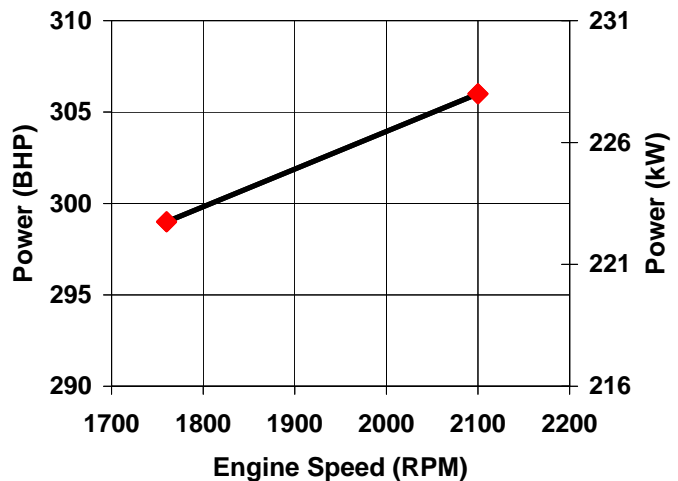
Torque Output

| RPM | lb-ft | N-m |
|------|-------|------|
| 1760 | 890 | 1207 |
| 2100 | 766 | 1039 |



Power Output

| RPM | BHP | kW |
|------|-----|-----|
| 1760 | 298 | 222 |
| 2100 | 306 | 228 |



NOTES:

- Curves shown above represent mature gross engine performance capabilities obtained and corrected in accordance with SAE J1349 conditions of 29.61 in Hg (100 kPa) barometric pressure [300 ft. (90 m) altitude], 77 °F (25 °C) inlet air temperature, and 0.30 in. Hg (1 kPa) water vapor pressure with No. 2 diesel fuel.
- The engine may be operated without changing the fuel setting up to 1000 ft. (300 m) altitude and up to 77 °F (25 °C) ambient temperature. For sustained operation at high altitudes, the fuel rate of the engine should be adjusted to limit performance by 3% per 1,000 ft. (305 m) above 1000 ft. (300 m) altitude. For sustained operation at high ambient temperatures, the fuel rate of the engine should be adjusted to limit performance by 1% per 10 °F above 77 °F (2% per 11 °C above 25 °C).

Scott Danforth
Engineering Manager

Certified Within 5%

Fuel Supply / Drain System**1760 2100**

| | | |
|--|----------------------|-------------|
| Nominal Fuel Consumption - Gal./hr. (L/hr) | 14.1 (53.3) | 15.5 (58.6) |
| Fuel Type | Number 2 Diesel Only | |
| Minimum Supply Line Size - in. (mm) | 0.5 (12.7) D. | |
| Minimum Drain Line Size - in. (mm) | 0.375 (9.53) D. | |
| Maximum Fuel Line Length Between Supply Tank & Fuel Pump - ft. (m) | 40 (12) | |
| Maximum Fuel Height above C/L Crankshaft - in. (mm) | 80 (2030) | |
| Recommended Fuel Filter - Primary: Fleetguard (Cummins)..... | FS1000 (3329289) | |
| - Secondary | None | |
| Maximum Restriction @ Lift Pump-Inlet - With Clean Filter - in. Hg (mm Hg) | 4.0 (102) | |
| Maximum Restriction @ Lift Pump-Inlet - With Dirty Filter - in. Hg (mm Hg) | 8.0 (203) | |
| Maximum Return Line Restriction - Without Check Valves - in. Hg (mm Hg) | 10 (254) | |
| Minimum Fuel Tank Vent Capability - ft ³ /hr (m ³ /hr) | 25 (0.707) | |
| Maximum Fuel Temperature @ Lift Pump Inlet - °F (°C) | 160 (71) | |

Starting and Electrical System**12V 24V**

| | | |
|---|----------|-------|
| Engine Only - Cold Cranking Amperes - (CCA) | 1250 | 625 |
| Engine Only - Reserve Capacity - Minutes | 360 | 180 |
| Battery Cable Size (Maximum Cable Length Not to Exceed 5 ft. [1.5 m] AWG) | 00 | 00 |
| Maximum Resistance of Starting Circuit - Ohms | 0.002 | 0.004 |
| Typical Cranking Speed - RPM | 120 | 120 |
| Alternator (Standard), Internally Regulated - Ampere | 95 | 45 |
| Wiring for Automatic Starting (Negative Ground) | Standard | |
| Reference Wiring Diagram | 8512 | |

Performance Data

All data is based on the engine operating with fuel system, water pump, lubricating oil pump, air cleaner, and alternator; not included are compressor, fan, optional equipment, and driven components. Data is based on operation at SAE standard J1394 conditions of 300 ft. (91 m) altitude, 29.61 in. (752 mm) Hg dry barometer, and 77 °F (25 °C) intake air temperature, using No.2 diesel or a fuel corresponding to ASTM-D2.

| | |
|---|----------|
| Altitude Above Which Output Should be Limited - ft. (m) | 300 (91) |
| Correction Factor per 1000 ft. (300 m) above Altitude Limit | 3% |
| Temperature Above Which Output Should be Limited - °F (°C) | 77 (25) |
| Correction Factor per 10 °F (11 °C) Above Temperature Limit | 1% (2%) |

Exhaust Emissions (EPA Tier T2) [Reference Emissions Data Doc 9801]**g/kW-hr g/BHP-hr**

| | | |
|--|------|------|
| Hydrocarbons (HC/OMHCE)..... | 0.16 | 0.12 |
| Oxides of Nitrogen (NOx)..... | 5.24 | 3.93 |
| Non-Methane Hydrocarbons + NOx (NMHC+NOx)..... | 5.50 | 4.13 |
| Carbon Monoxide (CO)..... | 0.90 | 0.68 |
| Particulate..... | 0.13 | 0.10 |

FM Approved and UL Listed Ratings for CFP8E-F10

| | | |
|---|-------------|-------------|
| Engine Speed - RPM | 1760 | 2100 |
| Output - BHP (kW) | 298 (222) | 306 (228) |
| Ventilation Air Required for Combustion - CFM (litre/sec) | 575 (271) | 668 (315) |
| Exhaust Gas Flow - CFM (litre/sec) | 1512 (714) | 1660 (783) |
| Exhaust Gas Temperature - °F (°C) | 942 (506) | 900 (482) |
| Engine Heat Rejection to Coolant- BTU/min. (kW) | 5307 (93) | 5756 (101) |
| Engine Heat Rejection to Ambient - BTU/min. (kW) | 1400 (24.6) | 1750 (30.7) |

All Data is Subject to Change Without Notice.



Engine Performance Curve

Cummins Fire Power

DePere, WI 54115

<http://www.cumminsfirepower.com>

Basic Engine Model:

CFP8E-F10

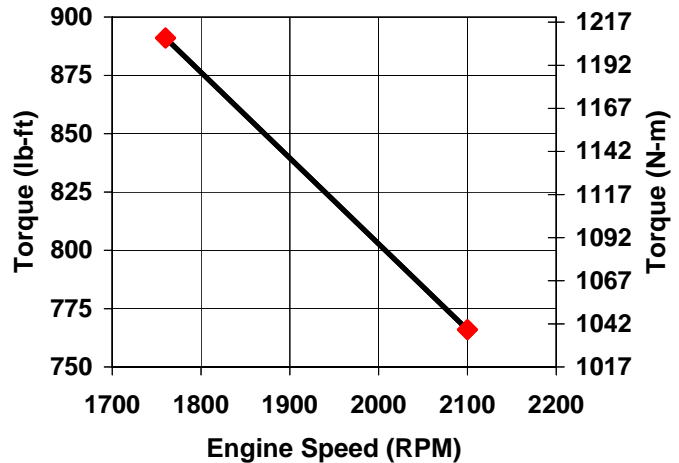
Curve Number: FR - 91061

Date: 11/2004

| | | | |
|--------------------|-------------------------------|-------------------------|--------------------------------------|
| Engine Family: | Industrial | CPL Code: | 8151 |
| Displacement: | 506 cu.in. (8.3 litre) | Emission Certification: | 2002 EPA/CARB Tier-2 |
| Dry Weight: | 1595 lb. (723) kg) | Aspiration: | Turbocharged, Chrg Air Cooled |
| Compression Ratio: | 17.1:1 | Engine Configuration: | D143032CX03 |
| No. of Cylinders: | 6 | Minimum rating | 299 HP @ 1760 RPM |
| Fuel System: | C.A.P.S. | Maximum rating | 306 HP @ 2100 RPM |

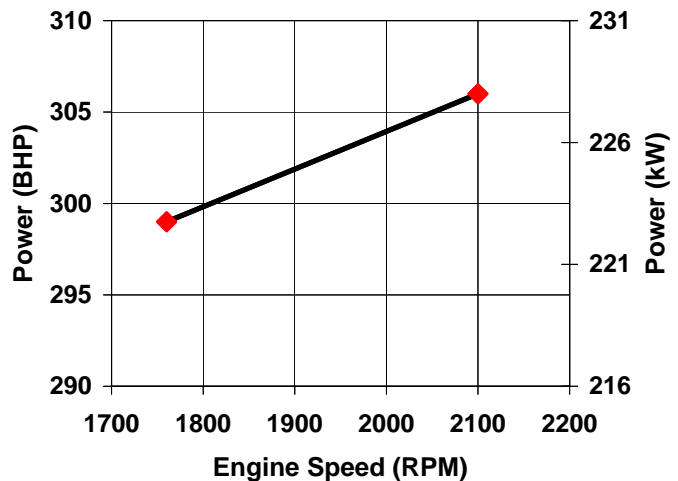
Torque Output

| RPM | lb-ft | N-m |
|------|-------|------|
| 1760 | 890 | 1207 |
| 2100 | 766 | 1039 |



Power Output

| RPM | BHP | kW |
|------|-----|-----|
| 1760 | 298 | 222 |
| 2100 | 306 | 228 |



NOTES:

1. Curves shown above represent mature gross engine performance capabilities obtained and corrected in accordance with SAE J1349 conditions of 29.61 in Hg (100 kPa) barometric pressure [300 ft. (90 m) altitude], 77 °F (25 °C) inlet air temperature, and 0.30 in. Hg (1 kPa) water vapor pressure with No. 2 diesel fuel.
2. The engine may be operated without changing the fuel setting up to 1000 ft. (300 m) altitude and up to 77 °F (25 °C) ambient temperature. For sustained operation at high altitudes, the fuel rate of the engine should be adjusted to limit performance by 3% per 1,000 ft. (305 m) above 1000 ft. (300 m) altitude. For sustained operation at high ambient temperatures, the fuel rate of the engine should be adjusted to limit performance by 1% per 10 °F above 77 °F (2% per 11 °C above 25 °C).

Scott Danforth
Engineering Manager

Certified Within 5%



Engine Datasheet

Cummins Fire Power

DePere, WI 54115

<http://www.cumminsfirepower.com>

Basic Engine Model

CFP8E-F10

Curve Number: **FR - 91061**

CPL Code: **8062**

Configuration Number: - **D413032CX03**

Installation Drawing: - **8711**

Engine Family: **Industrial**

Date: **Nov 2004**

General Engine Data

Type 4 Cycle; In-Line; 6 Cylinder
 Aspiration Turbocharged, Chrg Air Cooled
 Bore & Stroke - in. (mm) 4.49 (114) x 5.31 (135)
 Displacement - in.³ (litre) 506 (8.3)
 Compression Ratio 17.1:1
 Valves per Cylinder: - Intake 2
 - Exhaust 2
 Dry Weight - lb (kg) 1595 (723)
 Wet Weight - lb (kg) 1792 (813)
 Maximum Allowable Bending Moment @ Rear Face of Block - lb.-ft. (N*m) 1000 (1350)

Air Induction System

Maximum Temperature Rise Between Ambient Air and Engine Air Inlet - °F (°C) ... 30 (15)
 Maximum Inlet Restriction with Dirty Filter - in. H₂O (mm H₂O) 25 (635)
 Recommended Air Cleaner Element (Standard): Donaldson (CFP)..... B105006 (8535)
 (Optional): K&N (CFP)..... RU-5045 (9606)

Lubrication System

Oil Pressure Range at Rated - PSI (kPa) 40-60 (276-414)
 Oil Capacity of Pan (High - Low) - U.S. quarts (litre) 20-16 (18.9-15.1)
 Total System Capacity - U.S. Gal. (litre) 6.3 (23.8)
 Recommended Lube Oil Filter : Fleetguard (Cummins)..... LF9009 (3401544)

Cooling System

Raw Water Working Pressure Range at Heat Exchanger - PSI (kPa) 60 (414) MAX
 Recommended Min. Water Supply Pipe Size to Heat Exchanger - in. (mm) 1.0 (25.4) D.
 Recommended Min. Water Disch. Pipe Size From Heat Exchanger - in. (mm) 1.25 (31.7) D.
 Coolant Water Capacity (Engine Side) - U.S. gal. (litre) 2.8 (10.4)
 Standard Thermostat - Type Modulating
 - Range - °F (°C) 180-199 (82-93)
 Minimum Raw Water Flow
 with Water Temperatures to 90 °F (32 °C) - U.S. GPM (litre/s) 30 (1.89)
 Recommended Cooling Water Filter: Fleetguard (Cummins)..... WF2072 (3315115)

A jacket water heater is mandatory on this engine. The recommended heater wattage is 2250 down to 40 °F (4 °C).

Exhaust System

Max. Back Pressure Imposed by Complete Exhaust System in in. H₂O (kPa) 40.8 (10.1)
 Exhaust Pipe Size Normally Acceptable - in. (mm) 4 (101.6) D.

Noise Emissions

Top..... 97.7 dBa
 Right Side..... 97.7 dBa
 Left Side..... 97.7 dBa
 Front..... 97.7 dBa
 Exhaust..... N/A dBa

Fuel Supply / Drain System**1760****2100**

| | | |
|--|----------------------|-------------|
| Nominal Fuel Consumption - Gal./hr. (L/hr) | 14.1 (53.3) | 15.5 (58.6) |
| Fuel Type | Number 2 Diesel Only | |
| Minimum Supply Line Size - in. (mm) | 0.5 (12.7) D. | |
| Minimum Drain Line Size - in. (mm) | 0.375 (9.53) D. | |
| Maximum Fuel Line Length Between Supply Tank & Fuel Pump - ft. (m) | 40 (12) | |
| Maximum Fuel Height above C/L Crankshaft - in. (mm) | 80 (2030) | |
| Recommended Fuel Filter - Primary: Fleetguard (Cummins)..... | FS1000 (3329289) | |
| - Secondary | None | |
| Maximum Restriction @ Lift Pump-Inlet - With Clean Filter - in. Hg (mm Hg) | 4.0 (102) | |
| Maximum Restriction @ Lift Pump-Inlet - With Dirty Filter - in. Hg (mm Hg) | 8.0 (203) | |
| Maximum Return Line Restriction - Without Check Valves - in. Hg (mm Hg) | 10 (254) | |
| Minimum Fuel Tank Vent Capability - ft ³ /hr (m ³ /hr) | 25 (0.707) | |
| Maximum Fuel Temperature @ Lift Pump Inlet - °F (°C) | 160 (71) | |

Starting and Electrical System**12V****24V**

| | | |
|---|----------|-------|
| Engine Only - Cold Cranking Amperes - (CCA) | 1250 | 625 |
| Engine Only - Reserve Capacity - Minutes | 360 | 180 |
| Battery Cable Size (Maximum Cable Length Not to Exceed 5 ft. [1.5 m] AWG) | 00 | 00 |
| Maximum Resistance of Starting Circuit - Ohms | 0.002 | 0.004 |
| Typical Cranking Speed - RPM | 120 | 120 |
| Alternator (Standard), Internally Regulated - Ampere | 95 | 45 |
| Wiring for Automatic Starting (Negative Ground) | Standard | |
| Reference Wiring Diagram | 8512 | |

Performance Data

All data is based on the engine operating with fuel system, water pump, lubricating oil pump, air cleaner, and alternator; not included are compressor, fan, optional equipment, and driven components. Data is based on operation at SAE standard J1394 conditions of 300 ft. (91 m) altitude, 29.61 in. (752 mm) Hg dry barometer, and 77 °F (25 °C) intake air temperature, using No.2 diesel or a fuel corresponding to ASTM-D2.

| | |
|---|----------|
| Altitude Above Which Output Should be Limited - ft. (m) | 300 (91) |
| Correction Factor per 1000 ft. (300 m) above Altitude Limit | 3% |
| Temperature Above Which Output Should be Limited - °F (°C) | 77 (25) |
| Correction Factor per 10 °F (11 °C) Above Temperature Limit | 1% (2%) |

Exhaust Emissions (EPA Tier T2) [Reference Emissions Data Doc 9801]**g/kW-hr****g/BHP-hr**

| | | |
|--|------|------|
| Hydrocarbons (HC/OMHCE)..... | 0.16 | 0.12 |
| Oxides of Nitrogen (NOx)..... | 5.24 | 3.93 |
| Non-Methane Hydrocarbons + NOx (NMHC+NOx)..... | 5.50 | 4.13 |
| Carbon Monoxide (CO)..... | 0.90 | 0.68 |
| Particulate..... | 0.13 | 0.10 |

FM Approved and UL Listed Ratings for CFP8E-F10

| | | |
|---|-------------|-------------|
| Engine Speed - RPM | 1760 | 2100 |
| Output - BHP (kW) | 298 (222) | 306 (228) |
| Ventilation Air Required for Combustion - CFM (litre/sec) | 575 (271) | 668 (315) |
| Exhaust Gas Flow - CFM (litre/sec) | 1512 (714) | 1660 (783) |
| Exhaust Gas Temperature - °F (°C) | 942 (506) | 900 (482) |
| Engine Heat Rejection to Coolant- BTU/min. (kW) | 5307 (93) | 5756 (101) |
| Engine Heat Rejection to Ambient - BTU/min. (kW) | 1400 (24.6) | 1750 (30.7) |

All Data is Subject to Change Without Notice.



California ATCM Tier 2 Emission Data
EPA Tier 2 Emission Data

CFP8E-F10 Fire Pump Driver

Type: 4 Cycle; In-Line; 6 Cylinder
Aspiration: Turbocharged, Charge Air Cooled

| 15 PPM Diesel Fuel | | | | | | | | | | | | | |
|--------------------|-----|------------------|------|----------------------------|-------|-------|-------------------|-------|-------|-------------|-----|----------|-------|
| RPM | BHP | Fuel Consumption | | D2 Cycle Exhaust Emissions | | | | | | Exhaust | | | |
| | | Gal/Hr | L/hr | Grams per BHP - HR | | | Grams per kW - HR | | | Temperature | | Gas Flow | |
| | | | | NMHC+NOx | CO | PM | NMHC+NOx | CO | PM | °F | °C | CFM | L/sec |
| 1760 | 298 | 14.1 | 53.4 | 3.701 | 0.671 | 0.085 | 4.963 | 0.900 | 0.114 | 942 | 506 | 1512 | 714 |
| 2100 | 306 | 15.5 | 58.7 | | | | | | | 900 | 482 | 1660 | 784 |

The emissions values above are based on CARB approved calculations for converting EPA (500 ppm) fuel to CARB (15 ppm) fuel.

| 300-500 PPM Diesel Fuel | | | | | | | | | | | | | |
|-------------------------|-----|------------------|------|----------------------------|-------|-------|-------------------|-------|-------|-------------|-----|----------|-------|
| RPM | BHP | Fuel Consumption | | D2 Cycle Exhaust Emissions | | | | | | Exhaust | | | |
| | | Gal/Hr | L/hr | Grams per BHP - HR | | | Grams per kW - HR | | | Temperature | | Gas Flow | |
| | | | | NMHC+NOx | CO | PM | NMHC+NOx | CO | PM | °F | °C | CFM | L/sec |
| 1760 | 298 | 14.1 | 53.4 | 4.027 | 0.671 | 0.097 | 5.400 | 0.900 | 0.130 | 942 | 506 | 1512 | 714 |
| 2100 | 306 | 15.5 | 58.7 | | | | | | | 900 | 482 | 1660 | 784 |

QSC8.3 Base Model Manufactured by Cummins Inc.
- Using fuel rating 91061

Reference EPA Standard Engine Family: 2CEXL0505ACC

No special options needed to meet current regulation emissions for all 50 states

Test Methods:

EPA/CARB Nonroad emissions recorded per 40CFR89 (ref. ISO8178-1) and weighted at load points prescribed in Subpart E, Appendix A, for Constant Speed Engines (ref. ISO8178-4, D2).

Diesel Fuel Specifications:

Cetane Number: 40-48
Reference: ASTM D975 No. 2-D

Reference Conditions:

Air Inlet Temperature: 25°C (77°F)
Fuel Inlet Temperature: 40°C (104°F)
Barometric Pressure: 100 kPa (29.53 in Hg)
Humidity: 10.7 g/kg (75 grains H₂O/lb) of dry air; required for NO_x corrector
Restrictions: Intake Restriction set to a maximum allowable limit for clean filter; Exhaust Back Pressure set to maximum allowable limit.

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results.



EPA Tier 2 Emission Data
Fire Pump NSPS Compliant

CFP8E-F10 Fire Pump Driver

Type: 4 Cycle; In-Line; 6 Cylinder
Aspiration: Turbocharged, Charge Air Cooled

| 15 PPM Diesel Fuel | | | | | | | | | | | | | |
|--------------------|-----|------------------|------|----------------------------|-------|-------|-------------------|-------|-------|-------------|-----|----------|-------|
| RPM | BHP | Fuel Consumption | | D2 Cycle Exhaust Emissions | | | | | | Exhaust | | | |
| | | Gal/Hr | L/hr | Grams per BHP - HR | | | Grams per kW - HR | | | Temperature | | Gas Flow | |
| | | | | NMHC+NOx | CO | PM | NMHC+NOx | CO | PM | °F | °C | CFM | L/sec |
| 1760 | 298 | 14.1 | 53.4 | 3.701 | 0.671 | 0.085 | 4.963 | 0.900 | 0.114 | 942 | 506 | 1512 | 714 |
| 2100 | 306 | 15.5 | 58.7 | | | | | | | 900 | 482 | 1660 | 784 |

The emissions values above are based on CARB approved calculations for converting EPA (500 ppm) fuel to CARB (15 ppm) fuel.

| 300-500 PPM Diesel Fuel | | | | | | | | | | | | | |
|-------------------------|-----|------------------|------|----------------------------|-------|-------|-------------------|-------|-------|-------------|-----|----------|-------|
| RPM | BHP | Fuel Consumption | | D2 Cycle Exhaust Emissions | | | | | | Exhaust | | | |
| | | Gal/Hr | L/hr | Grams per BHP - HR | | | Grams per kW - HR | | | Temperature | | Gas Flow | |
| | | | | NMHC+NOx | CO | PM | NMHC+NOx | CO | PM | °F | °C | CFM | L/sec |
| 1760 | 298 | 14.1 | 53.4 | 4.027 | 0.671 | 0.097 | 5.400 | 0.900 | 0.130 | 942 | 506 | 1512 | 714 |
| 2100 | 306 | 15.5 | 58.7 | | | | | | | 900 | 482 | 1660 | 784 |

QSC8.3 Base Model Manufactured by Cummins Inc.
- Using fuel rating 91061

Reference EPA Standard Engine Family: 2CEXL0505ACC

No special options needed to meet current regulation emissions for all 50 states

Test Methods:

EPA/CARB Nonroad emissions recorded per 40CFR89 (ref. ISO8178-1) and weighted at load points prescribed in Subpart E, Appendix A, for Constant Speed Engines (ref. ISO8178-4, D2).


Diesel Fuel Specifications:

Cetane Number: 40-48
Reference: ASTM D975 No. 2-D

Reference Conditions:

Air Inlet Temperature: 25°C (77°F)
Fuel Inlet Temperature: 40°C (104°F)
Barometric Pressure: 100 kPa (29.53 in Hg)
Humidity: 10.7 g/kg (75 grains H₂O/lb) of dry air; required for NOx correction
Restrictions: Intake Restriction set to a maximum allowable limit for clean filter; Exhaust Back Pressure set to maximum allowable limit.

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results.

| | | |
|---|--|---|
|  | Engine Materials and Construction Cummins Fire Power DePere, WI 54115 http://www.cumminsfirepower.com | Basic Engine Model CFP8E-F10 |
| | Configuration Number: D413032CX03 Installation Drawing: 8711 | Curve Number: FR - 91061 CPL Code: 8062 Engine Family: Industrial Date: December 2008 |
| <p style="text-align: center;"><u>Engine</u></p> <p>Camshaft Type..... Precision Ground Material..... Forged Steel Location..... In Block Drive..... Gear</p> <p>Connecting Rods Type..... I-Beam, Fracture split Material..... Nickel Chrome Molybdenum</p> <p>Crankshaft Type..... Precision Ground Material..... Forged Steel</p> <p>Crankshaft Main Bearings Type..... Precision Half Shells Material..... Steel, Copper with Soft Metal Overlay</p> <p>Crankshaft Rod Bearings Type..... Precision Half Shells Material..... Steel, Copper with Soft Metal Overlay</p> <p>Cylinder Block Type..... Wet Lined Material..... Cast Iron Alloy</p> <p>Cylinder Head Type..... 1 Common, 24 Valve Material..... Cast Iron Alloy</p> <p>Cylinder Liners Type..... Centrifugal Casting, Mid Stop Material..... Cast Iron Alloy</p> <p>Pistons Type..... Articulated Material..... Steel Head with Aluminum Skirt</p> <p>Piston Pins Type..... Full Floating Material..... Forged Steel</p> <p>Piston Rings First..... Chrome Coated Ductile Cast Iron Second..... Keystone, Hardened Grey Cast Iron Third..... Chrome Coated Composite</p> <p>Valves Type..... Poppet Arrangement..... Overhead Valve Number per Cylinder... 2 Intake, 2 Exhaust Operating Mechanism. Mechanical Rocker Arm Lifter Type..... Solid Push Tube</p> | | <p style="text-align: center;"><u>Air Handling</u></p> <p>Air Cleaner Type..... Single Element, Washable Material..... Oiled Cotton Fabric</p> <p>Turbocharger Type..... Cummins Turbo Tech HX40 Design..... Wastegated</p> <p style="text-align: center;"><u>Cooling System</u></p> <p>Charge Air Cooler Heat Exchanger Type..... Tube and Shell Material..... Covers..... 83600 Red Brass Headers..... 36500 Muntz Plumbing..... 316 Stainless Steel, Brass, Copper & Silicone Tubes..... Copper</p> <p>Coolant Heat Exchanger Type..... Tube and Shell Material..... Electrode..... Zinc Headers..... Copper Shell..... Copper Tubes..... Copper</p> <p>Coolant Pump Type..... Centrifugal Drive..... Belt, Multi VCC</p> <p>Thermostat Type..... Modulating Quantity..... 1</p> <p style="text-align: center;"><u>Fuel System</u></p> <p>Fuel Injection Pump Type..... Cummins Accumulator Pump CAPS Drive..... Electronic, Gear Driven</p> <p>Fuel Lift Pump Type..... Roller Vane Drive..... Electronic, Gear Driven</p> <p style="text-align: center;"><u>Lubrication System</u></p> <p>Oil Pump Type..... Gerotor Drive..... Gear</p> <p>Lubrication Cooler Type..... Plate Material..... Braised Stainless Steel</p> |