FIREWATER PUMP INFORMATION

JW6H-UF40

FIRE PUMP DRIVER

EMISSION DATA

FOR

CALIFORNIA ATCM TIER 2

6 *Cylinders*
Four *Cycle*
Lean *Burn*
Turbocharged & Raw Water Aftercooled

15 PPM SULFUR #2 DIESEL FUEL (3b)								
RPM	BHP (1)	FUEL GAL/HR (L/HR)	GRAMS / HP / HR				EXHAUST	
			NMHC	NOx	CO	PM (2)	°F (°C)	CFM (m^3/min)
2100	300	14.0 (53)	0.32	4.27	0.33	0.12	770 (396)	1740 (49)

6081H Base Model Engine Manufactured by John Deere Co.

Notes:

1) *Engines are rated at standard conditions of 29.61in. (7521 mm) Hg barometer and 77°F (25° C) inlet air temperature. (SAE J1349)*

2) *PM is a measure of total particulate matter, including PM_{10}.*

3) *These emission values:*
   a) *are dependent on CUSTOMER PURCHASED special option C131329 on the engine*
   b) *have been determined using single engine test data with 500 parts per million (PPM) Sulfur content fuel*

4) *See disclaimer on reverse side*

CLARKE

FIRE PROTECTION PRODUCTS
3133 EAST KEMPER ROAD
CINCINNATI, OH 45241

Disclaimer

1. Stationary diesel-fueled compression ignition engines installed in California after January 1, 2005 are subject to California's Airborne Toxic Control Measure for Stationary Compression Ignition Engines (the "ATCM"), Cal. Code Regs. Title 17, Section 93115

2. The reverse side of this document shows the emissions from this model engine supplied by Clarke Fire Protection Products ("Clarke"). These emissions values are calculated based on a ISO 8178 part 4 D1 cycle weighted average of actual test data from a single engine test.

3. Actual test data in the field or other information established by the local air districts or the California Air Resources Board ("CARB") that show actual emissions from an engine supplied by Clarke in excess of the ATCM limitations could indicate a violation of the ATCM and subject the seller, owner and operator of the engine to penalties under California law. Although Clarke believes that the engines supplied by Clarke comply with the ATCM based on the available data, for the foregoing reasons, Clarke cannot, and does not, guarantee that its engines will comply with the ATCM emission regulations.

4. CLARKE MAKES NO WARRANTIES OR GUARANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT THE ENGINES SUPPLIED BY CLARKE WILL COMPLY WITH THE ATCM. CLARKE ALSO EXPRESSLY DISCLAIMS THAT THE ENGINES SUPPLIED BY CLARKE WILL, IN FACT, COMPLY WITH THE ATCM. IN NO EVENT SHALL CLARKE BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THESE TERMS AND CONDITIONS OR THE ENGINES SUPPLIED BY CLARKE OR FOR INDEMNIFICATION OF BUYER ON ACCOUNT OF ANY CLAIM ASSERTED AGAINST BUYER, OR FOR ANY OTHER DAMAGE OF ANY KIND, WHETHER DIRECT OR INDIRECT, IF THE ENGINES SUPPLIED BY CLARKE DO NOT COMPLY WITH THE ATCM.

8 February 2006

California ATCM Tier 2 Emission Data
EPA Tier 2 Emission Data

CFP83-F40 Fire Pump Driver

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

15 PPM Diesel Fuel													
		Fuel Consumption		D2 Cycle Exhaust Emissions						Exhaust			
				Grams per BHP - HR			Grams per kW - HR			Temperature		Gas Flow	
RPM	BHP	Gal/Hr	L/hr	NMHC+NOx	CO	PM	NMHC+NOx	CO	PM	°F	°C	CFM	L/sec
1470	247	9.5	36.0	3.778	0.447	0.059	5.067	0.600	0.079	971	522	1247	589
1760	288	14.5	54.9							952	511	1632	770

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													
		Fuel Consumption		D2 Cycle Exhaust Emissions						Exhaust			
				Grams per BHP - HR			Grams per kW - HR			Temperature		Gas Flow	
RPM	BHP	Gal/Hr	L/hr	NMHC+NOx	CO	PM	NMHC+NOx	CO	PM	°F	°C	CFM	L/sec
1470	247	9.5	36.0	4.109	0.447	0.067	5.510	0.600	0.090	971	522	1247	589
1760	288	14.5	54.9							952	511	1632	770

C8.3TAA Base Model Manufactured by Cummins Inc.
- Using fuel rating 90940

Reference EPA Standard Engine Family: D413035GX02

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 H_2O/lb) of dry air; required for NOx correctior
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.

CLARKE

www.clarkefire.com ***Fire Protection Products***

JW6H-UF40

FIRE PUMP DRIVER

NOISE DATA

Mechanical Engine Noise *

RPM	BHP	OVERALL dB(A)	Octave Band 31.5 Hz dB(A)	63 Hz dB(A)	125 Hz dB(A)	250 Hz dB(A)	500 Hz dB(A)	1k Hz dB(A)	2k Hz dB(A)	4k Hz dB(A)	8k Hz dB(A)	16k Hz dB(A)
1470	240											
1760	290											
2100	300	108.6	66.4	67.7	83.2	90.7	96.4	101.0	104.4	101.1	97.0	95.0
2350	300	109.4	67.3	69.2	80.4	89.9	97.1	102.2	104.9	101.8	97.0	94.3

Raw Exhaust Engine Noise **

RPM	BHP	OVERALL dB(A)	Octave Band 31.5 Hz dB(A)	63 Hz dB(A)	125 Hz dB(A)	250 Hz dB(A)	500 Hz dB(A)	1k Hz dB(A)	2k Hz dB(A)	4k Hz dB(A)	8k Hz dB(A)	16k Hz dB(A)
1470	240											
1760	290											
2100	300											
2350	300											

To Be Provided Later

** Values above are provided at 3.3ft (1m) from engine block and do **not** include the raw exhaust noise.*

*** Values above are provided at 3.3ft (1m), 90° horizontal, from a vertical exhaust outlet and does **not** include noise created mechanically by the engine*

The above data reflects values for a typical engine of this model, speed and power in a free-field environment.

Installation specifics such as background noise level and amplification of noise levels from reflecting off of surrounding objects, will affect the overall noise levels observed. As a result of this, Clarke makes no guarantees to the above levels in an actual installation.

JW6H-UF40 (JDFP-06WR)
INSTALLATION & OPERATION DATA

Basic Engine Description

Engine Manufacturer	John Deere Co.
Ignition Type	Compression (Diesel)
Number of Cylinders	6
Bore and Stroke - in.(mm)	4.56 (116) x 5.06 (129)
Displacement - $in.^3$ (L)	496 (8.1)
Compression Ratio	15.7:1
Valves per cylinder - Intake	1
Exhaust	1
Combustion System	Direct Injection
Engine Type	In-Line, 4 Stroke Cycle
Aspiration	Turbocharged
Firing Order (CW Rotation)	1-5-3-6-2-4
Charge Air Cooling Type	Raw Water Cooled
Rotation (Viewed from Front) - Clockwise	Standard
Counter-Clockwise	Not Available
Engine Crankcase Vent System	Open
Installation Drawing	D-495
Weight - lb (kg)	2003 (906)

Cooling System	**1470**	**1760**	**2100**	**2350**
Engine H_2O Heat -Btu/sec.(kW)	147 (155)	154 (162)	162 (171)	156 (164)
Engine Radiated Heat - Btu/sec.(kW)	26 (27)	30 (32)	32 (34)	32 (34)
Heat Exchanger Minimium Flow				
60°F (15°C) Raw H_2O - gal/min. (L/min.)	12 (45)	15 (57)	17 (64)	21 (79)
95°F (35°C) Raw H_2O - gal/min. (L/min.)	19 (72)	23 (87)	29 (110)	31 (117)
Heat Exchanger Maximum Cooling H_2O				
Inlet Pressure - bar ($lb./in.^2$) (kPa)	4 (60) (400)			
Flow - gal./min (L/min.)	80 (302)			
Thermostat, Start to Open - °F (°C)	180 (82)			
Fully Opened - °F (°C)	202 (94)			
Engine Coolant Capacity - qt. (L)	23 (22)			
Coolant Pressure Cap - $lb./in.^2$(kPa)	10 (69)			
Maximum Engine H_20 Temperature - °F (°C)	200 (93)			
Minimum Engine H_20 Temperature - °F (°C)	160 (71)			

Electric System - DC

System Voltage (Nominal)	12 (Standard)	24 (Optional)
Battery Capacity for Ambients Above 32°F (0°C)		
Voltage (Nominal)	12	24
Qty. per Battery Bank	1	1
SAE size per J537	8D-900	8D-900
CCA @ 0°F (-18°C)	900	900
Reserve Capacity - Minutes	430	430
Battery Cable Circuit*, Max Resistance - ohm	0.0017	0.0017
Battery Cable Minimum Size		
0 -120 in. Circuit* Length	00	00
121 - 160 in. Circuit* Length	000	000
161 - 200 in. Circuit* Length	0000	0000
Charging Alternator Output - Amp	40	40
Starter Cranking Amps - @ 60°F (15°C)	495	326

**Positive and Negative Cables Combined Length*

NOTE: This engine is Intendend For Indoor Installation Or In A Weatherproof Enclosure.

Continued

JW6H-UF40 (JDFP-06WR)
INSTALLATION & OPERATION DATA (Continued)

Exhaust System	**1470**	**1760**	**2100**	**2350**
Exhaust Flow - $ft.^3$/min. (m^3/min.)	1276 (36)	1506 (43)	1740 (49)	2058 (58)
Exhaust Temperature - °F (°C)	1030 (540)	855 (443)	770 (396)	738 (392)
Maximum Allowable Back Pressure - in. H_20 (kPa)	19 (4.7)	26 (6.6)	28 (7.1)	30 (7.5)
Minimum Exhaust Pipe Dia. - in. (mm)**	5.0 (127)	5.0 (127)	5.0 (127)	5.0 (127)

Fuel System

Fuel Consumption - gal./hr. (L/hr.)	13 (49)	13.5 (51)	14 (53)	14.5 (55)
Fuel Return - gal./hr. (L/hr)	63 (238)	62.5 (237)	62 (235)	61.5 (233)
Total Supply Fuel Flow - gal./hr (L/hr.)	76 (288)	76 (288)	76 (288)	76 (288)
Fuel Pressure - $lb./in.^2$ (kPa)	25-35 (172-241)			
Minimum Line Size - Supply - in. (mm)**	50 Sch. 40 - Black			
Minimum Line Size - Return - in. (mm)**	37 Sch. 40 - Black			
Maximum Allowable Fuel Pump Suction				
With Clean Filter - in. H_20 (mH_20)	31 (0.8)			
Maximum Allowable Fuel Head above Fuel pump, Supply or Retrun - ft(m)	9 (2.7)			
Fuel Filter Micron Size	8			

Heater System

Jacket Water Heater	Standard
Wattage (Nominal)	2500
Voltage - AC, 1P	230 (+5%, -10%)
Optional Voltage - AC, 1P	115 (+5%, -10%)
Lube Oil Heater Wattage	
(Required Option When Ambient is Below 40°F (4°C)	150

Induction Air System

Air Cleaner Type	Indoors Service Only - Washable			
Air Intake Restriction Maximum Limit				
Dirty Air Cleaner - in. H_20 (kPa)	13 (3.2)	14 (3.5)	15 (3.7)	16 (4.0)
Clean Air Cleaner - in. H_20 (kPa)	3 (0.7)	4 (1.0)	6 (1.5)	7 (1.7)
Engine Air Flow - $ft.^3$/min. (m^3/min.)	460 (13)	615 (17)	760 (22)	923 (26)
Maximum Allowable Temperature (Air To Engine Inlet) - °F (°C)***	130 (54)			

Lubrication System

Oil Pressure - normal - $lb./in.^2$ (kPa)	30-55 (207-379)
In Pan Oil Temperature - °F (°C)	190-220 (88-104)
Oil Pan Capacity - High - qt. (L)	32 (30)
Total Oil Capacity with Filter - qt. (L)	34 (32)

Performance

BMEP - $lb./in.^2$ (kPa)	261 (1800)	263 (1813)	228 (1572)	204 (1406)
Piston Speed - ft./min. (m/min.)	1240 (378)	1484 (452)	1771 (540)	1982 (604)
Mechanical Noise - dB(A) @ 1M	C13918			
Power Curve	CDDA - W064 - 02			

*** Based On Nominal System. Flow Analysis Must Be Done To Assure Adherance To System Limitations.*
(Minimum Exhaust pipe Diameter is based on 15 feet of pipe, one elbow, and a silencer
pressure drop no greter than one half the max. allowable back pressure.)

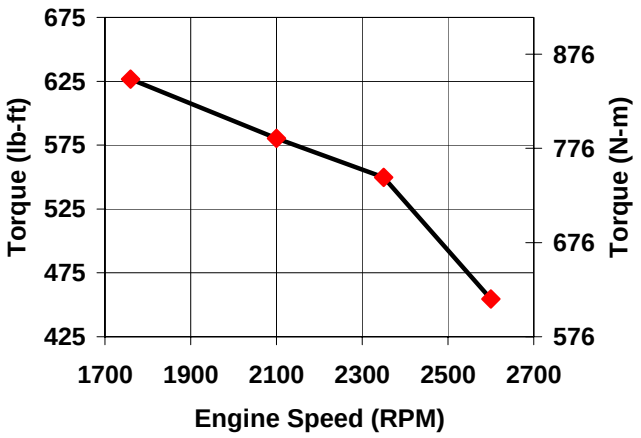
**** Review For Power Deration If Air Entering Engine Exceeds °77F (25°C)*

Cummins Fire Power	**Engine Performance Curve** **Cummins Fire Power** DePere, WI 54115 http://www.cumminsfirepower.com	**Basic Engine Model** **CFP6E-F35** Curve Number: **FR - 90847** Revision Date: **November 2006**

Engine Family:	**Industrial**	CPL Code:	**8040**
Displacement - in.3 (litre):	**359 (5.9)**	Emission Certification:	**2002 EPA/CARB Tier 2**
Dry Weight - lbs (kg):	**1435 (646)**	Aspiration:	**Turbocharged, Chrg Air Cooled**
Compression Ratio:	**16.3:1**	Engine Configuration:	**D403046CX03**
No. of Cylinders:	**6**	Minimum rating:	**210 HP @ 1760 RPM**
Fuel System:	**Bosch - Electronic**	Maximum rating:	**246 HP @ 2350 RPM**

Torque Output

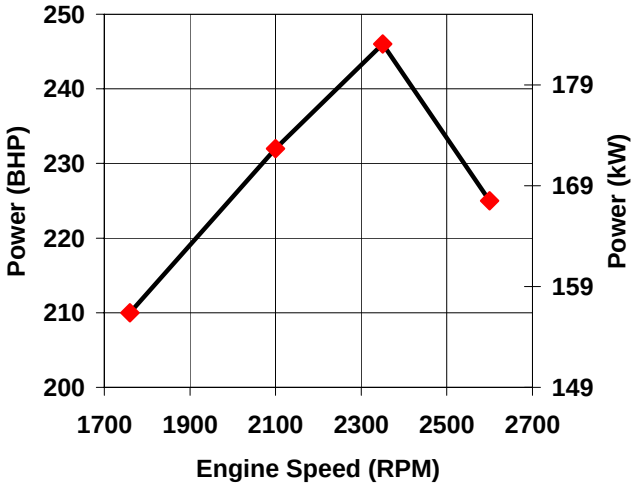
RPM	lb-ft	N-m
1760	627	850
2100	580	787
2350	550	745
2600	455	616



Horsepower Output *

RPM	BHP	kW
1760	210	157
2100	232	173
2350	246	183
2600	225	168

See page 4 for details



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. (91.4 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 300 ft. (91.4 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 300 ft. (91.4 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).

3. Engine is certified at any speed between 1760 and 2600 RPM.

Scott Danforth
Engineering Manager

Certified Within 5%

Engine Datasheet **Cummins Fire Power** DePere, WI 54115 http://www.cumminsfirepower.com	Basic Engine Model **CFP6E-F35, F25, F15**	
	Curve Number:	**FR - 90847**
	CPL Code:	**8040**
Configuration Number: **D403046CX03**	Engine Family:	**Industrial**
Installation Drawing: **8707**	Revision Date:	**November 2006**

General Engine Data

Type	4 Cycle; In-Line; 6 Cylinder	
Aspiration	Turbocharged, Chrg Air Cooled	
Bore & Stroke - in. (mm)	4.02 x 4.72	(102 x 120)
Displacement - in.^{3} (litre)	359	(5.9)
Compression Ratio	16.3:1	
Valves per Cylinder - Intake	2	
- Exhaust	2	
Dry Weight - lb (kg)	1435	(646)
Wet Weight - lb (kg)	1511	(680)
Maximum Allowable Bending Moment @ Rear Face of Block - lb.-ft. (N-m)	1000	(1356)

Air Induction System

Max. Temperature Rise Between Ambient Air and Engine Air Inlet - ^oF (^oC)	30	(16.7)
Maximum Inlet Restriction with Dirty Filter - in. H_2O (mm H_2O)	25	(635)
Recommended Air Cleaner Element - (Standard) Donaldson (CFP)	B105006	(8535)
- (Optional) K&N (CFP)	RU5045	(9606)

Lubrication System

Oil Pressure Range at Rated - PSI (kPa)	40-60	(276-414)
Oil Capacity of Pan (High - Low) - U.S. quarts (litre)	15-13	(14.2-12.3)
Total System Capacity - U.S. Gal. (litre)	4.2	(15.9)
Recommended Lube Oil Filter Fleetguard (Cummins)	LF3970	(3937736)

Cooling System

Raw Water Working Pressure Range at Heat Exchanger - PSI (kPa)	60	(413) MAX
Recommended Min. Water Supply Pipe Size to Heat Exchanger - in. (mm)	0.75	(19.05)
Recommended Min. Water Disch. Pipe Size From Heat Exchanger - in. (mm)	1.00	(25.40)
Coolant Water Capacity (Engine Side) - U.S. gal. (litre)	2.6	(9.8)
Standard Thermostat - Type	Modulating	
- Range - deg F (deg C)	181-196	(83-91)
Minimum Raw Water Flow with Water Temperatures to 90 ^oF (32 ^oC) - U.S. GPM (litre/s)	30	(1.89)
Recommended Cooling Water Filter Fleetguard (Cummins)	None	

A jacket water heater is mandatory on this engine. The recommended heater wattage is 1500 down to 40 ^oF (4 ^oC).

Exhaust System

Max. Back Pressure Imposed by Complete Exhaust System in in. H_2O (kPa)	40.8	(10.2)
Exhaust Pipe Size Normally Acceptable - in. (mm)	4.0	(102)

Noise Emissions

Top	95.8 dBa
Right Side	95.5 dBa
Left Side	99.6 dBa
Front	99.3 dBa
Exhaust	111 dBa

The noise emission values are estimated sound pressure levels at 3.3 ft. (1 m.).

Fuel Supply / Drain System	1760	2100	2350	2600
CFP6E-F35 Nominal Fuel Consumption - Gal./hr. (L/hr)	10.2 (38.6)	11.4 (43.0)	12.2 (46.3)	11.6 (43.8)
CFP6E-F25 Nominal Fuel Consumption - Gal./hr. (L/hr)	9.3 (35.1)	9.4 (35.4)	10.7 (40.5)	11.6 (43.8)
CFP6E-F15 Nominal Fuel Consumption - Gal./hr. (L/hr)	8.5 (32.2)	9.8 (37.1)	9.9 (37.6)	10.3 (38.9)

Fuel Type	Number 2 Diesel Only	
Minimum Supply Line Size - in. (mm)	0.25	(6.35)
Minimum Drain Line Size - in. (mm)	0.125	(3.18)
Maximum Fuel Line Length Between Supply Tank & Fuel Pump - ft. (m)	40	(12)
Maximum Fuel Height above C/L Crankshaft - in. (mm)	80	(2032)
Recommended Fuel Filter - Primary ..... Fleetguard (Cummins)	FS19519V	(3894519)
- Secondary	None	
Maximum Restriction @ Lift Pump-Inlet - With Clean Filter - in. Hg (mm Hg)	6.0	(152)
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)	20.1	(511)
Minimum Fuel Tank Vent Capability - ft^3/hr (m^3/hr)	12	(0.36)
Maximum Fuel Temperature @ Lift Pump Inlet - ^oF (^oC)	160	(71)

Starting and Electrical System	12V	24V
Min. Recommended Batt. Capacity - Cold Soak at 0^oF (-18^oC) or Above		
Engine Only - Cold Cranking Amperes - (CCA)	1250	625
Engine Only - Reserve Capacity - Minutes	260	130
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. (91.4 m) altitude, 29.61 in. (752 mm) Hg dry barometer, and 77 ^oF (25 ^oC) intake air temperature, using No.2 diesel or a fuel corresponding to ASTM-D2.

Altitude Above Which Output Should be Limited - ft. (m)	300	(91.4)
Correction Factor per 1000 ft. (305 m) above Altitude Limit	3%	
Temperature Above Which Output Should be Limited - ^oF (^oC)	77	(25)
Correction Factor per 10 ^oF (11 ^oC) Above Temperature Limit	1%	(2%)

Exhaust Emissions (EPA Tier T2) [Reference Emissions Data Doc. 9800]	g/kW-hr	g/BHP-hr
Hydrocarbons (HC/OMHCE)	0.12	0.09
Oxides of Nitrogen (NOx)	5.60	4.18
Non-Methane Hydrocarbons + NOx (NMHC+NOx)	5.72	4.27
Carbon Monoxide (CO)	0.60	0.45
Particulate	0.10	0.07

FM Approved and UL Listed Ratings for CFP6E-F35, F25, F15

Engine Speed - RPM	1760	2100	2350	2600
CFP6E-F35 Output - BHP (kW)	**210 (157)**	**232 (173)**	**246 (183)**	**225 (168)**
Ventilation Air Required for Combustion - CFM (litre/sec)	416 (196)	488 (230)	539 (254)	580 (274)
Exhaust Gas Flow - CFM (litre/sec)	1051 (496)	1207 (570)	1328 (627)	1380 (651)
Exhaust Gas Temperature - ^{o}F (^{o}C)	917 (492)	917 (492)	938 (503)	925 (496)
Engine Heat Rejection to Coolant- BTU/min. (kW)	3697 (65)	4171 (73)	4587 (81)	4744 (83)
Engine Heat Rejection to Ambient - BTU/min. (kW)	1330 (23)	1300 (23)	1250 (22)	1200 (21)
CFP6E-F25 Output - BHP (kW)	**191 (142)**	**215 (160)**	**225 (168)**	**215 (160)**
Ventilation Air Required for Combustion - CFM (litre/sec)	407 (192)	483 (228)	532 (251)	572 (270)
Exhaust Gas Flow - CFM (litre/sec)	988 (466)	1158 (547)	1277 (603)	1348 (636)
Exhaust Gas Temperature - ^{o}F (^{o}C)	859 (459)	874 (468)	898 (481)	898 (481)
Engine Heat Rejection to Coolant- BTU/min. (kW)	3428 (60)	3948 (69)	4355 (77)	4609 (81)
Engine Heat Rejection to Ambient - BTU/min. (kW)	1330 (23)	1300 (23)	1250 (22)	1200 (21)
CFP6E-F15 Output - BHP (kW)	**175 (130)**	**200 (149)**	**200 (149)**	**200 (149)**
Ventilation Air Required for Combustion - CFM (litre/sec)	392 (185)	477 (225)	521 (246)	561 (265)
Exhaust Gas Flow - CFM (litre/sec)	924 (436)	1110 (524)	1197 (565)	1294 (611)
Exhaust Gas Temperature - ^{o}F (^{o}C)	818 (437)	850 (454)	831 (444)	857 (458)
Engine Heat Rejection to Coolant- BTU/min. (kW)	3196 (56)	3731 (66)	4028 (71)	4412 (78)
Engine Heat Rejection to Ambient - BTU/min. (kW)	1330 (23)	1300 (23)	1250 (22)	1200 (21)

All Data is Subject to Change Without Notice.

Manager Engineering: ***Scott Danforth***
Cummins Fire Power, DePere, WI 54115 U.S.A.