CLARKE®

FIRE PUMP ENGINES

MODELS

JW6H-UFADF0 JW6H-UFAD80
JW6H-UFADJ0 JW6H-UFAA60
JW6H-UFAD70 JW6H-UFAA80

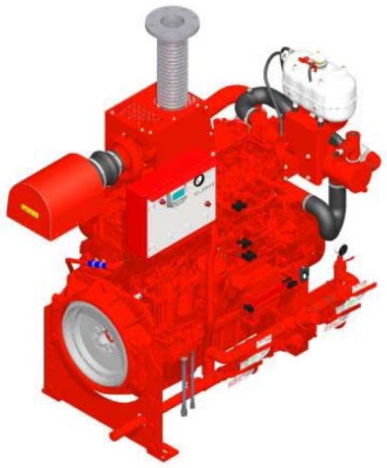
FM-UL-cUL APPROVED RATINGS BHP/*KW*

JW6H MODEL ♦	RATED SPEED 1760		1900		2100		2350		US-EPA (NSPS) Available until ●
UFADF0	**327**	*244*			**311**	*232*			*No Expiration*
UFADJ0	**350**	*261*			**332**	*247.5*			*No Expiration*
UFAD70	**376**	*280*			**399**	*297.5*			*No Expiration*
UFAD80	**422**	*315*	***400***	*298*	**400**	*298*			*No Expiration*
UFAA60							**360**	268	*NA* λ
UFAA80	**422**	*315*			**400**	*298*			*NA* λ

● USA EPA (NSPS) Tier 3 Emissions Certified Off-Road (40 CFR Part 89) and NSPS Stationary (40 CFR Part 60 Sub Part IIII). Meet EU Stage IIA emission level

λ N/A = Not Applicable / Non-Emissionized

♦ All Models are available for Export



Picture represents JW6H-TRWA Power Tech E Engine Series

SPECIFICATIONS

ITEM	JW6H MODELS UFADF0	UFADJ0	UFAD70	UFAD80	UFAA60	UFAA80
Number of Cylinders	6					
Aspiration	TRWA					
Rotation*	CW					
Overall Dimensions – in. (mm)	66.9 (1699) H X 61.1 (1553) L X 38.2 (971) W					
Crankshaft Centerline Height – in. (mm)	17.7 (449)					
Weight – lb (kg)	2094 (948)					
Compression Ratio	16.0:1					
Displacement – cu. in. (L)	549 (9.0)					
Engine Type	4 Stroke Cycle – Inline Construction					
Bore & Stroke – in. (mm)	4.66 x 5.35 (118 x 136)					
Installation Drawing	D627					D636
Wiring Diagram AC	C07651					
Wiring Diagram DC	C072146, C071361, C071369					
Engine Series	John Deere 6090 Series Power Tech E					
Speed Interpolation	N/A					

Abbreviations: CW – Clockwise TRWA – Turbocharged with Raw Water Aftercooling N/A – Not Available L – Length W – Width H - Height

*Rotation viewed from Heat Exchanger / Front of engine

CERTIFIED POWER RATING

- Each engine is factory tested to verify power and performance.
- FM-UL power ratings are shown at specific speeds, Clarke engines can be applied at a single rated RPM setting ± 50 RPM.

ENGINE RATINGS BASELINES

- Engines are to be used for stationary emergency standby fire pump service only. Engines are to be tested in accordance with NFPA 25.
- Engines are rated at standard SAE conditions of 29.61 in. (752.1 mm) Hg barometer and 77°F (25°C) inlet air temperature [approximates 300 ft. (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 (5.6°C) above 77°F (25°C) ambient temperature.

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JW6H-UFAD70 JW6H-UFAA80

ENGINE EQUIPMENT

EQUIPMENT	STANDARD	OPTIONAL
Air Cleaner	Direct Mounted, Washable, Indoor Service with Drip Shield	Disposable, Drip Proof, Indoor Service Outdoor Type, Single or Two Stage (Cyclonic)
Alarms	Overspeed Alarm & Shutdown, Low Oil Pressure, Low & High Coolant Temperature, Low Raw Water Flow, High Raw Water Temperature, Alternate ECM Warning, Fuel Injection Malfunction, ECM Warning and Failure with Automatic Switching	Low Coolant Level, Low Oil Level, Oil Filter Differential Pressure, Fuel Filter Differential Pressure, Air Filter Restriction
Alternator	12V-DC, 42 Amps with Poly-Vee Belt and Guard	24V-DC, 40 Amps with Poly-Vee Belt and Guard
Coupling	Bare Flywheel	UL Listed Driveshaft and Guard, UFADD0/F0/J0/70-CDS50-SC; UFAD80 – CDS50-SC AT 2100 RPM only
Electronic Control Module	12V-DC, Energized to Stop, Primary ECM always Powered on	24V-DC, Energized to Stop, Primary ECM always Powered on
Engine Heater	230V-AC, 2500 Watt	
Exhaust Flex Connection	SS Flex, 150# ANSI Flanged Connection, 6”	SS Flex, 150# ANSI Flanged Connection, 8”
Exhaust Protection	Metal Guards on Manifolds and Turbocharger	
Flywheel Housing	SAE #3	
Flywheel Power Take Off	11.5” SAE Industrial Flywheel Connection	
Fuel Connections	Fire Resistant, Flexible, USA Coast Guard Approved, Supply and Return Lines	SS, Braided, cUL Listed, Supply and Return Lines
Fuel Filter	Primary and Secondary Filter with Priming Pump	
Fuel Injection System	High Pressure Common Rail	
Governor, Speed	Dual Electronic Control Modules	
Heat Exchanger	Tube and Shell Type, 60 PSI (4 BAR), NPT(F) Connections – Sea Water Compatible	
Instrument Panel	Multimeter to Display English and Metric, Tachometer, Hourmeter, Water Temperature, Oil Pressure and One (1) Voltmeter with Toggle Switch, Front Opening	
Junction Box	Integral with Instrument Panel; For DC Wiring Interconnection to Engine Controller	
Lube Oil Cooler	Engine Water Cooled, Plate Type	
Lube Oil Filter	Full Flow with By-Pass Valve	
Lube Oil Pump	Gear Driven, Gear Type	
Manual Start Control	On Instrument Panel with Control Position Warning Light	
Overspeed Control	Electronic, Factory Set, Not Field Adjustable	
Raw Water Cooling Loop w/Alarms	Galvanized	Seawater, All 316SS, High Pressure
Raw Water Cooling Loop Solenoid Operation	Automatic from Fire Pump Controller and from Engine Instrument Panel (for Horizontal Fire Pump Applications)	Not Supplied (for Vertical Turbine Fire Pump Applications)
Run – Stop Control	On Instrument Panel with Control Position Warning Light	
Starters	One (1) 12V-DC with Two (2) Start Contactors	One (1) 24V-DC with Two (2) Start Contactors
Throttle Control	Adjustable Speed Control by Increase/Decrease Button, Tamper Proof in Instrument Panel	
Water Pump	Centrifugal Type, Gear Driven	

Abbreviations : DC – Direct Current, AC – Alternating Current, SAE – Society of Automotive Engineers, NPT(F) – National Pipe Tapered Thread (Female), NPT(M) – National Pipe Tapered Thread (Male), ANSI – American National Standards Institute, SS – Stainless Steel

MODEL NOMENCLATURE (10 Digit Models)

JW 6 H - UF A D F0

- JW: John Deere Base Engine
- 6: 450 Series
- H: 6 Cylinder
- UF: Heat Exchanger Cooled
- A: Power Curve Number
- D: EPA Tier 3 Certified
- F0: Built in USA
- UL Listed and FM Approved

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