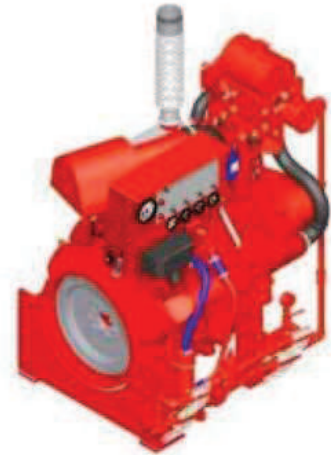


JU4H-UF10	JU4H-UF20	JU4H-UF34	JU4H-UF40	JU4H-UF50
JU4H-UF12	JU4H-UF22	JU4H-UFH0	JU4H-UF42	JU4H-UF52
JU4H-UF14	JU4H-UF24	JU4H-UFH2	JU4H-UF58	JU4H-UF54

FM-UL-cUL APPROVED RATINGS BHP/KW

JU4H MODEL ◆	RATED SPEED								US-EPA (NSPS) Available Until ●
	1470	1760	2100	2350	2600	2800	3000		
UF10		41 31	51 38	55 41					12/31/10
UF12				55 41	59 44				12/31/10
UF14						70 52	71 53		12/31/13 +
UF20		60 45	67 50	72 54					12/31/10
UF22				72 54	75 56				12/31/10
UF24						80 60	83 62		12/31/13 +
UF34						104 78	115 86		12/31/12 +
UFH0		73 54	88 66	98 73					12/31/10
UFH2				98 73	99 74				12/31/10
UF40		94 70	105 78	106 79					12/31/10 ▼ 12/31/09 ▲
UF42				106 79	106 79				12/31/09
UF58	79 59	110 82							12/31/09
UF50		110 82	130 97	127 95					12/31/09
UF52				127 95	127 95				12/31/09
UF54						145 108	145 108		12/31/12 +



Picture shown represents a JU4H-NA low speed engine model

● USA EPA (NSPS) Emissions Compliant. Applies to John Deere model year per Table 4 of 40 CFR Part 60 Sub Part IIII.

◆ All Models are available for Export

+ Not Available in California

▼ Less than 100HP

▲ Greater than 99HP

SPECIFICATIONS

ITEM	JU4H MODELS					
	UF10/12/14	UF20/22/24	UF34	UFH0/H2	UF40/42	UF58/50/52/54
Number of Cylinders	4					
Aspiration	NA			T		
Rotation*	CW					
Overall Dimensions – in. (mm)	52.5 (1333) H x 45.7 (1162) L x 36.1 (918) W			59.9 (1522) H x 51.6 (1310) L x 36.6 (930) W		
Crankshaft Centerline Height – in. (mm)	14 (356)					
Weight – lb (kg)	910 (413)			935 (424)		
Compression Ratio	17.6:1			17.0:1		
Displacement – cu. in. (L)	275 (4.5)					
Engine Type	4 Stroke Cycle – Inline Construction					
Bore & Stroke – in. (mm)	4.19 x 5.00 (106 x 127)					
Installation Drawing	D534					
Wiring Diagram AC	C07651					
Wiring Diagram DC	C072145					
Engine Series	John Deere 4045 Series					
Speed Interpolation	Optional					

Abbreviations: CW – Clockwise NA – Naturally Aspirated T – Turbocharged 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.
- Although FM-UL ratings are shown at specific speeds, Clarke engines with optional speed interpolation can be applied at any intermediate speed. To determine the intermediate speed power; make a linear interpolation from the Clarke FM-UL power curve. Contact Clarke or your Pump OEM Representative to obtain details.

ENGINE RATINGS BASELINES

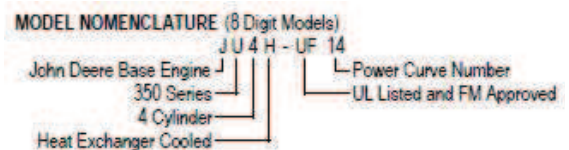
- Engines are to be used for stationary emergency standby fire pump service only. Engines are to be tested in accordance with NFPA 25.
- Engines are rated at standard SAE conditions of 29.61 in. (752.1 mm) Hg barometer and 77°F (25°C) inlet air temperature [approximates 300 ft. (91.4 m) above sea level] 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.



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, High Raw Water Flow, High Raw Water Temperature	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	Listed Driveshaft and Guard, UF10/12/14, UF20/22/24 – CDS10-SC; UF34, UFH0/H2, UF40/42 – CDS20-SC; UF58/50/52/54 – CDS30-S1
Engine Heater	115V-AC, 1000 Watt	230V-AC, 1000 Watt
Exhaust Flex Connection	For NA Engines - SS Flex, NPT(M) Connection, 3" For T Engines - SS Flex, 150# ANSI Flanged Connection, 4"	For NA Engines – SS Flex, 150# ANSI Flanged Connection, 4" For T Engines - SS Flex, 150# ANSI Flanged Connection, 5"
Exhaust Protection	Blankets on UF10/12/14/20/22/24; Metal Guards on Manifolds and Turbocharger on UF34/H0/H2/40/42/58/50/52/54	
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 Filter with Priming Pump	
Fuel Injection System	Stanadyne, Direct Injection	
Fuel Solenoid	12V-DC Energized to Stop (ETS)	12V-DC Energized to Run (ETR); 24V-DC Energized to Run (ETR); 24V-DC Energized to Stop (ETS)
Governor, Speed	Constant Speed, Mechanical	
Heat Exchanger	Tube and Shell Type, 60 PSI (4 BAR), NPT(F) Connections – Sea Water Compatible	
Instrument Panel	English and Metric, Tachometer, Hourmeter, Water Temperature, Oil Pressure and Two (2) Voltmeters	
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 with Reset and Test on Instrument Panel	
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	Two (2) 12V-DC	Two (2) 24V-DC
Throttle Control	Adjustable Speed Control, Tamper Proof	
Water Pump	Centrifugal Type, Poly-Vee Belt Drive with Guard	

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), NA – Naturally Aspirated, T- Turbocharged, ANSI – American National Standards Institute, SS – Stainless Steel



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