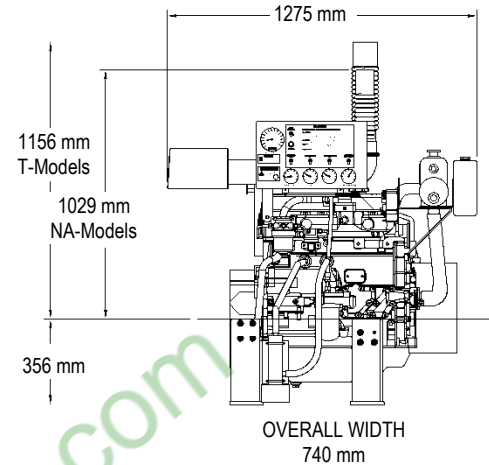


UK Purchased



NON-LISTED – HEAT EXCHANGER COOLED ENGINES

-GROSS POWER RATINGS KW/BHP

JU4H MODEL	RATED SPEED																							
	1470		1760		1800		2000		2100		2200		2350		2400		2600		2800		2960		3000	
NL14												45	60.5	46	61	48.5	65	57.5	77	58	78	58	78	
NL20			49	66	50	67	53	71	54	73	56	75	59	79										
NL22													59	79	60	80	62	83						
NL24													59	79	60	80	61.5	82.5	66	88	68	91	68	91
NL34													70	93.5	70	93.5	70	93.5	85	114	94	126.5	94	126.5
NL50	65	87	90	121	92	123	102	137	107	143	106	142	104	140										
NL52													104	140	104	140	104	140						
NLK4																109	146	109	146	109	146	109	146	
NL54													100	134	103	138	114	153	119	159.5	119	159.5	119	159.5

\*Power Rating: A 10% deduction in power must be made to determine the maximum allowable pump load

SPECIFICATIONS

ITEM	JU4H MODELS					
	NL14	NL20/22	NL24	NL34	NL50/52	NLK4/54
Number of Cylinders	4					
Aspiration	NA			T		
Rotation*	CW					
Weight – kg (lb)	413 (910)			424 (935)		
Compression Ratio	17.6:1			17.0:1		
Displacement – l (cu. in.)	4.5 (275)					
Engine Type	4 Stroke Cycle – Inline Construction					
Bore & Stroke – mm (in.)	4.19 x 5.00 (106 x 127)					
Installation Drawing	D525					
Wiring Diagram AC	C07591					
Wiring Diagram DC	C07575					
Engine Series	John Deere 4045 Series					

Abbreviations: CW – Clockwise NA – Naturally Aspirated T – Turbocharged

\*Rotation viewed from Heat Exchanger / Front of Engine

CERTIFIED POWER RATING

- Each engine is factory tested to verify power and performance.
- Although ratings are shown at specific speeds, Clarke engines can be applied at any intermediate speed. To determine the intermediate speed power; make a linear interpolation from the Clarke certified power curve. Contact Clarke or your Pump OEM Representative to obtain details.

ENGINE RATINGS BASELINES

- Engines are not to be used for continuous duty. Engines are to be used only for stationary emergency standby fire pump service.
- 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
Alternator		12V-DC, 42 Amps with Belt Guard; 24V-DC, 40 Amps with Belt Guard
Exhaust Protection		Blankets on JU4H-NL14/20/22/24; Metal Guards on Manifolds and Turbo on JU4H-NL34/50/52/K4/54
Coupling		Centaflex; Driveshaft
Exhaust Flex Connection		Stainless Steel Flex, Clamped Connection, 3" for NL14/20/22/24; Stainless Steel Flex, Clamped Connection, 4" for NL34/50/52/K4/54
Flywheel Housing	SAE #3	
Flywheel Power Take Off	11.5" SAE Industrial Flywheel Connection	
Fuel Connections		Fire Resistant Flexible Supply and Return Lines
Fuel Filter	Primary Filter with Priming Pump	
Fuel Injection System	Stanadyne Direct Injection	
Engine Heater		230V-AC, 1000 Watt; 115V-AC, 1000 Watt
Governor, Speed	Constant Speed, Mechanical	
Heat Exchanger	Tube and Shell Type; 14 BAR (203 PSI), BSP(F) Connections	
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 Solenoid Operation		Automatic from Engine Controller and from Engine Instrument Panel
Run – Stop Control	Manual Stop Lever	On Instrument Panel with Control Position Warning Light
Run Solenoid	12V-DC Energized to Stop	12V-DC Energized to Run; 24V-DC Energized to Run; 24V-DC Energized to Stop
Silencer		Industrial with Clamped Connections
Starters	One (1) 12V-DC	Two (2) 12-V-DC; One (1) 24V-DC; Two (2) 24V-DC
Throttle Control	Adjustable Speed Control, Tamper Proof	
Water Pump	Centrifugal Type, Dual Poly-Vee Belt Drive with Guard	Centrifugal Type, Single Poly-Vee Belt Drive with Guard

Abbreviations: DC – Direct Current, AC – Alternating Current, SAE – Society of Automotive Engineers, BSP(F) – British Standard Pipe Thread (Female)

### MODEL NOMENCLATURE (8 Digit Models)

