

Industrial Engine Product Guide

Australia / New Zealand



JOHN DEERE







CONTENTS

Industrial Engines Continuous Power Ratings	4
Engine Identification	5
Specification Definitions A & B.....	6
Specification Definitions CM & CK	7
Specification Definitions DM & DK	8
Comparison Chart	9
Specification Definitions E & F	10
Optional Equipment	11

John Deere irrigation engines know their way around a field. With more than 80 years of proven performance under our belt, you can depend on a John Deere for uninterrupted performance, legendary, durability and unbeatable fuel economy. For an engine that's not afraid of a hard day's work, backed by dealer network committed to keeping you up and running, make your next engine a John Deere.

Talk to your local dealer today

Industrial Engines | Continuous Power Ratings

Engine model	RPM	1400	1600	1800	2000	2200	2400	2500
4024T	HP/kW	33/25	40/30	45/33	47/35	49/37	51/38	52/39**
3029D	HP/kW	32/24	36/27	39/29	42/31	44/33	45/34	46/34
4045D	HP/kW	51/38	57/43	62/46	65/48	68/51	72/54	72/54
4045T1	HP/kW	69/51	78/58	86/64	90/67	96/72	99/74	100/75
4045T2	HP/kW	78/58	89/66	97/72	103/77	107/80	110/82	110/82
4045H	HP/kW	82/61	93/70	101/75	107/80	111/83	112/84	-
6068D	HP/kW	77/57	86/64	93/69	100/75	104/78	108/81	110/82
6068T1	HP/kW	104/76	117/87	127/95	135/101	142/106	144/107	-
6068T2	HP/kW	111/83	129/96	142/106	149/111	157/117	159/119	-
6068T3	HP/kW	128/92	153/114	171/128	176/131	182/136	173/129	
6068H2	HP/kW	138/103	159/119	171/128	183/137	185/138	185/138	-
6068HF475	HP/kW	173/129	195/145	211/157	223/166	226/169	222/166	-
6090H1	HP/kW	229/171	273/203	303/226	326/243	286/213	-	-
6090H2	HP/kW	254/189	285/212	294/220	293/219	292/218	-	-
6135H1	HP/kW	388/289	445/331	462/344	445/332	415/309*	-	-
6135H2	HP/kW	444/331	486/361	491/367	488/364	486/362*	-	-

* Denotes 2100 RPM

** Denotes 2600 / 2800 RPM

- Power ratings are derated to allow for cooling fan losses
- A 1 year/unlimited hour or 2 year/2,000 hour (whichever occurs first) engine warranty is offered on all engines and commences the date that the machine begins operation
- Specifications subject to change without notice
- Additional engine models and ratings (intermittent and heavy duty) may be available on request. Check with your John Deere engine dealer.

Engine Identification

Engine model	No. of cylinders	Cubic capacity	Engine aspiration	Fuel system	Off-road emission compliance
4024T	4	2.4L	Turbocharged	Mechanical	Tier 2
3029D	3	2.9L	Naturally Aspirated	Mechanical	NIL
4045D	4	4.5L	Naturally Aspirated	Mechanical	Tier 1
4045T1	4	4.5L	Turbocharged	Mechanical	Tier 1
4045T2	4	4.5L	Turbocharged	Mechanical	Tier 1
4045H	4	4.5L	Turbocharged/Aftercooled	Mechanical	Tier 1
6068D	6	6.8L	Naturally Aspirated	Mechanical	Tier 1
6068T1	6	6.8L	Turbocharged	Mechanical	Tier 1
6068T2	6	6.8L	Turbocharged	Mechanical	Tier 1
6068T3	6	6.8L	Turbocharged	Mechanical	Tier 1
6068H2	6	6.8L	Turbocharged/Aftercooled	Mechanical	Tier 1
6068HF475	6	6.8L	Turbocharged/Aftercooled	Electronic ECU+HPCR	Tier 2
6090H1	6	9.0L	Turbocharged/Aftercooled	Electronic ECU+HPCR	Tier 2
6090H2	6	9.0L	Turbocharged/Aftercooled	Electronic ECU+HPCR	Tier 3
6135H1	6	13.5L	Turbocharged/Aftercooled	Electronic ECU+EUI	Tier 2
6135H2	6	13.5L	Turbocharged/Aftercooled	Electronic ECU+EUI	Tier 3

FUEL SYSTEM DEFINITIONS:

HPCR – High-pressure common-rail

ECU – Engine control unit

EUI – Electronic unit injector

- 4045H, 6068H2, 6068HF475, 6090H1/2, and 6135H1/2 engines are fitted with air-to-air aftercooling
- Specifications subject to change without notice
- Other engine models are available with alternate emission compliance certification. Check with your John Deere engine dealer.

Specification Definitions

Specification A

Basic engine configuration

- SAE flywheel housing
- SAE flywheel
- Variable speed governing
- Wiring harness and engine control unit (ECU) on electronic engines only
- 12 Volt starter and alternator
- Vertical exhaust elbow, except 4024T
- Energised to run shut off solenoid on mechanical engines
- Operators manual
- First fill of engine oil and coolant



6068T3



3029D

Specification B

Power pack configuration

- SAE flywheel housing
- SAE flywheel
- Variable speed governing
- Wiring harness and engine control unit (ECU) on electronic engines
- 12 Volt starter and alternator
- Vertical exhaust elbow, except 4024T
- Energised to run shut off solenoid on mechanical engines
- Operators manual
- First fill of engine oil and coolant
- + **Engine feet**
- + **Engine mounted radiator and fan**
- + **Heavy duty air filter**



4045D



6135H2

Specification CM (Macquarrie)

Key start power pack configuration

- Key start power pack configuration
- SAE flywheel housing
- SAE flywheel
- Variable speed governing
- Wiring harness and engine control unit (ECU) on electronic engines
- 12v starter and alternator
- Energised to run shut off solenoid on mechanical engines
- Operators manual
- First fill of engine oil & coolant
- + **Engine feet**
- + **Engine mounted radiator & fan**
- + **Heavy duty air filter**
- + **Engine mounted key start panel featuring an oil pressure & engine temperature Switchgauge, tachometer, hourmeter & voltmeter.**
- + **Throttle cable**
- + **Muffler and raincap**



Spec CM Panel – Mechanical Engines



Spec CM Panel – Electronic Engines

Specification CK (Kensho K25)

Key start power pack configuration

- Key start power pack configuration
- SAE flywheel housing
- SAE flywheel
- Variable speed governing
- Wiring harness and engine control unit (ECU) on electronic engines
- 12v starter and alternator
- Energised to run shut off solenoid on mechanical engines
- Operators manual
- First fill of engine oil & coolant
- + **Engine feet**
- + **Engine mounted radiator & fan**
- + **Heavy duty air filter**
- + **Engine mounted Kensho K25 key start panel featuring back lit LCD display of oil pressure, engine temperature, engine speed, engine hours & battery voltage. Remote stop time clock and first out fault indication also included**
- + **Low coolant level shutdown protection**
- + **Throttle cable**
- + **Muffler and raincap**



Spec CK - Mechanical + Electronic Engines

NOTE: Product images are for illustration purposes only and actual items may vary in appearance.

Specification Definitions

Specification DM (Macquarrie)

Key start power pack configuration

- SAE flywheel housing
- SAE flywheel
- Variable speed governing
- Wiring harness and engine control unit (ECU) on electronic engines
- 12v starter and alternator
- Energised to run shut off solenoid on mechanical engines
- Operators manual
- First fill of engine oil & coolant
- + **Engine feet**
- + **Engine mounted radiator & fan**
- + **Heavy duty air filter**
- + **Remote mount key start panel featuring an oil pressure & engine temperature Switchgauge, pump discharge pressure Switchgauge, tachometer, hourmeter, charge warning light & remote stop time clock.**
- + **Throttle cable**
- + **Muffler and raincap**



Specification DK (Kensho K25)

Key start power pack configuration

- SAE flywheel housing
- SAE flywheel
- Variable speed governing
- Wiring harness and engine control unit (ECU) on electronic engines
- 12v starter and alternator
- Energised to run shut off solenoid on mechanical engines
- Operators manual
- First fill of engine oil & coolant
- + **Engine feet**
- + **Engine mounted radiator & fan**
- + **Heavy duty air filter**
- + **Remote mount Kensho K25 key start panel featuring back lit LCD display of oil pressure, engine temperature, pump discharge pressure, engine speed, engine hours & battery voltage. Remote stop time clock and first out fault indication also included. The pump pressure sender is supplied loose with the control system.**
- + **Low coolant level shutdown protection**
- + **Throttle cable**
- + **Muffler and raincap**



Comparison Chart

Comparison Chart for Mechanical Engine Spec C & D Instrument panels

Spec CM & DM instrument panels are manufactured by Macquarrie

Spec CK & DK instrument panels are manufactured by Kensho and are based on their K25 specification

Instrument Panel Option	Spec CM	Spec CK	Spec DM	Spec DK
Panel Feature				
Weatherproof Enclosure	No	Yes ✓	Yes ✓	Yes ✓
Oil Pressure Indication	Yes Analogue Gauge ✓	Yes Digital Display ✓	Yes Analogue Gauge ✓	Yes Digital Display ✓
Low Oil Pressure Shutdown	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Engine Temp. Indication	Yes Analogue Gauge ✓	Yes Digital Display ✓	Yes Analogue Gauge ✓	Yes Digital Display ✓
High Engine Temp Shutdown	Yes ✓	Yes ✓	Yes ✓	Yes ✓
Tachometer	Yes Analogue Gauge ✓	Yes Digital Display ✓	Yes Analogue Gauge ✓	Yes Digital Display ✓
Hourmeter	Yes Digital Display ✓	Yes Digital Display ✓	Yes Digital Display ✓	Yes Digital Display ✓
Battery Voltmeter	Yes Analogue Gauge ✓	Yes Digital Display ✓	No Charge light only	Yes Digital Display ✓
Pump Pressure Indication	No	No	Yes Analogue Gauge ✓	Yes Digital Display ✓
Low Pump Pressure Shutdown	No	No	Yes ✓	Yes ✓
High Pump Pressure Shutdown	No	No	Yes ✓	Yes ✓
Remote Stop Timer	No	Yes ✓	Yes ✓	Yes ✓
Low Coolant Level Shutdown	Optional Extra	Yes ✓	Optional Extra	Yes ✓
Low Oil Level Shutdown	Optional Extra	Optional Extra	Optional Extra	Optional Extra
Shutdown Fault Indication	No	Yes ✓	No	Yes ✓

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Specification Definitions

Specification E (Kensho K45)

Constant Pressure system

The Spec E control system is designed to automatically start & stop the engine by closure of a volt free contact.

Once the engine has started & warmed up the control system will automatically adjust the engine speed to maintain a constant pump discharge pressure.

The rate of speed change & dead band parameters are adjustable to reduce the effects of water hammer & pressure surges in the irrigation system.

The control system incorporates low oil pressure, high engine temperature, low coolant level & pump discharge high & low pressure protection.

The pump pressure sender is supplied loose with the control system.



Specification F (Kensho K45)

Constant Speed system

The Spec F control system is designed to automatically start & stop the engine by closure of a volt free contact.

Once the engine has started & warmed up the control system will automatically accelerate the engine to a preset engine speed.

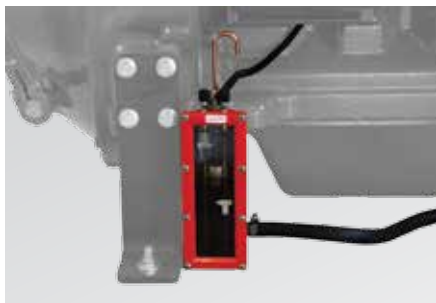
The rate of speed change & dead band parameters are adjustable to reduce the effects of water hammer & pressure surges in the irrigation system.

The control system incorporates low oil pressure, high engine temperature, low coolant level & pump discharge high & low pressure protection.

The pump pressure sender is supplied loose with the control system.

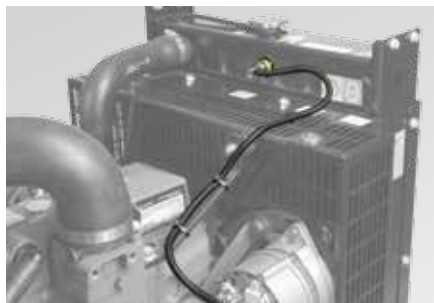


Optional Equipment



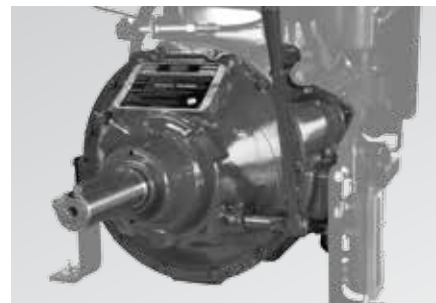
Low oil level shutdown protection

Shuts down engine if oil level falls to critical level.



Low coolant level shutdown protection

Shuts down engine if coolant level falls to critical level.



Overcentre clutch

Allows drive to be mechanically connected/disconnected.



Auxiliary drive pulley

Enables an additional drive to be taken from gear end of engine.



Heat Exchanger

Heat Exchanger cooling replaces standard radiator and fan cooling package.



Specification CM weatherproof cubicle with electric gauges

To protect equipment from the effects of adverse operating conditions. Ideal for installations where panel is more than 2 metres from engine.

Other accessories

are available on request

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Bringing it all together

No matter what the future holds, John Deere Power Systems has the experience and resources to lead the way – providing innovation, precision, performance, and support.



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