Generator Drive Applications

Diesel Engines

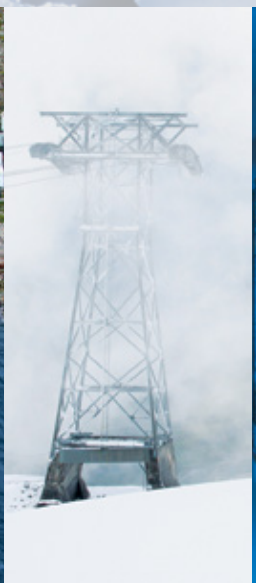
JOHN DEERE

Put the value of John Deere generator drive engines to work for you

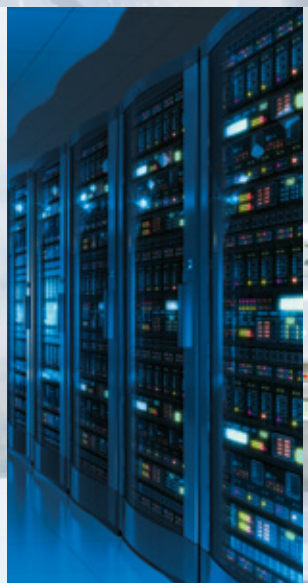
John Deere generator power

- Leading gen-set manufacturers trust John Deere PowerTech™ generator drive engines.
- John Deere is one of the very few engine manufacturers that doesn't make gen-sets. It makes us unbiased partners with gen-set OEMs.
- We listen closely to gen-set manufacturers to provide the features and services they need.
- Preconfigured cooling packages and direct-ship cooling packages in John Deere generator set power units (GSPU) provide ease of design and installation.
- Ready spec: a standard specification made up of the most popular option codes allows John Deere to offer a special short lead-time program.
- Compact engines deliver power density in a space-saving design.
- Complete power range meets worldwide emissions regulations and certifications — from non-emissions certified engines to Stage III A (Europe) and Tier 4 (North America).
- Reliable operation, low maintenance, long engine life, and exceptional fluid economy lead to low cost of operation.
- Extensive worldwide support network enables peace of mind.

Power in remote locations. John Deere generator drive engines provide prime power for pumping stations, peak shaving, distributed power, mining, and other remote applications.



Power at a moment's notice. From computer centers to hospital operating rooms, John Deere–powered standby generator sets protect critical applications, deliver uninterrupted productivity, and offer peace of mind.



Confidence is built in

Prime or standby power

John Deere generator drive engines are ready when and where you need them! They provide fast response for standby situations and exceptional load recovery in all applications.

In any condition

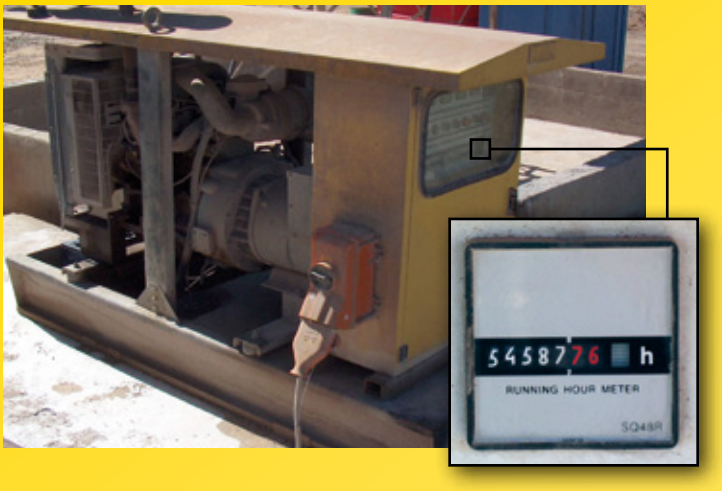
Are you operating in subzero cold or blistering heat? Don't worry. John Deere engines start in freezing temperatures thanks to advanced electronic high-pressure fuel systems and preheating options such as glow plugs, air heaters, or block heaters. We also offer a full line of cooling packages built to handle the hottest working conditions.

Without interruption

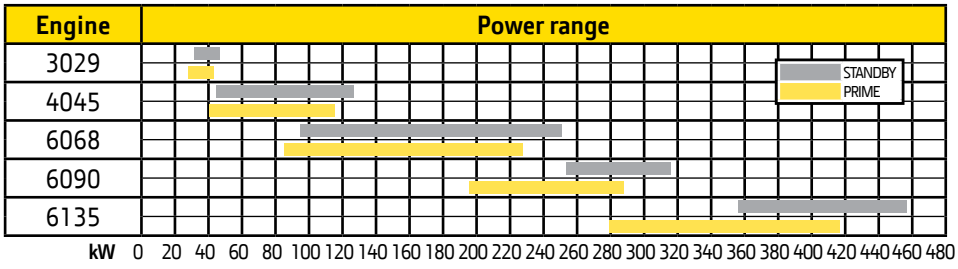
When it's your prime power source, you can't afford any interruptions. That's where John Deere generator drive engines earn their reputation for reliability and confidence. Even our maintenance intervals are extended with up to a 500-hour oil change.

For the long haul

The John Deere name has always been synonymous with durability. It explains why you find so many John Deere engines continuing to do their job many years after they were put into service. Check out the heavy-duty features found on all John Deere generator drive engines by visiting **JohnDeere.com/GenDrive**.



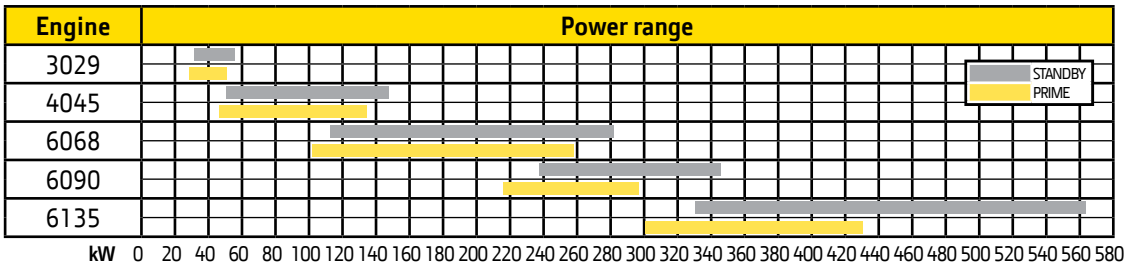
Gen-Set Ratings 50 Hz (1500 rpm)



50 Hz engines

Our current engine range meets emissions regulations introduced by the European directive 97/68/EC, TA-Luft, and CCNR. Non-emissions certified engines are also available for non-regulated markets.

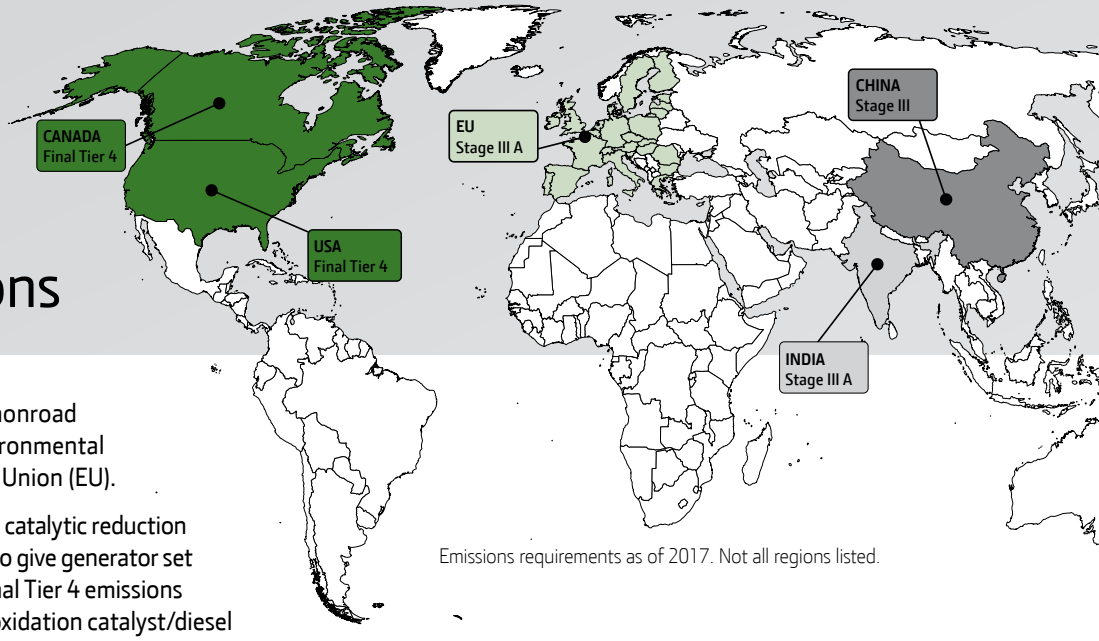
Gen-Set Ratings 60 Hz (1800 rpm)



60 Hz engines

We offer a wide choice of engines that fully meet EPA emissions regulations. Non-emissions certified engines are also available for non-regulated markets.

Our solutions to different regulations



Emissions requirements as of 2017. Not all regions listed.

John Deere engines comply with all major nonroad emissions regulations such as the U.S. Environmental Protection Agency (EPA) and the European Union (EU).

PowerTech diesel oxidation catalyst/selective catalytic reduction (DOC/SCR) engines join our complete lineup to give generator set manufacturers more choices for meeting Final Tier 4 emissions regulations. We continue to provide diesel oxidation catalyst/diesel particulate filter/selective catalytic reduction (DOC/DPF/SCR) engines, which deliver premium performance when the job requires it. We also offer a full line of Tier 3, Interim Tier 4/Stage III A, and non-emissions certified engines for standby generator sets and non-regulated areas.

European Union

Stationary/mobile power. The EU does not regulate stationary applications. Mobile applications are required to meet Stage III A in Europe.

U.S. EPA

Prime power. Prime power applications are required to meet Final Tier 4 emissions regulations in North America.

Emergency standby provision. The New Source Performance Standard (NSPS) provision of the EPA requires that Tier 3 engines for standby power be limited to emergency use and no more than 100 hours per year for required maintenance and testing. Owners/operators must record the use of the engine during all operations, including hours operated during emergencies and non-emergencies.

EU nonroad mobile emissions regulations — constant-speed engines

kW	hp	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
0–7	0–10	Not regulated in EU												7.50 0.40 –			
8–18	11–24	Not regulated in EU												7.50 0.40 –			
19–36	25–49	8.0 1.5 0.80				7.5 0.60								4.7 0.015 1x10[12]			
37–56	50–74	7.0 1.3 0.40					4.7 0.40							4.7 0.015 1x10[12]			
57–74	75–99	7.0 1.3 0.40					4.7 0.40								0.40 0.015 1x10[12]		
75–129	100–174	6.0 1.0 0.30				4.0 0.30									0.40 0.015 1x10[12]		
130–559	175–749	6.0 1.0 0.20				4.0 0.20								0.40 0.015 1x10[12]			
≥560	≥750	Not regulated in EU												3.50[1] 0.045 –			
≥560	≥750	Not regulated in EU												0.67[2] 0.035 –			

NOTE: Stage V emissions regulations have implementation dates of 2019 – 2020.
The EU does not regulate engines to an emissions stage for stationary applications.

[1] Nonroad mobile — Industrial
[2] Nonroad mobile — Generator Set

Medium combustion directive regulations for engines above 350 kW (stationary) have expected implementation dates in 2019.

Examples

NOx NMHC PM	6.0 1.0 0.20

6.0, Nitrogen oxides allowed in g/kWh

1.0, Nonmethane hydrocarbons allowed in g/kWh

0.20, Particulates (mass based) allowed in g/kWh

NMHC + NOx PM	4.0 0.30

4.0, Nonmethane hydrocarbons + nitrogen oxides allowed in g/kWh

0.30, Particulates (mass based) allowed in g/kWh

NMHC + NOx PM PN	4.7 0.015 1x10[12]

4.7, Nonmethane hydrocarbons + nitrogen oxides allowed in g/kWh

0.015, Particulates (mass based) allowed in g/kWh

1x10[12], Particulates (number based) allowed in #/kWh

NOx PM PN	3.50 0.045 –

3.50, Nitrogen oxides allowed in g/kWh

0.045, Particulates (mass based) allowed in g/kWh

–, Particulates (number based) standard does not apply in this power segment

Fuel sulfur regulations

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU	2000 ppm	1000 ppm			10 ppm											

Legend

EU	Stage II	Stage III A	Stage V

Availability of EU Flexibility Scheme

EU: European Union

EPA nonroad emissions regulations

kW	hp	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
0–7	0–10	7.5 0.80	7.5 0.40														
8–18	11–24	7.5 0.80	7.5 0.40														
19–36	25–49	7.5 0.60	7.5 0.30					4.7 0.03									
37–55	50–74	7.5 0.40	4.7 0.30	Option 1*				4.7 0.03									
			4.7 0.40	Option 2*			4.7 0.03										
56–74	75–99	7.5 0.40	4.7 0.40				3.4 0.19 0.02			0.40 0.19 0.02							
75–129	100–174	4.0 0.30					3.4 0.19 0.02			0.40 0.19 0.02							
130–224	175–299	4.0 0.20				2.0 0.19 0.02			0.40 0.19 0.02								
225–449	300–599	4.0 0.20				2.0 0.19 0.02			0.40 0.19 0.02								
450–559	600–749	4.0 0.20				2.0 0.19 0.02			0.40 0.19 0.02								
≥560	≥750	6.4 0.20				3.5 0.40 0.10				3.5 0.19 0.04							
560–900 Generator Sets	750–1,200 Generator Sets	6.4 0.20				3.5 0.40 0.10				0.67 0.19 0.03							

*In the 50 to 74 horsepower category there are two options. Option 1 requires a reduced PM level (0.30 vs. 0.40) but allows Final Tier 4 to be delayed one year (2013).

NOTE: The vertical dashed lines separating the years show when the seven-year life of the Tier 2/3 Equipment Flexibility Provision ends and engines can no longer be placed in vehicle production.

NOTE: In emergency standby applications, the EPA does not require engines to use aftertreatment.

Fuel sulfur regulations

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EPA	5000 ppm	500 ppm							15 ppm							

Legend

EPA	Tier 2	Tier 3	Interim Tier 4	Final Tier 4

General Availability of Tier 4 Equipment Flexibility Provision	**Delayed** Availability of Tier 4 Equipment Flexibility Provision

Examples

NOx	0.40
NMHC	0.19
PM	0.02

0.40, Nitrogen oxides allowed in g/kWh
0.19, Nonmethane hydrocarbons allowed in g/kWh
0.02, Particulates (mass based) allowed in g/kWh

NMHC + NOx	4.7
PM	0.03

4.7, Nonmethane hydrocarbons + nitrogen oxides allowed in g/kWh
0.03, Particulates (mass based) allowed in g/kWh

EPA: Environmental Protection Agency

Ready for any market

John Deere generator drive engines keep your gen-sets in compliance, and they keep your customers confident. Wherever your generator sets go, they will be ready to meet local emissions regulations in all countries.

Full line of generator drive engines

John Deere offers more than 200 configurations of generator drive engines from 31 to 563 kW (42 to 755 hp) to meet all emissions regulations and power nodes.

Jet fuel capable

Some John Deere generator drive engines are jet fuel capable and are available in dual frequency 1500 rpm (50 Hz) and 1800 rpm (60 Hz) with the same software and hardware.

Advanced electronic controls

John Deere uses proven electronic controls in almost all our power ranges. They help provide load recovery, clean power, better diagnostics, engine monitoring, and ease of synchronization when operating more than one set in parallel. John Deere uses smart governing and throttling selections to make this process seamless — even when paralleling to older mechanical engines.

Dual frequency

Electronic controls also make it easy for manufacturers that need 60 Hz and 50 Hz power to switch between 1800 and 1500 rpm without reprogramming.

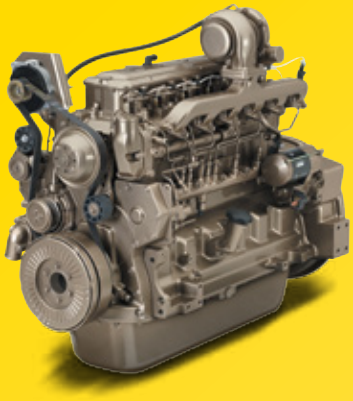
Engine range	Markets
60 Hz EPA Final Tier 4 certified engines	Prime power gen-sets in USA
60 Hz EPA Tier 3 certified engines	Emergency standby gen-sets in USA
50 Hz EU Stage III A certified engines	Mobile/rental gen-sets in EU
50 Hz non-certified engines	Non-regulated countries Stationary gen-sets in EU
60 Hz non-certified engines	Non-regulated countries
50 Hz/60 Hz marine auxiliary engines	Marine market*

*Refer to the John Deere marine engine brochure for more detail.

Ready to install

Application choices

Select from a wide range of John Deere generator drive engine models with displacements from 2.9L to 13.5L and a variety of options. Our power ranges overlap across engine displacements so you can choose exactly the right fit for your application.



- 12 V or 24 V electrical systems
- Left or right side service points
- Multiple fan heights and speed ratios
- Factory-installed cooling systems

Power density

Imagine a 4-cylinder engine that can perform like a 6-cylinder! One of the secrets of John Deere engines is their ability to generate maximum power in minimum space. We use engine technologies such as dual turbochargers and 4-valve cylinder heads to maximize power density. Through these advancements, our current 4.5L, 6.8L, and 9.0L engines perform in applications where larger displacement engines are traditionally required. Our power density also results in smaller canopies, less weight on the trailer, and lower fuel costs.

Installation flexibility

Install John Deere engines using the engine block's front or side mounts. It's your choice. We also offer many options to ensure perfect integration and provide single-side service points for easy access. Have a unique space or noise requirement? With our multiple fan heights and speed ratios, you can build generator sets for tight places or quiet operation.

Application assistance

It's like having a direct line to an application engineer. Our experienced factory and distributor technical teams work closely with you to confirm the compatibility of John Deere engines. John Deere also offers application-approved cooling packages for our full line of engines. These preconfigured units can save you hours of engineering time and help you get generator sets to market faster.

Ready for results

Fluid economy

Generate more power with less fuel. Low-friction pistons, 4-valve cylinder heads, and advanced electronic controls are just some of the tools we use to help you build efficient generator sets. John Deere Final Tier 4 engines use an optimized SCR system that minimizes consumption of fuel and diesel exhaust fluid (DEF).

Low idle speeds

Some John Deere generator drive engines have low idle capability for reduced fluid consumption and decreased wear and tear during transport or startup and shutdown checks.

Easy operation

John Deere generator drive engines are designed to minimize noise and vibration. All service points are located on a single side for easy access and quick service.

Big-engine durability

Heavy-duty components that are usually found in larger engines are used throughout the John Deere generator drive engine line. Many of our engines feature wet-type cylinder liners, top-liner cooling, steel pistons, and variable-speed fan drives. Visit **JohnDeere.com/GenDrive** for complete specifications.

Total quality

From our continuing research and development efforts to our rigorous manufacturing processes, every component of a John Deere engine is scrutinized for quality. The total result is a generator drive engine that delivers performance, fuel efficiency, reliability, emissions compliance, and easy installation — a combination of engine qualities that you can't find just anywhere. We are ISO 9001 and 14001 certified and have expertise partnering with gen-set manufacturers worldwide.

Low cost of operation

John Deere generator drive engines quietly do their job generating electrical power. The fluid efficiency of John Deere prime power engines minimizes the number of times you have to fill the tank. It all adds up to a low cost of operation. It's exactly why John Deere has received the attention and loyalty of so many generator set manufacturers and customers.

Engine technology summary

Engine	Emissions regulations	Turbocharging	Cooled EGR	Exhaust filter	Aftertreatment
PowerTech M	Interim Tier 4 and Stage III A	Fixed	No	No	No
PowerTech E	Tier 3 and Stage III A	Fixed	No	No	No
PowerTech Plus	Tier 3	VGT	Yes	No	No
PowerTech PWX	Interim Tier 4	WGT	Yes	Yes	DOC/DPF
PowerTech PVX	Interim Tier 4	VGT	Yes	Yes	DOC/DPF
PowerTech PSX	Interim Tier 4	Series	Yes	Yes	DOC/DPF
PowerTech EWX	Final Tier 4	WGT	No	Yes	DOC/DPF
PowerTech PWL	Final Tier 4	WGT	Yes	No	DOC/SCR
PowerTech PVL	Final Tier 4	VGT	Yes	No	DOC/SCR
PowerTech PVS	Final Tier 4	VGT	Yes	Yes	DOC/DPF/SCR
PowerTech PSL	Final Tier 4	Series	Yes	No	DOC/SCR
PowerTech PSS	Final Tier 4	Series	Yes	Yes	DOC/DPF/SCR

Turbocharging: Fixed = fixed turbocharger, VGT = variable geometry turbocharger, WGT = wastegate turbocharger, Series = series turbochargers
Cooled EGR: cooled exhaust gas recirculation
DOC: diesel oxidation catalyst
DPF: diesel particulate filter
SCR: selective catalytic reduction

Integrated Emissions Control system

John Deere has integrated new technologies with field-proven solutions to meet each regulatory tier. A single electronic control unit (ECU) controls the engine and entire Integrated Emissions Control system.

Turbocharging

John Deere engines use fixed geometry turbochargers sized for specific power ranges, wastegate turbochargers (WGT) to develop more airflow at lower engine speeds, and variable geometry turbochargers (VGT) to tailor the amount of recirculated exhaust gas that mixes with fresh air. Some models use a fixed turbocharger and VGT in series to deliver higher power density, improved low-speed torque, and improved high-altitude operation.

Cooled exhaust gas recirculation (EGR)

Cooled EGR is a proven technology that reduces nitrogen oxides (NOx) by mixing measured amounts of cooled exhaust gas with incoming fresh air to lower the engine's peak combustion temperature.

Exhaust filters

Some engine models use an exhaust filter to provide a simple and reliable solution for reducing particulate matter (PM). This is the accepted technology for reducing PM in nonattainment areas.

Selective catalytic reduction (SCR)

Most John Deere Final Tier 4/Stage IV engines feature an SCR system that utilizes a urea-based additive, sometimes referred to as diesel exhaust fluid (DEF). The ammonia in the urea mixes with engine exhaust gases in the SCR catalyst to reduce NOx — converting it to nitrogen and water vapor. This is the accepted technology for reducing NOx in nonattainment areas.

EPA Final Tier 4

John Deere offers a full line of PowerTech generator drive engines to give generator set manufacturers more choices for meeting Final Tier 4 emissions regulations. We provide DOC/DPF/SCR engines, which deliver premium performance when the job requires it. We also offer a range of compact and durable DOC/SCR engines to meet customer performance expectations without the need for a DPF.

Low idle speeds

Some John Deere Final Tier 4 engines have low idle capability for reduced fluid consumption and decreased wear and tear during transport or startup and shutdown checks.

Dual frequency

Electronic controls make it easy for manufacturers that need 60 Hz and 50 Hz power to switch between 1800 and 1500 rpm without reprogramming.

Staying in sync

A single electronic control unit (ECU) controls the engine and entire Integrated Emissions Control system. John Deere electronics provide load recovery, clean power, comprehensive diagnostics, engine monitoring, and ease of synchronization when operating more than one generator set in parallel. John Deere uses smart governing and throttling selections to make this process seamless — even when paralleling to older mechanical engines.

Easy operation

John Deere generator drive engines are designed to minimize noise and vibration. All service points are located on a single side for easy access and quick service. Plus, our engines are simple to operate.

In a small package

John Deere generator drive engines have always been known for delivering more kWm per liter of displacement. With increased kWm for three ratings, our new DOC/SCR engines continue that tradition of power density, while providing improved engine packaging.

Engines for EPA Final Tier 4 applications
Dual frequency 50 Hz/60 Hz

PowerTech technology	Speed	Engine model	Standby ratings				Prime ratings				Generator efficiency	Fan power
	rpm		kWm	hpm	kVA	kWe	kWm	hpm	kVA	kWe	%	kW
DOC/SCR												
PWL	1800	4045HFG04	68	91	71	57	62	83	64	51	90	4.8
	1500		68	91	72	57	62	83	65	52	90	4.4
PWL	1800	4045HFG04	80	107	84	67	73	97	76	60	90	5.6
	1500		80	107	84	67	73	97	76	61	90	5.1
PWL	1800	4045HFG04	99	133	106	85	90	121	96	76	92	6.9
	1500		80	107	85	68	73	98	77	61	92	6.3
PSL	1800	4045HFG06	128	172	138	111	117	157	126	101	92	7.7
	1500		112	150	121	97	102	137	109	87	92	7.1
PVL	1800	6068HFG05	160	214	174	139	146	196	158	126	92	9
	1500		160	214	175	140	146	196	158	127	92	8.2
PVL	1800	6068HFG05	192	257	211	169	175	235	191	153	93	10.8
	1500		165	221	180	144	150	201	163	130	93	9.9
PSL	1800	6068HFG06	216	289	236	189	196	263	213	171	93	13
	1500		197	264	215	172	179	240	194	155	93	11.8
PSL	1800	6068HFG06	240	322	262	210	218	292	237	190	93	14.4
	1500		197	264	214	171	179	240	193	154	93	13.1
PSL	1800	6090HFG06	273	366	298	239	249	334	270	216	93	16.4
	1500		273	366	300	240	249	334	272	218	93	14.9
PSL	1800	6090HFG06	326	437	356	285	297	398	322	258	93	19.6
	1500		300	402	328	262	273	366	297	237	93	17.8
PSL	1800	6090HFG06 [7]	345	462	377	302	N/A	N/A	N/A	N/A	93	20.7
	1500		300	402	327	261	N/A	N/A	N/A	N/A	93	18.9
PSL	1800	6135HFG06	473	634	521	417	431	578	472	378	93	24.7
	1500		430	576	474	379	391	524	428	343	93	22.5
DOC/DPF												
EWX	1800	3029HFG03	36	48	39	31	33	44	36	28	90	1.4
	1500		36	48	39	31	33	44	36	29	90	1.2
EWX	1800	3029HFG03	48	64	52	41	44	59	47	38	90	1.9
	1500		48	64	52	42	44	59	48	38	90	1.7
EWX	1800	3029HFG03	55	74	59	48	50	67	54	43	90	2.2
	1500		48	64	52	41	44	59	47	38	90	2
EWX	1800	4045TFG03	55	74	57	46	50	67	52	41	90	3.9
DOC/DPF/SCR												
PSS	1800	4045HFG09	105	141	114	91	93	125	121	97	92	6.3
PSS	1800	4045HFG09	124	166	162	130	136	182	146	117	92	7.4
PVS	1800	6068HFG08	150	201	162	130	136	182	146	117	92	9
PVS	1800	6068HFG08	180	241	195	156	164	219	176	141	92	10.8
PSS	1800	6068HFG09	216	289	236	189	218	292	239	191	93	13
PSS	1800	6068HFG09	240	322	262	210	218	292	237	190	93	14.4
PSS	1800	6090HFG09	237	318	259	207	216	289	235	188	93	14.2
PSS	1800	6090HFG09	273	366	298	239	249	334	270	216	93	16.4
PSS	1800	6090HFG09	297	398	325	260	271	363	294	235	93	17.8
PSS	1800	6090HFG09	326	437	356	285	298	399	324	259	93	19.6
PSS	1800	6090HFG09 [7]	345	462	377	302	N/A	N/A	N/A	N/A	93	20.7
PSS	1800	6135HFG09	356	477	389	311	324	434	351	281	93	21.4
PSS	1800	6135HFG09	411	551	449	359	374	501	406	325	93	24.7
PSS	1800	6135HFG09	473	634	517	413	432	579	469	375	93	28.4

[7] Prime rating not available at this node.

EPA Tier 3

John Deere offers a complete range of Tier 3 engines for emergency standby applications.

High performance

- High-pressure common-rail system with electronic control and air-to-air aftercooling provides exceptional load acceptance
- Fan designed to minimize power consumption and maximize fuel efficiency

Ease of integration

- Fan guard meets latest regulations

Environmentally friendly

- Higher fuel injection pressure and multiple injections reduce fuel consumption, noise, and vibration

Ease of use

- Easy modification of governing parameters
- Superior cold starting

High reliability and low maintenance

- Electronic system allows engine performance monitoring and easy diagnostics
- Replaceable cylinder liners for easy overhaul
- Optional belt tensioner eliminates need for manual adjustment

Engines for EPA Tier 3 applications 60 Hz

PowerTech technology	Engine model	Standby ratings				Prime ratings				Generator efficiency	Fan power
		kWm	hpm	kVA	kWe	kWm	hpm	kVA	kWe	%	kW
M	3029TFG89	35	47	37	30	31	42	32	29	90	2.2
M	3029HFG89	46	62	49	39	42	56	44	35	90	2.9
M	4045TF280[5]	56	75	61	49	51	68	55	44	90	1.9
M	4045TF280[5]	63	84	69	55	57	76	62	50	90	1.9
M	4045HF280[5]	74	99	81	65	67	90	73	58	90	2.2
E	4045TF285	74	99	77	62	67	90	70	56	90	5.2
E	4045HF285	94	126	102	82	86	115	93	74	92	5.2
E	4045HF285	99	133	108	86	90	121	98	78	92	5.2
E	4045HF285	118	158	128	103	107	143	116	92	92	6.5
E	4045HF285	147	197	162	129	134	180	147	117	92	6.5
Plus	4045HFG85[5]	147	197	162	129	134	180	147	117	92	6.5
E	6068HF285	147	197	160	128	134	180	145	116	92	8.1
E	6068HF285	177	237	192	154	161	216	174	139	92	9.8
E	6068HFG82[2]	212	284	232	185	193	259	210	168	93	12.6
Plus	6068HFG85[5]	212	284	232	185	193	259	210	168	93	12.6
E	6090HF484	229	307	250	200	208	279	226	181	93	13.7
Plus	6068HFG85[5]	235	315	257	205	214	287	232	186	93	14.1
E	6090HFG84[2]	258	346	278	222	235	315	251	201	93	18.9
E	6090HF484	287	385	314	251	258	346	280	224	93	17.2
E	6090HFG84[2]	315	422	344	275	287	385	312	249	93	18.9
E	6090HF484	315	422	344	275	287	385	312	249	93	18.9
Plus	6090HFG85[5]	315	422	347	278	287	385	315	252	93	16.1
E	6090HFG86[3]	345	462	379	303	N/A	N/A	N/A	N/A	93	19.3
Plus	6135HF485[5]	345	462	378	302	311	417	338	271	93	19.9
E	6135HFG84[3]	401	537	44	358	N/A	N/A	N/A	N/A	93	16
Plus	6135HF485[5]	401	537	441	352	365	489	399	319	93	22
E	6135HFG84[3]	460	616	513	411	N/A	N/A	N/A	N/A	93	18.4
Plus	6135HF485[5]	460	616	505	404	419	561	458	366	93	25.3
E	6135HFG75[3][4]	563	754	628	503	N/A	N/A	N/A	N/A	93	22.5

[2] 60 Hz/50 Hz dual frequency is available on these engines and meet EPA Interim Tier 4 and EU Stage III A emissions regulations.
[3] Available for emergency standby applications only.
[4] This PowerTech engine is capable of meeting Tier 2 emissions as required by emergency standby regulations (>560 kW).
[5] Jet fuel ratings available, contact your John Deere engine distributor for a complete listing.

EU Stage III A

John Deere offers a complete range of Stage III A certified engines for mobile generator applications. There is a perfectly tailored choice for every key power node from 30 to 300 kVA prime.

High performance

- High-pressure common-rail system with electronic control and air-to-air aftercooling provides exceptional load acceptance
- Fan designed to minimize power consumption and maximize fuel efficiency

Ease of integration

- Fan guard meets Stage III A European regulations
- Cooling package designed for enclosures up to 200 Pa air restrictions and 47°C (117°F) ambient air temperature
- Front feet design includes cooling package mountings

Environmentally friendly

- Higher fuel injection pressure and multiple injections reduce fuel consumption, noise, and vibration
- Clean engine environment with optional crankcase ventilation (OCV) system
- Low-noise fan design

Ease of use

- Dual frequency (50/60 Hz switchable); Stage III A/Tier 3 certified at both 1500 and 1800 rpm for most ratings
- See-through expansion tank for quick coolant level checks
- Easy modification of governing parameters
- Superior cold starting

High reliability and low maintenance

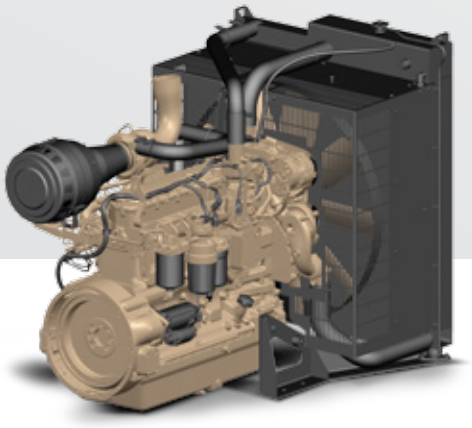
- Heavy-duty air cleaner available for the most severe working environments
- Two-stage fuel filtration with water detection (from 80 to 300 kVA)
- Electronic system allows engine performance monitoring and easy diagnostics
- Replaceable cylinder liners for easy overhaul
- Optional belt tensioner eliminates need for manual adjustment

Engines for EU Stage III A/EPA Tier 3 applications
Dual frequency 50 Hz/60 Hz

PowerTech technology	Engine model	GSPU model[8]	Speed	Standby ratings				Prime ratings				Generator efficiency	Fan power
			rpm	kWm	hpm	kVA	kWe	kWm	hpm	kVA	kWe	%	kW
M	3029TFG89[2]	3029TFU89[2]	1500	31	42	33	27	28	38	30	24	90	1.3
			1800	35	47	37	30	31	42	32	26	90	2.2
M	3029HFG89[2]	3029HFU89[2]	1500	43	58	47	37	39	52	42	34	90	1.5
			1800	46	62	49	39	42	56	44	35	90	2.6
M	4045HFG81	4045HFU81	1500	61	82	59	47	56	75	53	42	90	9
			1800	65	87	56	45	59	79	49	39	90	15.5
E	4045HFG82	4045HFU82	1500	83	111	91	73	76	102	83	67	90	2
			1800	86	115	93	74	78	105	84	67	90	3.4
E	4045HFG82	4045HFU82	1500	103	138	114	91	94	126	104	83	92	4
			1800	106	142	114	91	96	129	103	82	92	6.7
E	4045HFG82	4045HFU82	1500	123	165	135	108	112	150	122	98	92	6
			1800	126	169	133	106	115	154	120	96	92	10.3
E	6068HFG82	6068HFU82	1500	153	205	168	134	139	186	151	121	92	7.3
			1800	156	209	165	132	142	190	149	119	92	12.6
E	6068HFG82	6068HFU82	1500	202	271	226	181	184	247	205	164	93	7.3
			1800	212	284	232	185	193	259	210	168	93	12.6
E	6090HFG84	6090HFU84	1500	253	339	276	221	230	308	250	200	93	15.2
			1800	258	346	278	222	235	315	251	201	93	18.9
E	6090HFG84	6090HFU84	1500	304	407	336	269	277	371	304	243	93	15.2
			1800	315	422	344	275	287	385	312	249	93	18.9

[2] 60 Hz/50 Hz dual frequency is available on these engines and meet EPA Interim Tier 4 and EU Stage III A emissions regulations.
[8] Generator set power Unit (GSPU). A GSPU is a John Deere factory-built gen-set power unit, based on a bare engine with mounting pads, cooling package, and air filter.

Non-emissions certified



John Deere offers a 250 kVA prime power generator drive engine in an ultra-compact 6.8L package.

John Deere offers a full range of non-emissions certified engines, suitable for all generator sets in non-regulated countries and stationary generator sets in the EU. Available from 30 to 500 kVA, this range is based on simple, straightforward technologies providing flexibility and cost savings: 30 to 200 kVA nodes are covered by the PowerTech M platform (mechanical fuel system) while 225 to 500 kVA nodes are covered by the PowerTech E platform (HPCR fuel system and full authority electronic controls).

Reliability and durability

- Replaceable wet-type cylinder liner
- Heavy-duty engine block
- Heavy-duty crankshaft, connecting rods, and bearings

Simplicity

- Low installation costs
- Easy integration

Power in all environments

- Good performance in harsh conditions
- Operation in freezing temperatures
- Cooling packages are built to handle the hottest conditions

Generator set power unit availability

- Factory-built
- Bare engine with mounting pads, cooling package, and air filter
- Lower development cost and time

Ready spec range (50 Hz only)

- Short delivery time
- Ready to go specification
- Inventory optimization

Engines for non-emissions certified applications 50 Hz

Engine model	GSPU model[8]	Standby ratings				Prime ratings				Generator efficiency	Fan power
		kWm	hpm	kVA	kWe	kWm	hpm	kVA	kWe	%	kW
PowerTech M											
3029DF129	3029DFU29	31	42	33	26	27	36	28	23	90	2
3029TF129	3029TFU29	42	56	45	36	38	51	41	32	90	2
4045DF120	4045DF158	44	59	47	38	40	54	43	34	90	2
4045TF120	4045TF158	70	94	75	60	63	84	67	54	90	3.5
4045TF220	4045TF258	83	111	90	72	75	101	81	65	92	4.8
4045HF120	4045HF158	102	137	113	90	91	122	100	80	92	4
6068TF220	6068TF258	121	162	135	108	109	146	121	97	92	4
6068HF120	6068HF158	155	208	172	138	140	188	155	124	92	5.5
6068HF120	6068HF258	183	245	203	162	166	222	183	147	92	6.5
PowerTech E											
6068HFG20	6068HFU20	202	271	226	181	184	247	200	164	93	7.3
6068HFG55	6068HFU55	228	306	250	200	207	278	225	180	93	11
6068HFG55	6068HFU55	250	335	279	223	227	304	252	202	93	10
6090HFG84	6090HFU84	304	407	336	269	277	371	304	243	93	15.2
6135HF475	N/A	355	476	392	314	323	433	355	284	93	17.8
6135HF475	N/A	405	543	447	358	369	494	405	324	93	20.3
6135HF475	N/A	456	611	504	403	415	556	456	365	93	22.8

[8] Generator set power Unit (GSPU). A GSPU is a John Deere factory-built gen-set power unit, based on a bare engine with mounting pads, cooling package, and air filter.

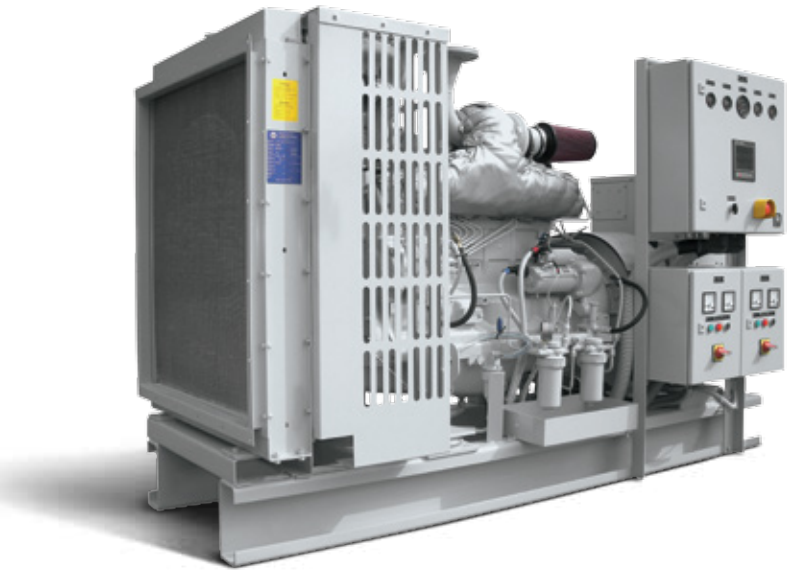
Engines for non-emissions certified applications 60 Hz

PowerTech technology	Engine model	GSPU model[8]	Standby ratings				Prime ratings				Generator efficiency	Fan power
			kWm	hpm	kVA	kWe	kWm	hpm	kVA	kWe	%	kW
M	3029DF129	3029DFU29	35	47	36	29	31	42	32	25	90	3
M	3029TF129	3029TFU29	48	64	51	41	44	59	47	37	90	2.4
M	4054DF150	4045DF158	53	71	57	45	48	64	51	41	90	2.6
M	4045TF150	4045TF158	74	99	79	63	67	90	71	57	90	3.7
M	4045TF250	N/A	84	113	90	72	98	131	106	85	90	4.1
M	4045TF250	4045TF258	100	134	109	87	90	121	98	78	92	5
M	6068HF150	N/A	112	150	122	98	101	135	110	88	92	5.6
M	4045HF150	4045HF158	123	165	135	108	111	149	121	97	92	6
M	6068TF250	6068TF258	142	190	152	123	129	173	138	112	92	7.5
E	4045HF285	N/A	147	197	162	129	134	180	147	117	92	6.5
M	6068HF250	N/A	148	198	162	129	133	178	144	115	92	7.1
M	6068HF150	6068HF158	187	251	207	165	168	225	184	148	93	9.3
M	6068HF150	6068HF258	210	281	232	186	189	253	208	166	93	10.4
E	6068HFG20	6068HFU20	210	282	230	183	191	256	210	168	93	12.6
E	6068HF475	N/A	234	314	258	207	213	285	234	187	93	11.7
E	6068HFG55	6068HFU55	260	348	281	225	237	318	254	203	93	18.5
E	6090HFG84	6090HFU84	315	422	344	275	287	385	312	249	93	18.9
E	6135HF475	N/A	360	482	398	318	327	438	359	287	93	17.9
E	6135HF475	N/A	420	563	464	371	382	512	420	336	93	20.9
E	6135HF475	N/A	460	616	508	406	418	560	459	367	93	23
E	6135HFG75	N/A	563	754	628	503	N/A	N/A	N/A	N/A	93	22.5

[8] Generator set power Unit (GSPU). A GSPU is a John Deere factory-built gen-set power unit, based on a bare engine with mounting pads, cooling package, and air filter.

PowerTech marine generator drive engines

For reliable power from 40 to 416 kW (54 to 558 hp), John Deere generator drive engines deliver quiet, smooth operation that never lets you down. You may even forget they are aboard until you turn on the lights or plug in an appliance. This quiet reliability is why John Deere is a preferred provider of generator drive engines worldwide. They are available in 1500 rpm for 50 Hz and 1800 rpm for 60 Hz configurations.



PowerTech radiator-cooled generator drive engines
40 – 416 kW
54 – 558 hp

Quiet operation and low vibration

We strive to design engines that go almost unnoticed. This is why all the moving parts are dynamically balanced. The torque available at low rpm helps with fast load response.

- Water-cooled exhaust manifold for cooler, quieter performance
- Engine isolators with optional mounting supports
- All 4-cylinder models have internal balance shafts to eliminate vibration

Marine generator engine ratings

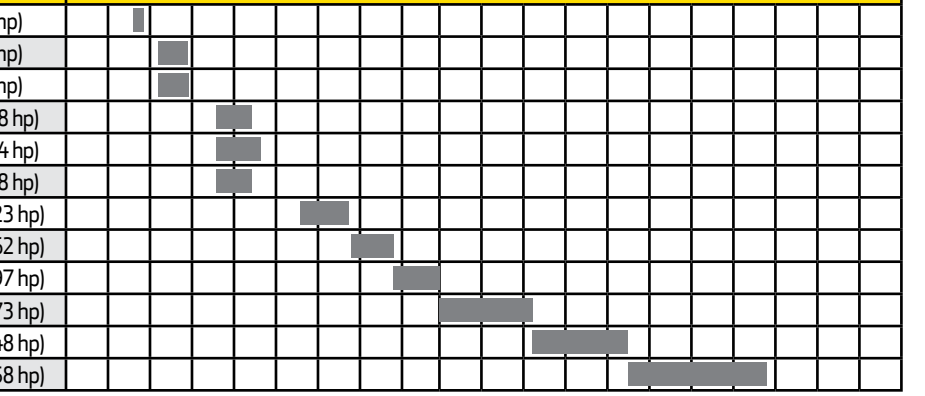
The marine generator engine rating is the power available under normal varying electrical load factors for an unlimited number of hours per year in commercial applications.* This rating incorporates a 10 percent overload capability and conforms to ISO 8528 prime power. Average load over a 24-hour period shall not exceed 67 percent of the prime rating, of which no more than two hours are between 100 percent and 110 percent of the prime rating.

This rating is used for applications that require constant speed in auxiliary applications.

* Load factor is the actual fuel burned over a period of time divided by the full-power fuel consumption for the same period of time. For example, if an engine burns 160 liters of fuel during an eight-hour run, and the full-power fuel consumption is 60 liters per hour, the load factor is 160 liters / (60 liters per hour x 8 hours) = 33.3 percent.

Marine engine generator drive power ratings

Engine	Power rating
4045DFM70	40 – 46 kW (54 – 62 hp)
4045TFM75	55 – 73 kW (74 – 98 hp)
4045TFM85	61 – 74 kW (82 – 99 hp)
4045AFM85	89 – 110 kW (119 – 148 hp)
6068TFM50	89 – 115 kW (119 – 154 hp)
6068TFM76	89 – 110 kW (119 – 148 hp)
6068AFM75/85	139 – 166 kW (186 – 223 hp)
6068SFM85	168 – 195 kW (226 – 262 hp)
6090AFM75/85	195 – 222 kW (261 – 297 hp)
6090SFM75/85	222 – 278 kW (298 – 373 hp)
6135AFM85	278 – 334 kW (373 – 448 hp)
6135SFM85	334 – 416 kW (448 – 558 hp)



Ratings are subject to change. Please contact your John Deere marine dealer for details.

Customer support

Easy access to parts and service

With more than 4,000 John Deere service locations worldwide, you never have far to go to find expert assistance and advice.

Simple maintenance

Our engines have extended oil change intervals — up to 500 hours. Single-side service points make it easy to check and maintain fuel filters, oil filters, starters, and fluid levels. Automatic belt tensioners minimize maintenance cost and increase belt life. Larger fuel filters, water separators, fuel pressure sensors, and fault code diagnostics optimize filter life.

Remanufactured components

Reduce operating downtime and repair costs with John Deere remanufactured engines and engine components. Our remanufactured components provide a high-quality, quick replacement at a lower cost.

Fast parts delivery

Our dealers stock maintenance parts, as well as many other common replacement parts, to meet your service needs quickly. Our worldwide parts distribution system also provides overnight delivery in most regions.

A warranty you can count on

From the day your gen-set begins operation, it's warranted for uninterrupted service. We offer a 2-year/2,000-hour and 1-year/unlimited-hour warranty. Extended warranties are also available under certain conditions — up to 5 years/5,000 hours. Be sure to register your engine for warranty support at **JohnDeere.com/EngineWarranty**.

Worldwide locations

North America, South America, Brazil, and Caribbean
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P.O. Box 5100
Waterloo, IA 50704-5100
Phone: +1 800 533 6446 (U.S.)
Phone: +1 319 292 6060 (Canada)
Fax: +1 319 292 5075
Email: jdpower@JohnDeere.com

Mexico and Central America
Industrias John Deere S.A. de C.V.
Boulevard Diaz Ordaz No. 500
Garza Garcia, Nuevo Leon 66210
Mexico
Phone: +52 81 8288 1212
Fax: +52 81 8288 8284
Email: mexweb@JohnDeere.com

Europe, Africa, and Middle East
John Deere Power Systems
Orléans-Saran Unit
La Foulonnerie – B.P. 11013
45401 Fleury-les-Aubrais Cedex
France
Phone: +33 2 38 82 61 19
Fax: +33 2 38 84 62 66
Email: jdengine@JohnDeere.com

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Email: JDAsiaEngines@JohnDeere.com

JOHN DEERE

DSWT32 Litho in U.S.A. (17-02)

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DSWT32 Litho in U.S.A. (17-02)

JohnDeere.com/GenDrive

John Deere generator power

– Leading gen-set manufacturers trust John Deere PowerTech™ generator drive engines.
– John Deere is one of the very few engine manufacturers that don't make gen-sets. This focus on engines makes us unbiased partners with gen-set OEMs.
– We listen closely to gen-set manufacturers to provide the features and services they need.
– We deliver high power in a compact design.
– Complete power range meets all worldwide emissions regulations and certifications — from non-emissions certified engines to Tier 4 and Stage III A.
– Reliable operation, low maintenance, long engine life, and unbeatable fluid economy lead to low cost of ownership.
– Extensive worldwide support network provides peace of mind.

Power in remote locations. John Deere generator drive engines provide prime power for pumping stations, peak shaving, distributed power, mining, and other remote applications.

Power at a moment's notice. From computer centers to hospital operating rooms, John Deere-powered standby generator sets protect critical applications, ensure uninterrupted productivity, and offer peace of mind.

Confidence is built in

Prime or standby power

John Deere generator drive engines are ready when and where you need them! They provide fast response for standby situations and exceptional load recovery in all applications.

Without interruption

When it's your prime power source, you can't afford any interruptions. That's where John Deere generator drive engines earn their reputation for reliability and confidence. Even our maintenance intervals are extended with a 500-hour oil change.

In any condition

Are you operating in subzero cold or blistering heat? Don't worry. John Deere engines start in freezing temperatures thanks to advanced electronic high-pressure fuel systems and preheating options such as glow plugs, air heaters, or block heaters. We also offer a full line of cooling packages built to handle the hottest working conditions.

For the long haul

The John Deere name has always been synonymous with durability. It explains why you find so many John Deere engines continuing to do their job many years after they were put into service. Check out the heavy-duty features found on all John Deere generator drive engines by visiting JohnDeere.com/gendrive.

Ready to install

Application choices

Select from a wide range of John Deere generator drive engine models with displacements from 2.9L to 13.5L and a variety of options. Our power ranges overlap across engine displacements so you can choose exactly the right fit for your application.

- 12 V or 24 V electrical systems
- Left or right side service points
- Multiple fan heights and speed ratios
- Factory-installed cooling systems

Power density

Imagine a 4-cylinder engine that performs like a 6-cylinder! One of the secrets of John Deere engines is their ability to generate maximum power in minimum space. We use engine technologies such as dual turbochargers and 4-valve cylinder heads to achieve maximum power density. Through these advancements, our current 4.5L, 6.8L, and 9.0L engines perform in applications where larger displacement engines are traditionally required. Our power density also results in smaller canopies, less weight on the trailer, and lower fuel costs.

Installation flexibility

Install John Deere engines using the engine block's front or side mounts. It's your choice. We also offer many options to ensure perfect integration and provide single-side service points for easy access. Have a unique space or noise requirement? With our multiple fan heights and speed ratios, you can build generator sets for tight places or quiet operation.

Application assistance

It's like having a direct line to an application engineer. Our experienced technical team works closely with you to make sure John Deere engines are compatible with your gen-sets. John Deere also offers application-approved cooling packages for our full line of engines. These preconfigured units can save you hours of engineering time and help you get generator sets to market faster.

Our solutions to different regulations

John Deere engines comply with all nonroad emissions regulations for the U.S. Environmental Protection Agency (EPA) and the European Union (EU).

PowerTech™ diesel oxidation catalyst/selective catalytic reduction (DOC/SCR) engines join our complete lineup to give generator set manufacturers more choices for meeting Final Tier 4 emissions regulations. We continue to provide diesel oxidation catalyst/diesel particulate filter/selective catalytic reduction (DOC/DPF/SCR) engines, which deliver the best available control technology (BACT) for reducing particulate matter and provide premium performance when the job requires it. We also offer a full line of Tier 3, Interim Tier 4/Stage III A, and non-emissions certified engines for standby generator sets and nonregulated areas.

Standby power. The EPA allows emergency standby applications to use Tier 3 products that do not require aftertreatment. The European Union (EU) does not regulate standby applications.

Emergency stationary provision. The New Source Performance Standard (NSPS) provision of the EPA requires that Tier 3 engines for standby power be limited to emergency use and no more than 100 hours per year for required maintenance and testing. Owners/operators must record the use of the engine during all operations, including hours operated during emergencies and non-emergencies.

Prime power. Prime power and portable applications are required to meet Final Tier 4 emissions regulations in North America and Stage III A in Europe.

EU off-highway mobile emissions regulations — constant speed engines

kW	hp	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0-7	0-10	Not regulated in EU											
8-18	11-24	Not regulated in EU											
19-36	25-49	8.0 1.5 0.80				7.5 0.60	→						
37-56	50-74	7.0 1.3 0.40					4.7 0.40	→					
57-74	75-99	7.0 1.3 0.40					4.7 0.40	→					
75-129	100-174	6.0 1.0 0.30				4.0 0.30	→						
130-559	175-749	6.0 1.0 0.20				4.0 0.20	→						
≥560	≥750	Not regulated in EU											

NOTES: Stage V emission regulations to be finalized in 2016; expected implementation dates are 2019 – 2020.

The EU does not regulate engines to an emission stage for stationary applications. Medium combustion directive regulations for engines above 350 kW (stationary) have expected implementation dates in 2019.

Legend

EU	Stage II	Stage III A

→ Availability of EU Flexibility Scheme

Fuel sulfur regulations

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
EU	2000 ppm		1000 ppm			10 ppm							

Examples

NOx NMHC PM	2.0 0.19 0.025

2.0, the maximum amount of nitrogen oxides (NOx) allowed in g/kWh.

0.19, the maximum amount of nonmethane hydrocarbons (NMHC) allowed in g/kWh.

0.025, the maximum amount of particulate matter (PM) allowed in g/kWh.

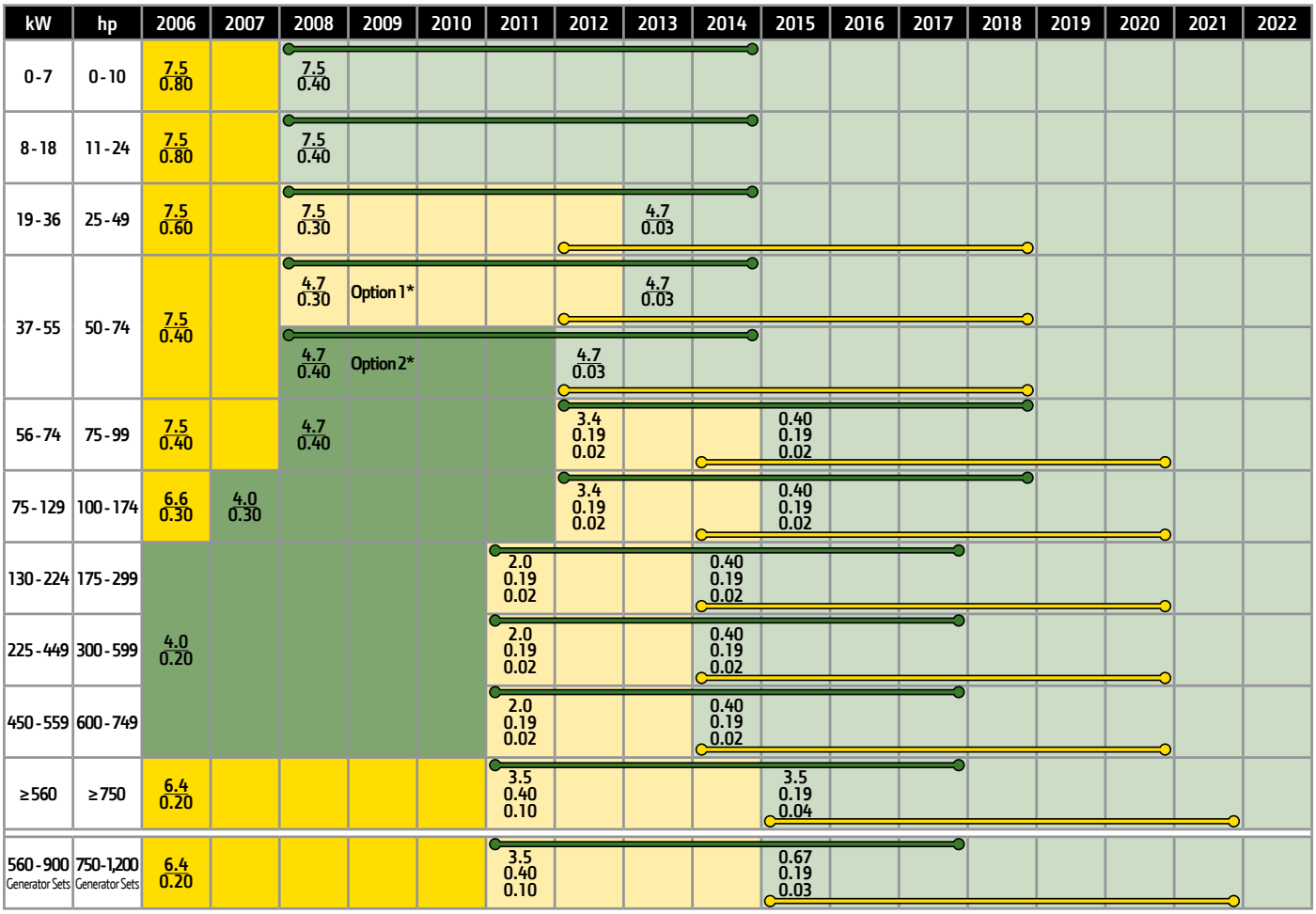
NMHC + NOx PM	7.5 0.80

7.5, the maximum amount of NMHC + NOx allowed in g/kWh.

0.80, the maximum amount of PM allowed in g/kWh.

New emissions regulations took effect January 1 of the year indicated by color change unless otherwise noted.

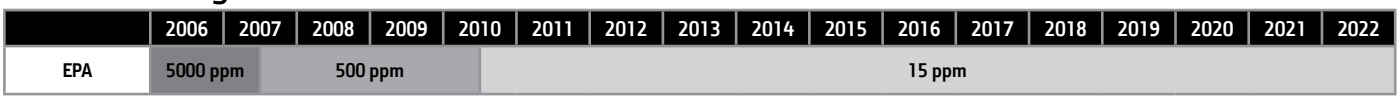
EPA off-highway emissions regulations



*In the 50 to 74 horsepower category, there were two options. Option 1 required a reduced PM level (0.30 vs. 0.40) but allowed Final Tier 4 to be delayed one year (2013)

NOTE: In emergency stationary applications, the EPA does not require engines to use aftertreatment.

Fuel sulfur regulations



Legend

EPA	Tier 2	Tier 3	Interim Tier 4	Final Tier 4

General Availability of Tier 4 Equipment Flexibility Provision

Delayed Availability of Tier 4 Equipment Flexibility Provision

Examples

NOx	2.0
NMHC	0.19
PM	0.025

2.0, the maximum amount of nitrogen oxides (NOx) allowed in g/kWh.
0.19, the maximum amount of nonmethane hydrocarbons (NMHC) allowed in g/kWh.
0.025, the maximum amount of particulate matter (PM) allowed in g/kWh.

NMHC + NOx	7.5
PM	0.80

7.5, the maximum amount of NMHC + NOx allowed in g/kWh.
0.80, the maximum amount of PM allowed in g/kWh.

EPA: Environmental Protection Agency

Ready when you need it

Ready for any market

John Deere generator drive engines keep your gen-sets in compliance, and they keep your customers confident. Wherever your generator sets go, they will be ready to meet local emissions regulations in most countries.

Full line of generator drive engines

John Deere offers more than 200 configurations of generator drive engines from 31 to 563 kW (42 to 755 hp) to meet all emissions regulations and power nodes.

Jet fuel capable

Some John Deere generator drive engines are jet fuel capable and are available in dual frequency 1500 rpm (50 Hz) and 1800 rpm (60 Hz) with the same software and hardware.

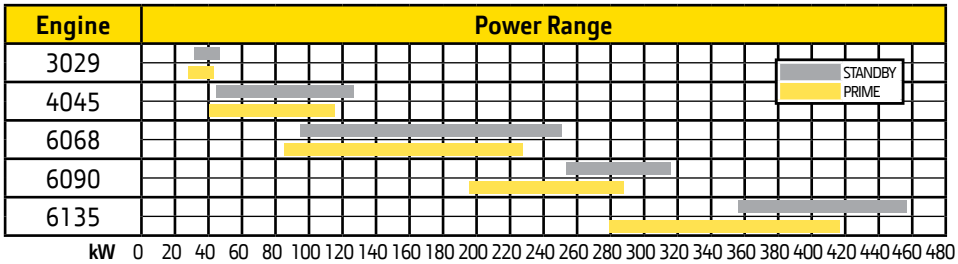
Advanced electronic controls

John Deere uses proven electronic controls in almost all our power ranges. They help provide load recovery, clean power, better diagnostics, engine monitoring, and ease of synchronization when operating more than one set in parallel. John Deere uses smart governing and throttling selections to make this process seamless — even when paralleling to older mechanical engines.

Dual frequency

Electronic controls also make it easy for manufacturers that need 60 Hz and 50 Hz power to switch between 1800 and 1500 rpm without reprogramming.

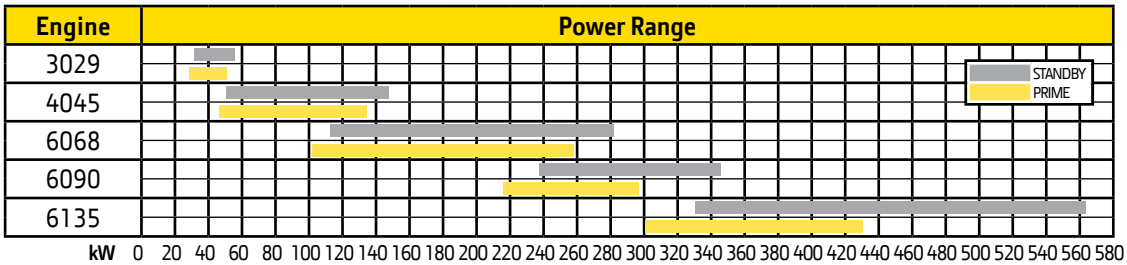
Gen-Set Ratings 50 Hz (1500 rpm)



50 Hz engines

Our current engine range meets emissions regulations introduced by the European directive 97/68/EC, TA-Luft, and CCNR. Non-emissions certified engines are also available for non-regulated markets.

Gen-Set Ratings 60 Hz (1800 rpm)



60 Hz engines

We offer a wide choice of engines that fully meet EPA emissions regulations. Non-emissions certified engines are also available for non-regulated markets.

Integrated Emissions Control system

John Deere has integrated new technologies with field-proven solutions to meet each regulatory tier. A single electronic control unit (ECU) controls the engine and entire Integrated Emissions Control system.

Turbocharging

John Deere engines use fixed geometry turbochargers sized for specific power ranges, wastegate turbochargers (WGT) to develop more airflow at lower engine speeds, and variable geometry turbochargers (VGT) to tailor the amount of recirculated exhaust gas that mixes with fresh air. Some models use a fixed turbocharger and VGT in series to deliver higher power density, improved low-speed torque, and improved high altitude operation.

Cooled exhaust gas recirculation (EGR)

Cooled EGR is a proven technology that reduces nitrogen oxides (NOx) by mixing measured amounts of cooled exhaust gas with incoming fresh air to lower the engine's peak combustion temperature.

Exhaust filters

Some engine models use an exhaust filter to provide a simple and reliable solution for reducing particulate matter (PM). This is the best available control technology (BACT) for reducing PM in nonattainment areas.

Selective catalytic reduction (SCR)

John Deere engines feature an SCR system that utilizes a urea-based additive, sometimes referred to as diesel exhaust fluid (DEF). The ammonia in the urea mixes with engine exhaust gases in the SCR catalyst to reduce NOx — converting it to nitrogen and water vapor. This is the best available control technology (BACT) for reducing NOx in nonattainment areas.

Engine technology summary

Engine	Emissions Regulations	Turbocharging	Cooled EGR	Exhaust Filter	PM Aftertreatment	SCR
PowerTech M	Interim Tier 4 and Stage III A	Fixed	No	No	No	No
PowerTech E	Tier 3 and Stage III A	Fixed	No	No	No	No
PowerTech Plus	Tier 3	VGT	Yes	No	No	No
PowerTech PWX	Interim Tier 4	WGT	Yes	Yes	DOC/DPF	No
PowerTech PVX	Interim Tier 4	VGT	Yes	Yes	DOC/DPF	No
PowerTech PSX	Interim Tier 4	Series	Yes	Yes	DOC/DPF	No
PowerTech EWX	Final Tier 4	WGT	No	Yes	DOC/DPF	No
PowerTech PWL	Final Tier 4	WGT	Yes	No	DOC	Yes
PowerTech PVL	Final Tier 4	VGT	Yes	No	DOC	Yes
PowerTech PVS	Final Tier 4	VGT	Yes	Yes	DOC/DPF	Yes
PowerTech PSL	Final Tier 4	Series	Yes	No	DOC	Yes
PowerTech PSS	Final Tier 4	Series	Yes	Yes	DOC/DPF	Yes

Turbocharging: Fixed = fixed turbocharger, VGT = variable geometry turbocharger, WGT = wastegate turbocharger, Series = series turbochargers
Cooled EGR: cooled exhaust gas recirculation
DOC: diesel oxidation catalyst
DPF: diesel particulate filter
SCR: selective catalytic reduction

Ready for results

Fluid economy

Generate more power with less fuel. Low-friction pistons, 4-valve cylinder heads, and advanced electronic controls are just some of the tools we use to help you build efficient generator sets. John Deere Final Tier 4 engines use an optimized SCR system that minimizes consumption of fuel and diesel exhaust fluid (DEF).

Low idle speeds

John Deere generator drive engines have low idle capability for reduced fluid consumption and decreased wear and tear during transport or startup and shutdown checks.

Easy operation

John Deere generator drive engines are designed to minimize noise and vibration. All service points are located on a single side for easy access and quick service.

Big-engine durability

Heavy-duty components that are usually found in larger engines are used throughout the John Deere generator drive engine line. Many of our engines feature wet-type cylinder liners, top-liner cooling, steel pistons, and variable-speed fan drives. Visit JohnDeere.com/gendrive for complete specifications.

Total quality

From our continuing research and development efforts to our rigorous manufacturing processes, every component of a John Deere engine is scrutinized for quality. The total result is a generator drive engine that delivers performance, fuel efficiency, reliability, emissions compliance, and easy installation — a combination of engine qualities that you can't find just anywhere. We are ISO 9001 and 14001 certified and have expertise partnering with gen-set manufacturers worldwide.

Low cost of ownership

John Deere generator drive engines quietly do their job generating electrical power. The fuel efficiency of John Deere prime power engines minimizes the number of times you have to fill the tank. It all adds up to a low cost of ownership. It's exactly why John Deere has received the attention and loyalty of so many generator set manufacturers and customers.

Customer support

A worldwide support network

The proven John Deere dealer network of over 4,000 service locations is prepared to fully support you and your engines. From around the globe, John Deere engine distributors and service dealers are your best source for engine service, knowledge, and parts. Our dealers keep John Deere maintenance and repair parts in stock to keep your gen-sets running reliably. Also, the worldwide John Deere parts distribution system has overnight delivery in most areas of the world.

To find the nearest John Deere engine distributor or service dealer, visit JohnDeere.com/dealer.

Qualified John Deere technicians

Only John Deere service technicians have the expertise to ensure top performance of your John Deere engine. Our technicians continuously participate in specialized training on John Deere engine technology, diagnostic tools, and service techniques. Trust your John Deere engine technician to have repairs completed quickly and accurately.

Genuine John Deere parts

There's a reason John Deere engine parts have such a strong reputation — quality. Other companies claim their repair parts meet or exceed OEM specifications. But the only real way to ensure performance is to use engine parts designed by John Deere for John Deere engines. Rely on the quality and support of genuine John Deere parts and service to keep your engine running like new.

With just a few clicks, get the parts you need through JDParts.com. Order from anywhere at any time using your phone, tablet, or laptop.

- Order online through your local dealer, 24/7/365
- Ship to your dealer or to your home as early as next day
- Search parts by model number, part number, or keyword
- Take advantage of local John Deere dealer pricing and inventory
- Get access to parts catalogs with product images

Fast. Convenient. Online.
JDParts.com

Warranty you can count on

At John Deere, we stand behind every engine we build. That's why our warranty covers your John Deere OEM engine for an unlimited number of hours during the first 12 months of use, or up to 2,000 hours in the first 24 months. Our warranty plans also protect genuine John Deere engine parts and accessories. Contact your John Deere engine distributor or service dealer for standard coverage details and extended warranty options.

Be sure to register your John Deere OEM engine and take full advantage of the John Deere service and support network. Registering your engine not only prepares us to support your warranty needs but also allows us to keep you informed on new products, services, and money-saving offers from John Deere.

You can register your John Deere OEM engine by simply scanning this code or visiting JohnDeere.com/enginewarranty.

Preventive Maintenance Kits

Get uptime in a box with a Preventive Maintenance Kit filled with genuine John Deere parts. Ask your John Deere dealer to customize a kit to fit your exact equipment needs and be prepared for planned maintenance and unforeseen repairs.

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