



JOHN DEERE

North America and Brazil
 John Deere Power Systems
 3801 West Ridgeway Avenue
 P.O. Box 5100
 Waterloo, IA 50704-5100
 Phone 800-533-6446
 FAX 319-292-5075
jdpower@JohnDeere.com

Mexico

Industrias John Deere S.A. de C.V.
 Boulevard Diaz Ordaz No. 500
 Garza Garcia, Nuevo Leon 66210
 Mexico
 Phone 52 (81) 8040-1212
 FAX 52 (81) 1052-8482

Central America, South America and Caribbean

Tradewinds Power Corp.
 5820 NW 84th Avenue
 Miami, FL 33166
 Phone 305-592-9745
 FAX 305-592-7461

Argentina

Industrias John Deere Argentina, S.A.
 Juan Orsetti 481
 2152 Grandero Baigorria
 Sante Fe, Argentina
 Phone 54-341-471-8000
 FAX 54-341-471-8001

Europe, Africa and Middle East

John Deere Power Systems
 Usine de Saran
 La Foulonnerie -B.P. 11013
 45401 Fleury-les-Aubrais Cedex - France
 Phone (33) 2 38 82 61 19
 FAX (33) 2 38 82 60 00
jdengine@JohnDeere.com

Australia and New Zealand

John Deere Limited,
 Power Systems Division
 49 Smeaton Grange Road
 Narellan NSW 2567 Australia
 Phone 612 46474857
 FAX 612 46461236

Far East

John Deere Asia Ltd
 Suite 903, 9th Floor
 Lippo Sun Plaza, 28 Canton Road
 Tsim Sha Tsui, Kowloon,
 Hong Kong
 Phone 852 3105 0818
 FAX 852 3105 0331

www.JohnDeere.com/gendrive
jdpower@JohnDeere.com







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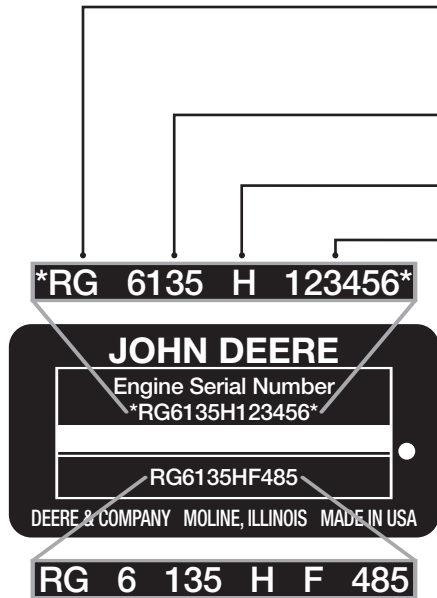
Generator Drive Diesel Engine Ratings



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Identification Plate



Factory Manufactured by:

RG Waterloo, IA
 CD Saran, France
 PE Torreon, Mexico

Number of Cylinders and Total Displacement

6135 6 Cylinders, 13.5 Liters
 6125 6 Cylinders, 12.5 Liters
 6090 6 Cylinders, 9.0 Liters
 6081 6 Cylinders, 8.1 Liters
 6068 6 Cylinders, 6.8 Liters
 4045 4 Cylinders, 4.5 Liters
 5030 5 Cylinders, 3.0 Liters
 3029 3 Cylinders, 2.9 Liters
 4024 4 Cylinders, 2.4 Liters

Air Intake System

D Naturally Aspirated
 T Turbocharged
 A Turbocharged and Aftercooled, Air-to-Water
 H Turbocharged and Aftercooled, Air-to-Air

Engine Serial Number

Engine Controls (Tier 3/Stage III A)

0 Mechanical Controls
 5 Electronic Controls

Emissions Certification

001 Tier 1/Stage I
 070 Tier 2/Stage II
 8 Tier 3/Stage III A
 9 Interim Tier 4/Stage III B

Valves Per Cylinder (Tier 3/Stage III A)

2 2-Valves
 4 4-Valves

User Type

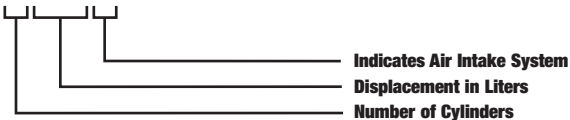
F OEM (John Deere Power Systems)
 XX Other letters are used to identify John Deere Equipment Manufacturing Locations

Model Designation Key

Below is a key for the engine models shown in this guide.

A model designated as 6135H is a 6-cylinder, 13.5 liter turbocharged and aftercooled, air-to-air engine. A model designated as a 4045T is a 4-cylinder, 4.5 liter turbocharged engine.

6135H



Features and Benefits

Standby and Prime

Power Density

- Best-in-class power density
 - Standby: 4.5L, 6.8L, 12.5L, and 13.5L
 - Prime: 4.5L, 6.8L, 12.5L, and 13.5L
- Competitive power density
 - Standby: 2.4L, 3.0L, 8.1L, and 9.0L
 - Prime: 2.4L, 3.0L, 8.1L, and 9.0L

Emissions

- Full EPA emissions-certified product range (2.4L–13.5L)
- Non-certified engines also available for non-regulated markets

John Deere Generator Drive Engines for Standby and Prime Applications

Options and accessories

- Oil pans, fuel filter sizes, and instrument panel types
- Cooling packages
- Air cleaner element types
- Optional auxiliary drive
- Wide range of fan speed ratios
- Either-side engine service

User-friendly features

- Low operating costs and low maintenance requirements
- Exceptional block-loading response capabilities
- Outstanding reliability and durability
- Longer service intervals
- Excellent cold starting
- Low noise

Non-regulated PowerTech™

Generator Drive Power Ratings 50 Hz

Engine Model	Rated Speed	Engine Power Prime		Prime Ratings	
	RPM	kW	hp	kVA	kWe
3029D	1500	27	36	28-29	22-23
3029T	1500	38	51	40-41	32-33
4024T	1500	19	25	20	16
4024T	1500	28	38	30	24
4045D	1500	40	54	41-44	33-35
4045T	1500	56	75	59-62	47-50
4045T	1500	63	84	65-68	52-54
4045T	1500	63	84	66-70	53-55
4045T	1500	75	101	79-83	63-66
4045H	1500	72	96	76-80	61-64
4045H	1500	91	122	96-100	77-80
4045H	1500	109	146	112-118	90-94
5030T	1500	38	50	40	32
5030H	1500	56	75	60	48
6068T	1500	85	114	90-94	72-75
6068T	1500	94	126	100-104	80-83
6068T	1500	95	127	100-105	80-84
6068T	1500	109	146	115-121	92-97
6068H	1500	111	149	117-123	94-98
6068H	1500	140	188	148-155	118-124
6068H	1500	166	223	175-183	156-163
6068H	1500	188	252	195-204	156-163
6081T	1500	119	160	125-131	100-105
6081T	1500	144	193	152-159	121-127
6081A	1500	142	190	150-157	120-126
6081A	1500	168	225	178-186	142-149
6081A	1500	192	257	202-212	162-169
6081H	1500	182	244	192-201	154-161
6081H	1500	231	310	244-255	195-204
6125H	1500	275	368	291-304	233-243
6125H	1500	273	366	288-302	231-241
6125H	1500	318	427	337-352	269-281
6125H	1500	320	429	339-354	271-283
6125H	1500	350	469	370-388	296-310

Engine Power Standby		Standby Ratings		Typical Generator Efficiency	Typical Fan Power
kW	hp	kVA	kWe	%	kW
31	41	32-34	26-27	88-92	2.0
42	56	44-46	35-37	88-92	2.0
21	28	23	18	88	0.1
31	42	34	27	88	1.0
44	59	46-49	37-39	88-92	2.0
62	83	66-69	53-55	88-92	2.0
70	94	73-76	58-61	88-92	3.5
70	94	74-78	59-62	88-92	2.5
83	111	88-92	70-74	88-92	4.8
80	107	85-89	68-71	88-92	3.0
102	137	108-113	86-90	88-92	4.0
120	161	125-131	100-104	88-92	6.0
42	56	45	36	88	1.3
62	84	66	53	88	1.9
94	126	100-104	80-83	88-92	3.5
104	139	110-116	88-93	88-92	3.5
105	141	111-116	89-93	88-92	3.5
121	162	129-135	103-108	88-92	4.0
123	165	130-136	104-109	88-92	4.5
155	208	165-172	132-138	88-92	5.5
183	245	194-202	155-162	88-92	6.5
207	278	216-226	173-181	88-92	10.4
131	175	139-145	111-116	88-92	4.5
169	227	179-187	143-150	88-92	6.0
157	210	166-174	133-139	88-92	5.5
187	250	199-207	159-166	88-92	6.5
225	302	239-250	191-200	88-92	8.0
200	268	212-222	170-178	88-92	7.0
268	359	284-297	227-238	88-92	9.5
302	405	320-335	256-268	88-92	10.5
300	402	318-333	255-266	88-92	10.5
350	469	372-388	297-311	88-92	12.3
352	472	374-390	299-312	88-92	12.5
387	519	411-429	329-344	88-92	13.5

Non-regulated PowerTech™

Generator Drive Power Ratings 60 Hz

Engine Model	Rated Speed	Engine Power Prime		Prime Ratings	
	RPM	kW	hp	kVA	kWe
3029D	1800	31	42	31-33	25-26
4045T	1800	90	121	94-98	75-78

Engine Power Standby		Standby Ratings		Typical Generator Efficiency	Typical Fan Power
kW	hp	kVA	kWe	%	kW
35	47	35-37	28-30	88-92	3.0
100	134	104-109	83-87	88-92	4.8

Tier 1 PowerTech™

Generator Drive Power Ratings 60 Hz

Engine Model	Rated Speed	Engine Power Prime		Prime Ratings	
	RPM	kW	hp	kVA	kWe
3029T	1800	43	58	44-46	35-37
4045D	1800	48	64	50-52	40-42
4045T	1800	67	90	70-73	56-58
4045T	1800	74	99	76-80	61-64
4045T	1800	76	102	79-82	63-66
4045T	1800	82	110	85-89	68-71
4045T	1800	90	121	94-98	75-78
4045H	1800	86	115	89-93	71-74
4045H	1800	111	149	115-120	92-96
6068T	1800	101	135	105-110	84-88
6068T	1800	111	149	115-120	92-96
6068T	1800	112	150	116-121	93-97
6068T	1800	128	172	132-139	106-111
6068H	1800	133	178	137-144	110-115
6068H	1800	168	225	174-182	139-146
6068H	1800	189	253	196-205	157-164
6081T	1800	142	190	147-154	118-123
6081T	1800	166	223	172-180	138-144
6081A	1800	168	225	174-182	139-146
6081A	1800	201	270	209-219	167-175
6081A	1800	220	295	228-238	182-190
6081H	1800	218	292	226-236	181-189
6081H	1800	263	353	273-285	218-228
6125A	1800	300	402	311-326	249-261
6125H	1800	327	439	340-356	272-285
6125H	1800	382	512	397-415	318-332
6125H	1800	418	561	404-421	323-337

Engine Power Standby		Standby Ratings		Typical Generator Efficiency	Typical Fan Power
kW	hp	kVA	kWe	%	kW
48	64	49-51	39-41	88-92	3.0
53	71	55-58	44-46	88-92	2.6
74	99	78-81	62-65	88-92	3.7
82	110	85-90	68-72	88-92	4.1
84	113	88-92	70-74	88-92	4.1
91	122	95-100	76-80	88-92	4.5
100	134	105-109	84-87	88-92	5.0
95	127	99-104	79-83	88-92	4.8
123	165	129-134	103-107	88-92	6.0
112	150	116-122	93-98	88-92	5.6
123	165	129-134	103-107	88-92	6.3
124	166	129-135	103-108	88-92	6.3
142	190	148-155	118-124	88-92	7.1
148	198	154-161	123-129	88-92	7.5
187	251	195-204	156-163	88-92	9.3
210	282	220-230	176-184	88-92	10.4
157	211	164-172	131-138	88-92	7.8
194	260	202-211	162-169	88-92	9.5
187	250	195-204	156-163	88-92	9.3
224	300	234-244	187-195	88-92	11.2
259	347	270-282	216-226	88-92	13.0
240	322	251-262	201-210	88-92	11.9
308	413	322-336	258-269	88-92	15.3
330	442	344-360	275-288	88-92	16.4
360	483	376-394	301-315	88-92	17.9
420	563	439-459	351-367	88-92	20.9
460	617	491-514	393-411	90-94	23.1

Tier 2 PowerTech™

Generator Drive Power Ratings 60 Hz

Engine Model	Rated Speed	Engine Power Prime		Prime Ratings	
	RPM	kW	hp	kVA	kWe
3029T	1800	44	59	46-48	37-38
4024T	1800	32	43	34	27
4045D	1800	46	62	48-50	38-40
4045T	1800	67	90	70-73	56-58
4045T	1800	76	102	79-83	64-66
4045H	1800	98	131	102-107	82-85
4045H	1800	106	142	109-115	87-92
4045H	1800	130	174	134-141	107-112
5030T	1800	54	72	56	45
5030H	1800	65	87	68	54
6068T	1800	112	150	116-122	93-97
6068H	1800	149	200	155-162	124-130
6068H	1800	170	228	177-185	141-148
6068H	1800	191	256	198-207	159-166
6068H	1800	213	286	221-231	177-185
6081H	1800	210	282	226-236	181-189
6081H	1800	236	317	254-266	203-212
6081H	1800	263	352	283-295	226-236
6081H	1800	289	388	311-325	249-260
6125H	1800	300	402	312-326	249-261
6125H	1800	327	439	340-356	272-285
6125H	1800	382	512	397-415	318-332
6125H	1800	418	561	435-454	348-364

Engine Power Standby		Standby Ratings		Typical Generator Efficiency	Typical Fan Power
kW	hp	kVA	kWe	%	kW
48	64	50-52	40-42	88-92	2.4
36	48	38	30	88	1.8
50	67	52-55	42-44	88-92	2.5
74	99	77-81	62-65	88-92	3.7
84	113	88-92	70-73	88-92	4.2
108	145	113-118	90-94	88-92	5.4
117	157	121-128	97-102	88-92	5.9
143	192	148-156	119-124	88-92	7.2
60	80	63	50	88	3.0
72	96	75	60	88	3.6
123	165	129-134	103-108	88-92	6.2
164	220	171-179	137-143	88-92	8.2
187	250	195-204	156-163	88-92	9.4
210	282	219-229	176-184	88-92	10.5
234	314	245-256	196-205	88-92	11.7
231	310	249-261	200-208	90-94	11.6
260	349	281-293	225-235	90-94	13.0
289	388	312-326	250-261	90-94	14.5
318	426	343-359	275-287	90-94	15.9
330	442	345-361	276-288	88-92	16.4
360	483	376-394	301-315	88-92	17.9
420	563	439-459	351-367	88-92	20.9
460	617	481-503	385-402	88-92	23.0

Tier 3 PowerTech Plus™

Generator Drive Power Ratings 60 Hz

Engine Model	Rated Speed	Engine Power Prime		Prime Ratings	
	RPM	kW	hp	kVA	kWe
6068H	1800	214	286	226	181
6090H	1800	208	279	226	181
6090H	1800	235	315	255	204
6090H	1800	261	350	284	227
6090H	1800	287	384	312	249
6090H*	1800	311	417	338	271
6135H	1800	365	489	397	317
6135H	1800	419	561	455	364
6135H*	1800	466	624	508	407

Engine Power Standby		Standby Ratings		Typical Generator Efficiency	Typical Fan Power
kW	hp	kVA	kWe	%	kW
235	315	250	200	90	12.9
229	307	250	200	92	12.6
258	346	281	225	92	14.2
287	385	312	250	92	15.8
315	422	344	275	92	17.3
344	461	375	300	92	18.9
401	538	438	350	92	22.1
460	617	500	400	92	25.3
516	691	562	450	92	28.4

Tier 3 PowerTech E™

Generator Drive Power Ratings 60 Hz

Engine Model	Rated Speed	Engine Power Prime		Prime Ratings	
	RPM	kW	hp	kVA	kWe
4045T*	1800	63	85	67	54
4045H*	1800	85	114	90	72
4045H*	1800	105	142	112	90
6068H	1800	134	180	141	113
6068H	1800	161	216	169	135

Engine Power Standby		Standby Ratings		Typical Generator Efficiency	Typical Fan Power
kW	hp	kVA	kWe	%	kW
70	94	75	60	90	3.9
94	126	100	80	90	5.2
117	157	125	100	90	6.4
147	197	156	125	90	8.0
177	237	186	149	90	11.0

*Preliminary data, ratings are subject to change.

All ratings are subject to change.

Conversions

Brake Horsepower (BHP)

$$BHP = \frac{RPM \times Torque}{5252}$$

Torque

$$Torque = \frac{BHP \times 5252}{RPM}$$

Fuel Consumption

$$Gal/hr = \frac{BHP \times BSFC}{7.2 \text{ lbs/gal}}$$

Generator Drive Rating (kWe)

$$kWe = [Engine Power (kW) - Fan Power Loss (kW)] \times Generator Efficiency$$

Power Factor (PF)

$$PF = kWe/kVA = \frac{Real Power}{Apparent Power}$$
$$PF \text{ Constant} = 0.80$$

English to Metric

$$Newton-meter = lb-ft \times 1.356$$

$$Newton = lb \text{ force} \times 4.448$$

$$Meter = ft \times 0.3048$$

$$Millimeter = in \times 25.4$$

$$Kilogram = lb \times 0.454$$

$$Liter = gal \times 3.785$$

$$Liter = cu \text{ in} \times 0.01639$$

$$Kilowatt = hp \times 0.746$$

$$(Kilowatt = \frac{volts \times amps}{1000})$$

$$Celsius = (deg \text{ F} - 32) \times 0.556$$

Customer Support

With more than 4,000 service locations worldwide, John Deere is always handy when you need service and support. You'll find an authorized John Deere dealer or engine distributor almost anywhere in the world.

We have centralized parts warehouses in the United States and Europe, plus numerous worldwide depots that employ overnight parts shipping—so you'll never have to wait long for parts. In addition, John Deere service personnel are highly trained technicians who stay on top of changing engine technologies and service techniques.

John Deere dealers and distributors are your best source for service, knowledge, and engine accessories. They're one of the many reasons to specify John Deere engines in your generator sets.