



Genset Ratings





Ratings Range - 60Hz Operation 1800 rpm Diesel

Standby	kW	65
,	kVA	81
Prime	kW	59
1 111110	k\/Δ	73

Sound Attenuation: at 7m / 23 ft **72** dBA

Pictures may include optional equipment and/or accessories.

Generator available with or without trailer











Key features

HIPOWER rental generators are an efficient, reliable and versatile source of power designed to operate in the most extreme working conditions. An unique combination of innovative materials and design features combine for easy user operation and dependable power you can rely on.

- The Genset features a heavy-duty John Deere 4 cycle diesel engine certified by the Environmental Protection Agency (EPA) to conform to Tier 3 non-road emissions regulations, an AC high capability alternator regulated by a precise Automatic Voltage Regulator controlled and protected by the manual auto-start DSE702 control module. A heavy-duty constructed chassis supports the complete set. The generator is protected by a best-in-class sound attenuated enclosure designed for durability and extreme application.
- Engine generating set tested to ISO 8528-5.
- The Genset engine is certified by the Environmental Protection Agency (EPA) Tier 3 non-road emissions regulations.
- The brushless, single bearing, 4 poles, 12-wire generator end, with automatic voltage regulator has broad range reconnectability.
- The Genset is CSA certified.
- Global product support.
- Operations and maintenance manuals.
- 1 Year Standard Warranty. Extended warranties are also available.







Model: HRJW 75 T6



Engine

Standard features

- Industrial grade Tier 3 John Deere diesel Engine, 4 stroke, water cooled, provided with:
- Electric start 12V. (24V optional)
- Radiator with pusher fan.
- Standard water separator visible level fuel filter.
- Secondary water separator fuel filter.
- Mechanical engine governor.
- HWT/LOP senders.
- Heavy duty 2-stage air filter with service indicator.
- Hot & rotating components (exhaust, fan,...) protections and radiator guards.
- Oil drain hand pump
- Spin type fuel and oil filters.

Alternator

- Self excited, self regulated alternator.
- Insulation class H, IP23 Protection.
- Automatic Voltage Regulator (AVR) (+/-1%).
- Vacuum impregnation.
- Permanent Magnet Generator (PMG).

CMA1 Control Panel

- DSE702 Manual and Auto-start control panel (2 wires).
- DSE702 Features: Manual start or remote Start, Engine Pre-heat, Engine monitoring and protection features, Protected solid state outputs, LED indicators.
- Engine protections: High coolant temperature, Low oil pressure, Low coolant level, Battery charging alternator failure, Overspeed.
- **Digital Metering**: Tamper proof engine hours counter.

Analogical Metering:

- 3 ammeters,
- 1 voltmeter + selector,
- 1 frequency meter,
- 1 fuel gauge,
- 1 analog hour meter,
- 1 battery charger gauge,
- 1 oil pressure gauge,
- 1 water temperature gauge.
- Siren
- Emergency Stop Button

Power Panel

- 3P Main Line Circuit Breaker for overload protection (UL listed)/ CSA 22.2).
- Main bus / Hardwire connection panel.
- Battery disconnect switch.

Distribution Panel

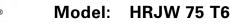
- Auxiliary socket box IP67, with individual breaker protection and 2 GFCI DUPLEX 20A 125VGFI for 110v duplex and 3 TWIST-LOCK 50A 2P+N+G.
- Direct access to auxiliary sockets with suitable protection.
- Secondary Main bus / hardwire connection (Load lugs).
- Camlocks.
- Voltage selector switch. Lockable, with 3 positions (3phase 277/480V 3phase 120/208V 1phase 120/240V).





Standard features







Electric Equipment

- Battery charging alternator.
- Gel type, heavy-duty Starting battery(s) installed and connected to the engine include cables and rack.
- Ground connection prepared for ground spike (G.S. not supplied).

Chassis

- Heavy duty skid base with forklift pockets and drawbars.
- Extended run time high capacity fuel tank.
- 110% spill containment for engine oil, coolant and fuel spills.
- Easy access for chassis cleaning and fast draining of fuel tank.
- Oversized chassis to protect canopy with skids for dragging embedded and Forklift pockets for easy transport.
- Vibration isolators between chassis and generator.
- External fuel tank filling (lockable fuel cap)
- Chassis ready for mobile kit installation. (see mobile kits options).

Enclosure

- Heavy duty sound attenuated canopy made with high quality 11 gauge steel.
- Powder coat paint which exceeds 1,000 hour salt spray test.
- Stainless steel hardware and fasteners.
- Ultra silent all weather enclosures with Rock-Wool insulation and curved edges with minimum outside fasteners.
- Reinforced Single eye lifting point.
- Fuel tank external filling system (lockable filler cap).

 Emergency stops (double protection for emergency stop; inside on control panel + external on canopy).

Industrial Rental Towable Generator

- Door with window to view control panel.
- Easy access to radiator fill through roof on enclosure.
- Outlet for power cables
- Recesses provision for quick release couplings (external fuel supply).

Exhaust

 Steel residential silencer of -35dBA attenuation, with rain cap.







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Optional features



Engine (optional)

- Water Jacket Heater
- Low coolant level sensor.
- Secondary water separator fuel filter -RACOR type (Decanting filter with water detection kit, alarm signal and sensor contact).
- Heavy duty, three stage air filter with service indicator.

Alternator (optional)

• Anti-condensation heater.

Electric Equipment (optional)

- Battery isolator.
- Automatic battery chargers.

Electronics (optional)

• Digital timer.

Trailers (optional)

• Road towing trailers to DOT standards.



Model: HRJW 75 T6

GE GE	NSET RATING										
GENSET Model	ENGINE Model	ALTERNATOR Model	VOLTAGE L-L	Ph	Hz	ST	150°C RI ANDBY R		F	125°C RI PRIME RA	
wodei	wodei	Wodei	L-L			kW	kVA	Amps L-L	kW	kVA	Amps L-L
HRJW 75 T6 4045HF280 - 74 UCI	UCI 224 F	120	1	60				45	56	2x233	
			240	1	60				45	56	233
			208	3	60	64	80	222	58	73	201
			240	3	60	65	81	195	59	74	177
			480	3	60	65	81	98	59	74	89

ENGINE SPECIFICATIONS				
Manufacturer		JOHN DEERE		
Engine model		4045HF280 -74		
EPA Certification for:	Stage	Tier 3		
Rated	RPM	1800		
Nominal Power (PRIME)	kW - HP	67 90		
Nominal Power (STANDBY)	kW - HP	74 99		
Engine type		Diesel 4 stroke		
Inyection type		DIRECT		
Aspiration type		INTERCOOLED		
Cylinder arrangement		4 - L		
Bore and stroke	(mm) - In	(106 x 127) 4.19 x 5.00		
Displacement	L - in3	4.5 275		
Cooling system		Liquid (Cool-Gard)		
Governor Type		mechanical		
Make		С		
Standard		С		
Starting voltage	Vcc	12		
Air cleaner type		Medium duty w/double cartridge		
Compression ratio		19.0 : 1		

AMPERAGE	
1 Phase 120V	2x233 Amps
1 Phase 240V	233 Amps
3 Phase 208V	201 Amps
3 Phase 240V	177 Amps
3 Phase 480V	89 Amps
Main Line Circuit Breaker Rating	250 Amps

Manufacturer	Stamford
Model (480V)	UCI 224 F
Alternator Type	4 poles, rotating field
Excitation system	
Exciter Type	PMG
Leads: quantity, type	12, reconnectable
Stator Pitch	2/3
Insulation system	
Material	Class H
Temperature rise	150°C Standby
	125°C Prime
Bearing: quantity, type	Single bearing sealed
Coupling	Flexible disc
Amortisseur windings	Full
Automatic Voltage regulator	
PMG regulator or EBS	MX341, Opt MX321
Voltage regulation, no load to full load	
PMG regulator	+/-1%, +/- 0.5%
Load acceptance	100% of rated standby current
Unbalanced load capability	20% of standby rating
Subtransient Reactance	
480V	12%
TIF	<50
Line Harmonics	5% Maximum
Peak motor starting kVA:	30% dip
480V	PMG excited MX series- 257kVA







Model: HRJW 75 T6

ELECTRICAL SY	12V	
Battery charging alternator:		
Ground (negative/positive)		Negative
Volts (DC)	V	12
Ampere rating	Amp	55
Starter motor rated voltage (DC)	V	12
Starter motor rated	kW	1.46
Starter motor rated	HP	1.99
Battery recommendations		
Quantity & Min. Amps rating	Amp	92
Min. Cold Cranking Amps	Amp	640
Battery Voltage (DC)	V	12

FUEL SYSTEM		
Recommended fuel		#2 Diesel
Fuel supply line. min. ID	mm - in	11 - 0.44
Fuel return line. min. ID	mm - in	6 - 0.24
Fuel pump Type		Engine Driven
Max. Lift fuel pump	m - ft	
Max. Flow to pump	(l/h) - gal/h	
Fuel filter		
Secondary filter		5μm @ 98% Eff.
Secondary Water Separator		Included
Primary filter		С
Primary Water Separator		С

FUEL CONSUMPTION		PRII	ME	STAN	IDBY
		l/h	gal/h	l/h	gal/h
100% Load	l/h - gal/h	17.8	4.7	19.4	5.1
75% Load	l/h - gal/h	13.6	3.6	14.9	3.9
50% Load	l/h - gal/h	9.6	2.5	10.6	2.8
25% Load	l/h - gal/h	5.4	1.4	5.9	1.5

EXHAUST SYS	PRIME	STANDBY	
Exhaust manifold type		Dry	Dry
Exhaust outlet diameter			
Sound Attenuated version	mm - In	90	- 3.546
Max. Exhaust temp. at full load	°C	515	545
	°F	959	1013
Exhaust Gas Flow	kg/h - Lb/h	340.2 - 750.01	- 362.88 - 800.01
	(m3/min) - ft3/min	(13.5) - 477	- (14.4) - 508
Evacuated by the exhaust heat	kcal/kWh - kcal/kWh	0.00	- 783.66
Maximum allowed back pressure	(mm/H2O) - inH2O	762	- 30
	(kPa) - inH2O	7.5	- 30

COOLING SYSTEM				
Engine cooling air flow	m3/s - ft3/s	3.8 - 133.4		
Generator cooling air flow	m3/min - ft3/min	16.9 - 595.4		
Total cooling air flow (engine + generator + combustion)				
Sound Attenuated version	m3/min - ft3/min	498.0 - 17,586.7		
Total cooling capacity	l - gal	648.0 - 22,883.9		
Antifreeze recommended	l - gal	27.1 - 7.2		

LUBRICATION SYSTEM			
Oil Filter: quantity. type		1 x Cartridge	
Oil pan capacity	l - gal	15 - 3.96	
Oil pan capacity with filter	l - gal	12 - 3.17	
Oil cooler		Water Cooled	
Recommended Oil		Cool-Gard II	
Specific oil consumption full load	% fuel	<0,1%	
Oil Press	(psi) - kPA	46 - 320	

VENTILATION REQUIREMENTS				
Air requirement for combustion at 100% load/rated speed	m3/h - ft3/h	324 - 11460		
Cooling airflow	m3/h - ft3/h			
Heat rejected to ambient:				
From engine	kW - btu/min	35 - 1979		
From alternator	kW - btu/min	1.4 - 79.67		







SP◎ Model: HRJW 75 T6

Control & Power Panel

- 1. CMA1 Control Panel.
- ✓ DSE702 Manual and Auto-start controller.
- √ 3 ammeters.
- ✓ 1 frequency meter.
- ✓ 1 voltmeter + selector.
- √ 1 fuel gauge.
- ✓ 1 analog hour meter.
- √ 1 selector switch.
- ✓ 1 Siren.
- √ 1 battery charger gauge.
- √ 1 oil pressure gauge.
- √ 1 water temperature gauge.
- ✓ Emergency Stop Button.

2. CP Power Panel.

- ✓ Main Line Circuit Breaker for overload protection (UL listed / CSA22.2).
- ✓ Main bus /hardwire connection panel.



Pictures may include optional equipment and/or accessories.

Distribution Panel

- 1. Auxiliary socket box IP67 with:
- ✓ Individual breaker protection for sockets.
- √ 2 GFCI duplex 20A 125VGFI for 110v duplex.
- √ 3 TWIST-LOCK 50A 2P+N + G.
- ✓ Secondary Main bus / hardwire connection (Load lugs).
- ✓ Camlocks.



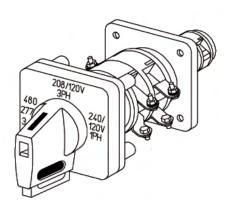
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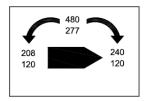
∰◎ Model: HRJW 75 T6

Voltage Selector Switch

- 1. Voltage selector switch 3 positions padlockable (12h / 09h/ 03h).
- ✓ High (Series) Wye 480/277V 3Ph Y.
- ✓ Low (Parallel) Wye 208/120V 3Ph YY.
- ✓ Low (Parallel) Zig Zag 240/120V 1Ph ZZ
- 2. 7 contact stages, 14 contacts.
- 3. Switching angle 90°.



AC Generator Startor Widing connected for 2Phase +Neutral Parallel Zig-Zag: 120/240 VAC 60Hz



9 (W1)

12 (W6) 5 (V1)

11 (W5)

12 (W6) 5 (V1)

12 (W2)

12 (W2)

12 (W2)

13 (W5)

14 (U6)

14 (U6)

15 (V1)

16 (V2)

17 (U1)

18 (V6)

19 (W1)

10 (W2)

11 (W5)

11 (W5)

12 (W6) 5 (V1)

12 (W6) 5 (V1)

12 (W6) 5 (V1)

13 (W6) 5 (V1)

14 (U6)

15 (W1)

16 (V2)

17 (W1)

18 (W6)

19 (W1)

10 (W1)

11 (W5)

11 (W5)

12 (W6) 5 (V1)

12 (W6) 5 (V1)

13 (W6)

14 (U6)

15 (W1)

16 (W2)

17 (W1)

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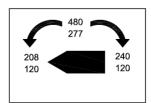
17 (W1)

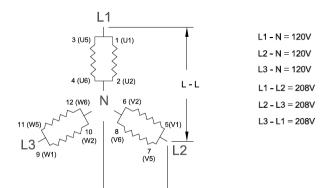
17 (W1)

18 (W1)

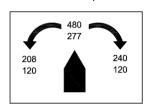
8 (V6)

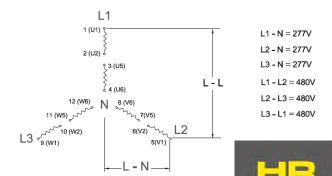
AC Generator Startor Widing connected for 3Phase Low Wye: 208/120 VAC 60Hz





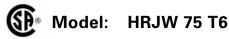
AC Generator Startor Widing connected for 3Phase Low Wye:480/277 VAC 60Hz











DSE702 Auto & Manual Start controller

- ✓ The DSE702 is a Manual and Auto start controller design for an excellent range of engine monitoring and protection features.
- ✓ The module has been designed to monitor low oil pressure, high engine temperature, overspeed, and a user-defined auxiliary input. When the module detects a fault it will automatically shut down the engine.
- ✓ The module also has the capability to monitor. battery charging by utilising the WL terminal on the charge alternator. On detecting a fault, it will light the warning LED on the front panel.
- ✓ Include a tamperproof LCD hours run counter to indicate total engine run time.
- ✓ Auto-start versions include an option for remote start signal input. This input allows the module to be started from a remote location.
- ✓ LED indicators for engine alarms and pre-heating operation.



- NOTES:

 ★ All the protections are programmable to carry out "Alarm with Engine Stop".

 ★ (A) Alarm with Engine Stop.

 ★ (W) Warning Alarm without Engine Stop.

Engine Alarms

- 1. Over speed (A).
- 2. Low oil pressure (A).
- 3. Low coolant level (A).
- 4. Battery charging alternator failure (w).
- 5. High coolant temperature (A).

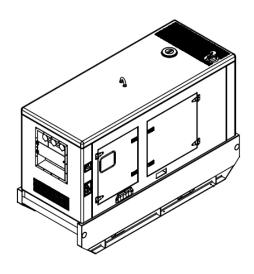






Śp̃⊚ Model: HRJW 75 T6



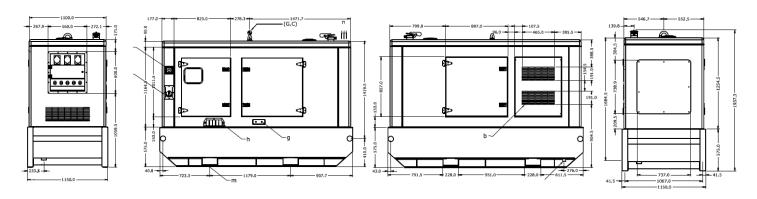


Enclosure model			DR10	
	(Length x Width x Height)			
i	n	100.7 x 45.3 x 76.4		
mm		2810 x 1150 x 1940		
Lb	Kg	4220	1910	
	m		(Length x W in 100.7 x 4 mm 2810 x 1	

			7
Trailer size (L x W x H)	in	180 x 77 x 14	
	mm	4572 x 1955 x 35	
Trailer weight	Lb Kg	975	445
Fuel Tank Capacity	Gal L	118.9	450
Run Time (Hr)	100%	75% 50)% 25%
	25.4	33 46	6.6 83

NOTE: The drawings are only representative of the overall dimensions.

For full detailed drawings please consult your local distributor or contact Himoinsa Power Systems <u>www.hipowersystems.com</u>



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