

### Ratings Range – 60 Hertz Operation

Standby: kW 123 - 180  
kVA 123 - 225

Prime: kW 115 - 165  
kVA 115 - 206

Baldor generators are available in a variety of power ratings and installation styles to meet the energy needs of the smallest businesses and the largest manufacturing facilities. All generator sets are designed to meet the specifications to ensure the fastest startup and dependable long-term operation. Rely on Baldor generators to provide the clean, quiet and environmentally friendly electrical power when you need it most. Emergency backup, standby, prime power, peak shaving or for any of your day or night electrical power needs, you can count on a dependable Baldor generator to provide the peace of mind and security you desire.

### Standby and Prime Power Features

- ✓ Heavy-duty industrial diesel engine that meets the latest EPA emissions levels
- ✓ Brushless synchronous alternators with dynamic balancing and four pole construction
- ✓ Fully featured microprocessor based controller that's easy to use and field programmable for customized installations
- ✓ Generator sets are prototype tested and production tested to ensure easy startup
- ✓ Gen-set accepts rated load in one step
- ✓ Heavy duty construction that's designed for use in prime or standby applications
- ✓ Manufactured in a dedicated and secure ISO-9001 certified facility
- ✓ Generator sets are backed by a world wide network of parts and service centers
- ✓ Optional agency approvals available including UL2200 and NFPA110
- ✓ Optional environmental enclosures available including weather resistant, sound attenuated, containerized, and walk-in models
- ✓ Full range of genset accessories and factory installed options available

### Genset Ratings

Genset Model Number	Alternator	Voltage L-N / L-L	Phase	Hertz	150°C Rise Standby Rating		125°C Rise Prime Rating	
					kW / kVA	Amps	kW / kVA	Amps
IDLC180-3J	UCI274G-311	120 / 208	3	60	170 / 213	591	165 / 206	573
		(1) 120 / 240	3	60	170 / 213	512	165 / 206	497
		(1) 120 / 240	1	60	123 / 123	513	115 / 115	479
		139 / 240	3	60	180 / 225	542	165 / 206	497
		220 / 380	3	60	154 / 193	293	149 / 186	283
		277 / 480	3	60	180 / 225	271	165 / 206	248
	UCI274G-07	347 / 600	3	60	180 / 225	217	165 / 206	199
	UCI274H-311	120 / 208	3	60	180 / 225	625	165 / 206	573
		(1) 120 / 240	3	60	180 / 225	542	165 / 206	497
		(1) 120 / 240	1	60	142 / 142	592	131 / 131	546
		139 / 240	3	60	180 / 225	542	165 / 206	497
		220 / 380	3	60	180 / 225	342	165 / 206	314
277 / 480		3	60	180 / 225	271	165 / 206	248	
UCI274H-07	347 / 600	3	60	180 / 225	217	165 / 206	199	
UCI274H-06	(1) 120 / 240	1	60	180 / 180	750	156 / 156	650	

**NOTES:** (1) Alternator connections have two circuits available for low voltage.  
Available current in each low voltage circuit is equal to high voltage current listed in table.  
For ratings and voltages not listed above refer to the Genset Selector.  
Standby ratings do not have an overload capability but can be used for the duration of the utility failure per ISO-3046, DIN6271 and BS5514.  
Prime (Unlimited Running Time) ratings are continuous per DIN 6271 and ISO-3046 with 10% overload capacity.  
Baldor reserves the right to implement specifications or design changes without notice.  
Reduce output rating by minus 1% for each 333 feet over 5000 feet altitude. Reduce output rating by minus 1% for 10°F over 104°F ambient temperature.

## Engine Application Data

### Engine Specifications

Manufacturer	John Deere
Engine Model #	6068HF485
Engine Type	4 Cycle, 6 Cylinder
Induction System	Turbocharged, Charge Air Cooled
Displacement, L (in <sup>3</sup> )	6.8 (415)
EPA Emissions Level	Tier 3
HP at Rated Speed BHP (kW <sub>m</sub> )	284 (212)
Rated RPM	1800
Bore and Stroke in(mm)	4.19x5.00 (106x127)
Compression Ratio	17.0:1
Air Filter Type	Dry
Governor Type	JDEC Electronic
Governor Model	Denso HP3
Freq Reg NL to FL	Isochronous
Freq Reg Steady State	+/- 0.25%

### Engine Lubrication System

Oil Pan Capacity gal(L)	8.6 (32.5)
Oil Pan w/Filter	8.9 (33.5)
Oil Filter Quantity	1
Oil Filter Type	Cartridge
Oil Cooler	Water Cooled
Recommended Oil	15W-40
Oil Press psi(kPa)	44 (300)

### Engine Cooling System

Genset Ambient Temp °F(°C)	122 (50)
Engine Coolant Cap qt(L)	13 (12.3)
Engine + Radiator System Cap qt(L)	39.6 (37.5)
Water Pump Type	Centrifugal
Coolant Flow gpm (Lpm)	63 (240)
Heat Rejected to Cooling Water @ Rated kW; Btu/min (kW)	5175 (90.9)
Heat Rejected to Charge Cooler @ Rated kW; Btu/min (kW)	2864 (50.3)
Max Restriction of Cooling Air in H <sub>2</sub> O(kPa)	0.5 (0.124)

### Engine Exhaust System

Exhaust Manifold Type	Dry
Exhaust Flow @ Rated kW cfm(cmm)	1335 (37.8)
Exhaust Temp (dry manifold) °F(°C)	860 (460)
Min Back Pressure inH <sub>2</sub> O(kPa)	16 (4)
Max Back Pressure inH <sub>2</sub> O(kPa)	30 (7.5)
Exhaust Outlet Diameter in(mm)	4.0 (101.6)
Exhaust Outlet Type	O.D. Tube

### Engine Electrical System

Charging Alternator Volts dc	12
Charging Alternator Amps	65
Grounding Polarity	Negative
Starter Motor Volts dc	12
Battery Recommendations	
Battery Volts dc	12
Min Cold Cranking Amps	800
Quantity Required	1

### Ventilation Requirements

Cooling Airflow scfm(cmm)	13372 (379)
Combustion Airflow cfm(cmm)	563 (16)
Heat Rejected to Ambient	
From Engine Btu/min(kW)	2389 (42)
From Alternator Btu/min(kW)	810 (22)
Recommended Free Area Intake	
Louver Size ft <sup>2</sup> (m <sup>2</sup> )	28 (2.6)

### Engine Fuel System

Recommended Fuel	#2 Diesel
Fuel Line at Engine	
Supply Line Min ID in(mm)	0.44 (11)
Return Line Min ID in(mm)	0.38 (6)
Fuel Pump Type	Engine Driven
Fuel Pump Max Lift ft (m)	6 (2)
Max Flow to Pump gph(Lph)	33.5 (126.8)
Fuel Filter	
Secondary Filter	2µm
Secondary Water Separator	Included
Primary Filter	30µm
Primary Water Separator	Included

### Fuel Consumption – Standby Rating

100% Load gph(Lph)	13.9 (52.6)
75% Load gph(Lph)	10.5 (39.7)
50% Load gph(Lph)	7.4 (28.0)
25% Load gph(Lph)	4.3 (16.3)

### Fuel Consumption – Prime Rating

100% Load gph(Lph)	12.4 (46.9)
75% Load gph(Lph)	9.6 (36.3)
50% Load gph(Lph)	6.7 (25.4)
25% Load gph(Lph)	4 (15.1)

## Alternator Specifications

Alternator Type	4-Pole, Rotating Field	Automatic Voltage Regulator	
Exciter Type		Wound Field	Std SX460, Opt SX440
Wound Field	Brushless	PMG	Opt MX341, Opt MX321
PMG	Optional	Voltage Regulation	No Load to Full Load
Insulation	per NEMA MG1	Std Regulator	+/- 1.5%, +/- 1%
Material	Class H	PMG Regulator	+/- 1%, +/- 0.5%
Standby Temp Rise	150°C	Load Acceptance	100% of Rating, One Step
Prime Temp Rise	125°C	Subtransient Reactance	
Lead Connection	12 Lead, Reconnectable	480V, Per Unit	12%
Stator Pitch	2/3	TIF (1960 Weighting)	<50
Amortisseur Winding	Full	Line Harmonics	5% Maximum
Bearing	Single, Double Shielded	Motor Starting kVA	30% Max Voltage Dip
Drive Coupling	Flexible Disk	Alt @ 480V SkVA	UCI274G-311 - 650
Unbalanced Load	20% of Standby Rating	Alt @ 480V SkVA	UCI274H-311 - 730

## Genset Controller Specifications

### Baldor IntelliLite Features

Large back-lit graphical LCD Display  
64x128 pixel resolution

6 LED Genset Status Indicators

Alarm	Red LED
Not In Auto	Red LED
Warning	Yellow LED
Running	Green LED
Ready / Auto	Green LED
Supplying Load	Green LED

Sealed Membrane Panel to IP65

Push Buttons for Simple Control

Start, Stop, Fault Reset, Horn Reset, Mode,  
Page, and Enter Keys

Display Metering and Protection

Oil Pressure Warning / Shutdown  
High/Low Coolant Temperature Warning  
High Coolant Temperature Shutdown  
Low Coolant Level Shutdown  
Low Fuel Level Warning / Shutdown  
Over Speed Protection  
Battery Voltage Under/Over Warning  
Running Hour Meter  
Generator Under/Over Volts Warn/Shutdown  
Generator Under/Over Freq Warn/Shutdown  
Generator Over Current Shutdown  
Generator Output Metering for V1-V3, I1-I3,  
Hz, kW, kWh, kVAr, kVAh



NFPA110 Compliance

An optional Remote Annunciator is available  
to meet NFPA110 applications

Remote Annunciator Features – RA15

15 LED Indicators with Function Labels  
Horn Reset and Lamp Test keys  
CAN Bus Connection for up to 600 Feet



## Additional Standard Genset Features

- ✓ Voltage Adjust Potentiometer
- ✓ Run Relay
- ✓ Formed Steel Sub-Base
- ✓ Integral Vibration Isolation
- ✓ Sub-Base Lifting Eyes
- ✓ Unit Mounted Radiator
- ✓ Engine Mounted Fan
- ✓ Radiator Core and Fan Guards
- ✓ Battery Charging Alternator
- ✓ Unit Mounted Control Panel
- ✓ Spin-On Filters for Oil and Fuel
- ✓ Enamel Finish
- ✓ One Set - Operation / Maintenance Manual
- ✓ Factory Tested Prior to Shipment
- ✓ Limited Warranty

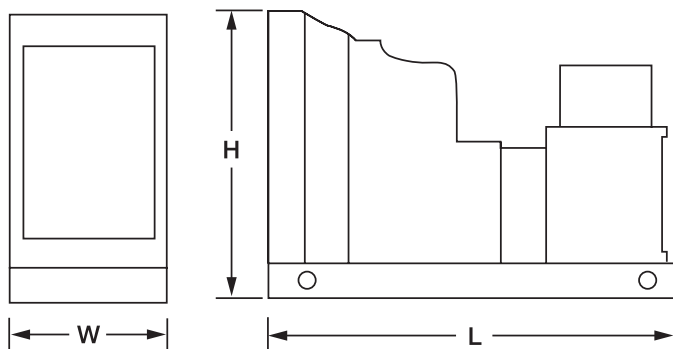
## Optional Agency Approvals

- UL2200 (Review Option Availability)
- NFPA110 (Request Remote Annunciator)

## Weight and Dimensions (Open Unit)

Weight – Wet lb(kg)	n/a
Overall Dimensions	Length x Width x Height
inches	n/a
mm	n/a

Note: Drawing is provided for reference only. Use engineering outline for installation planning



## Available Accessories and Options

### Open Unit

- Industrial Silencer
- Residential Silencer
- Critical Silencer
- Super Critical Silencer
- Exhaust Flex Pipe
- Rain Cap
- Radiator Duct Flange

### Enclosed Units

- Weather Resistant Enclosure
- Sound Attenuated w/Internal Critical Silencer
- ISO Container
- Walk-In Enclosure

### Alternator Accessories

- PMG Exciter and AVR Upgrade
- Alternator Space Heater
- Exciter Field Circuit Breaker
- Alternator Drip Shield

### Genset Accessories

- Battery Rack and Cables
- Starting Battery
- Battery Charger  Auto/Float
- Auto/Float Equalize Timer  Manual  Automatic
- Battery Heater
- Engine Coolant Heater
- Oil & Coolant Drain Valves (Engine/Radiator)
- Oil & Coolant Drain Extended to Base
- Main Output Breaker  Wall Mount  Unit Mount
- Transfer Switch  Manual  Automatic

### Control Panel

- Remote Annunciator
- Remote Communications
- Remote E-Stop

### Fuel System and Sub-Base Fuel Tank

- Sub-Base Tank  Single Wall  Double Wall
- UL142 Double Wall with Containment
- Tank Run Time @ 100% Load
  - 12-16 Hours
  - 24-36 Hours
- Flex Fuel Line
- Primary Fuel / Water Separator

### Vibration Isolators

- Location  Under Tank  Between Tank
- Elastomer Isolator  Pad Isolator
- Standard Spring  Spring for Seismic Zone 4

# BALDOR

## GENERATORS

### WORLD HEADQUARTERS

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