

### Ratings Range – 60 Hertz Operation

Standby: kW 170 - 300  
kVA 170 - 375

Prime: kW 160 - 270  
kVA 160 - 338

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
IDLC300-3J	HCI444D-311	120/208	3	60	292/365	1014	270/338	938
		(1) 120/240	3	60	292/365	879	270/338	813
		(1) 120/240	1	60	170/170	708	160/160	667
		139/240	3	60	300/375	903	270/338	813
		220/380	3	60	264/330	502	248/310	472
		277/480	3	60	300/375	452	270/338	406
	HCI444D-17	347/600	3	60	300/375	361	270/338	325
	HCI444E-311	120/208	3	60	300/375	1042	270/338	938
		(1) 120/240	3	60	300/375	903	270/338	813
		(1) 120/240	1	60	200/200	833	185/185	771
		139/240	3	60	300/375	903	270/338	813
		220/380	3	60	296/370	563	270/338	513
277/480		3	60	300/375	452	270/338	406	
HCI444E-17	347/600	3	60	300/375	361	270/338	325	

**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.

## Engine Application Data

### Engine Specifications

Manufacturer	John Deere
Engine Model #	6135HF485
Engine Type	4 Cycle, 6 Cylinder
Induction System	Turbocharged, Charge Air Cooled
Displacement, L (in <sup>3</sup> )	13.5 (824)
EPA Emissions Level	Tier 3
HP at Rated Speed BHP (kW <sub>m</sub> )	463 (345)
Rated RPM	1800
Bore and Stroke in(mm)	5.20 x 6.50 (132 x 165)
Compression Ratio	16.0:1
Air Filter Type	Dry
Governor Type/Model	JDEC Electronic
Governor Manufacturer	John Deere
Freq Reg NL to FL	Isochronous
Freq Reg Steady State	+/- 0.25

### Engine Lubrication System

Oil Pan Capacity gal(L)	10.6 (40)
Oil Pan w/Filter	11.4 (43)
Oil Filter Quantity	1
Oil Filter Type	Cartridge
Oil Cooler	Water Cooled
Recommended Oil	15W-40
Oil Press psi(kPa)	42 (287)

### Engine Cooling System

Genset Max Ambient Temp °F(°C)	122 (50)
Engine Coolant Cap qt(L)	19 (18.0)
Engine + Radiator System Cap qt(L)	102 (96.5)
Water Pump Type	Centrifugal
Coolant Flow gpm (Lpm)	102 (96.5)
Heat Rejected to Cooling Water @ Rated kW; Btu/min (kW)	124 (470)
Heat Rejected to Charge Cooler @ Rated kW; Btu/min (kW)	10189 (179)
Max Restriction of Cooling Air inH <sub>2</sub> O(kPa)	0.5 (0.124)

### Engine Exhaust System

Exhaust Manifold Type	Dry
Exhaust Flow @ Rated kW cfm(cmm)	2084 (59)
Exhaust Temp (dry manifold) °F(°C)	756 (402)
Min Back Pressure inH <sub>2</sub> O(kPa)	16 (4)
Max Back Pressure inH <sub>2</sub> O(kPa)	40 (10)
Exhaust Outlet Diameter in(mm)	6 (152.4)
Exhaust Outlet Type	O. D. Tube

### Engine Electrical System

Charging Alternator Volts dc	24
Charging Alternator Amps	65
Grounding Polarity	Negative
Starter Motor Volts dc	24
Battery Recommendations	
Battery Volts dc	24
Min Cold Cranking Amps	1100
Quantity Required	2

### Ventilation Requirements

Cooling Airflow scfm(cmm)	16194 (459)
Combustion Airflow cfm(cmm)	953 (27)
Heat Rejected to Ambient	
From Engine Btu/min(kW)	3981 (70)
From Alternator Btu/min(kW)	2047 (36)
Recommended Free Area Intake Louver Size ft <sup>2</sup> (m <sup>2</sup> )	35 (3.25)

### Engine Fuel System

Recommended Fuel	#2 Diesel
Fuel Line at Engine	
Supply Line Min ID in(mm)	0.5 (13)
Return Line Min ID in(mm)	0.38 (10)
Fuel Pump Type	Engine Driven
Fuel Pump Max Lift ft (m)	3 (1)
Max Flow to Pump gph(Lph)	47.5 (179.8)
Fuel Filter	
Secondary Filter	2µm
Secondary Water Separator	Included
Primary Filter	10µm
Primary Water Separator	Included

### Fuel Consumption – Standby Rating

100% Load gph(Lph)	22 (83.3)
75% Load gph(Lph)	16.6 (62.8)
50% Load gph(Lph)	11.8 (44.7)
25% Load gph(Lph)	7.1 (26.9)

### Fuel Consumption – Prime Rating

100% Load gph(Lph)	19.8 (74.9)
75% Load gph(Lph)	15 (56.8)
50% Load gph(Lph)	10.9 (41.3)
25% Load gph(Lph)	6.8 (25.7)

### Engine Output Deratings - Standby

Rated Temp	77°F
Rated Altitude	1,000 ft
Max Altitude	10,000 ft
Temperature Derate	-1% / 20°F
Altitude Derate	-1% / 2000 ft

## Alternator Specifications

Alternator Type	4-Pole, Rotating Field	Automatic Voltage Regulator	
Exciter Type	Brushless	PMG	Std MX341, Opt MX321
Excitation System	PMG	Voltage Regulation	No Load to Full Load
Insulation	per NEMA MG1	PMG Regulator	+/- 1%, +/- 0.5%
Material	Class H	Load Acceptance	100% of Rating, One Step
Standby Temp Rise	150°C	Subtransient Reactance	
Prime Temp Rise	125°C	480V, Per Unit	13%
Lead Connection	12 Lead, Reconnectable	TIF (1960 Weighting)	<50
Stator Pitch	2/3	Line Harmonics	5% Maximum
Amortisseur Winding	Full	Motor Starting kVA	30% Max Voltage Dip
Bearing	Single, Double Shielded	Alt @ 480V SkVA	HCI444D-311 - 940
Drive Coupling	Flexible Disk	Alt @ 480V SkVA	HCI444E-311 - 1040
Unbalanced Load	20% of Standby Rating		

## Genset Controller Specifications

### Baldor IntelliLite NT 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, kVA, 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

- ✓ 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
- ✓ Battery Rack and Cables
- ✓ 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

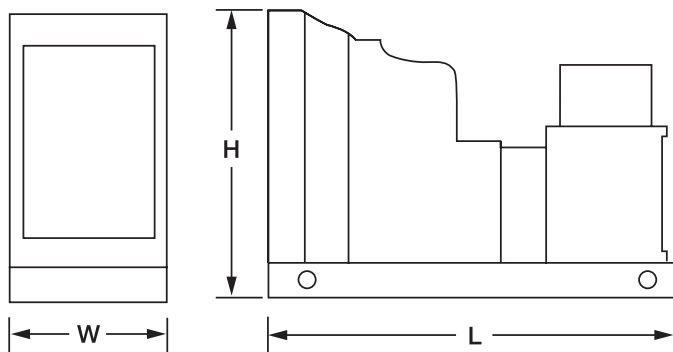
## Optional Agency Approvals

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

## Weight and Dimensions (Open Unit)

Weight – Wet lb(kg)	8012 (3114)
Overall Dimensions	Length x Width x Height
inches	137 x 60 x 82
mm	3480 x 1524 x 2083

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

- Voltage Adjust Potentiometer
- 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

Baldor Electric Company • P. O. Box 2400 • Fort Smith, AR 72902-2400 U.S.A.  
Phone (479) 646-4711 • Fax (479) 648-5792 • International Fax (479) 648-5895

www.baldor.com