

### Ratings Range – 60 Hertz Operation

Standby: kW 525 - 600  
kVA 656 - 750

Prime: kW 498 - 540  
kVA 623 - 675

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
IDLC600-2M	HCI534E-311	120/208	3	60	575/719	1997	540/675	1876
		127/220	3	60	600/750	1971	540/675	1774
		(1) 120/240	3	60	575/719	1731	540/675	1626
		139/240	3	60	600/750	1806	540/675	1626
		220/380	3	60	525/656	998	498/623	947
		240/416	3	60	575/719	999	540/675	938
		254/440	3	60	600/750	985	540/675	887
		277/480	3	60	600/750	903	540/675	813
	HCI534E-17	347/600	3	60	600/750	723	540/675	650
	HCI534F-311	120/208	3	60	600/750	2084	540/675	1876
		127/220	3	60	600/750	1971	540/675	1774
		(1) 120/240	3	60	600/750	1806	540/675	1626
		139/240	3	60	600/750	1806	540/675	1626
		220/380	3	60	570/713	1084	538/673	1023
240/416		3	60	600/750	1042	540/675	938	
		254/440	3	60	600/750	985	540/675	887
		277/480	3	60	600/750	903	540/675	813

**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	Mitsubishi
Engine Model #	S6R-Y2PTAW-1
Engine Type	4 Cycle, 6 Cylinder
Induction System	Turbocharged, Inter Cooler
Displacement, L (in <sup>3</sup> )	24.5 (1496)
EPA Emissions Level	Tier 2
HP at Rated Speed BHP (kW <sub>m</sub> )	918 (685)
Rated RPM	1800
Bore and Stroke in(mm)	6.69 x 7.09 (170 x 180)
Compression Ratio	14.5:1
Air Filter Type	Dry
Governor Type/Model	Proact2
Governor Manufacturer	Woodward
Freq Reg NL to FL	Isochronous
Freq Reg Steady State	+/- 0.25%

### Engine Lubrication System

Oil Pan Capacity gal(L)	21.1 (80.0)
Oil Pan w/Filter	26.4 (100.0)
Oil Filter Quantity	2
Oil Filter Type	Cartridge
Oil Cooler	Water Cooled
Recommended Oil	15W-40
Oil Press psi(kPa)	71 (490)

### Engine Cooling System

Genset Max Ambient Temp °F(°C)	113 (45)
Engine Coolant Cap qt(L)	52.8 (50.0)
Engine + Radiator System Cap qt(L)	238.0 (225.2)
Water Pump Type	Centrifugal
Coolant Flow gpm (Lpm)	211 (798.6)
Charge Cooler Flow gpm (Lpm)	106 (401.2)
Heat Rejected to Cooling Water @ Rated kW; Btu/min (kW)	14622 (257.0)
Heat Rejected to Charge Cooler @ Rated kW; Btu/min (kW)	13479 (236.9)
Heat Rejected to Ambient Air @ Rated kW; Btu/min (kW)	3374 (59.3)
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)	6320 (179)
Exhaust Temp (dry manifold) °F(°C)	973 (509)
Max Back Pressure inH <sub>2</sub> O(kPa)	23.6 (5.9)
Exhaust Outlet Diameter in(mm)	8.35 (212)
Exhaust Outlet Type	JIS200A (approx 8")

### Engine Electrical System

Charging Alternator Volts dc	24
Charging Alternator Amps	30
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)	38567 (1093)
Combustion Airflow cfm(cmm)	2401 (68)
Heat Rejected to Ambient	
From Engine Btu/min(kW)	3374 (59)
From Alternator Btu/min(kW)	1706 (30)
Recommended Free Area Intake	
Louver Size ft <sup>2</sup> (m <sup>2</sup> )	82.0 (7.62)

### Engine Fuel System

Recommended Fuel	#2 Diesel
Fuel Line at Engine	
Supply Line Min ID in(mm)	0.75 (19)
Return Line Min ID in(mm)	0.75 (19)
Fuel Pump Type	Engine Driven
Fuel Pump Max Lift ft (m)	3 (1)
Max Flow to Pump gph(Lph)	63.4 (240.0)
Fuel Filter	
Secondary Filter	2µm
Secondary Water Separator	Not Included
Primary Filter	Optional
Primary Water Separator	Optional

### Fuel Consumption – Standby Rating

100% Load gph(Lph)	51.3 (194.2)
75% Load gph(Lph)	37.8 (143.1)
50% Load gph(Lph)	26.7 (101.1)
25% Load gph(Lph)	16.1 (60.9)

### Fuel Consumption – Prime Rating

100% Load gph(Lph)	46.6 (176.4)
75% Load gph(Lph)	34.4 (130.2)
50% Load gph(Lph)	24.3 (92.0)
25% Load gph(Lph)	14.7 (55.6)

### Engine Output Deratings - Standby

Rated Temp	40°C
Rated Altitude	1500 m
Max Altitude	5000 m
Temperature Derate	-5% / 10°C
Altitude Derate	-1% / 100 m

## 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	10%
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	HCI534E-311 - 2050
Drive Coupling	Flexible Disk	Alt @ 480V SkVA	HCI534F-311 - 2300
Unbalanced Load	20% of Standby Rating		

## Genset Controller Specifications

### Baldor IntelliGen NT Features

- Large back-lit graphical LCD Display  
64x128 pixel resolution
- 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
  - User Configurable Inputs and Outputs
  - Up to 500 Event Based History Records
  - Integrated PLC Programming Functions
  - Interface to Remote Display or  
Remote Annunciator
- Controller capable of Both Single or Multiple  
Gensets Operating in Standby or  
Parallel Modes



### 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

- ✓ Structural Steel Sub-Base
- ✓ Sub-Base Lifting Eyes
- ✓ Unit Mounted Radiator
- ✓ Engine Mounted Fan
- ✓ Fan Guard
- ✓ 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

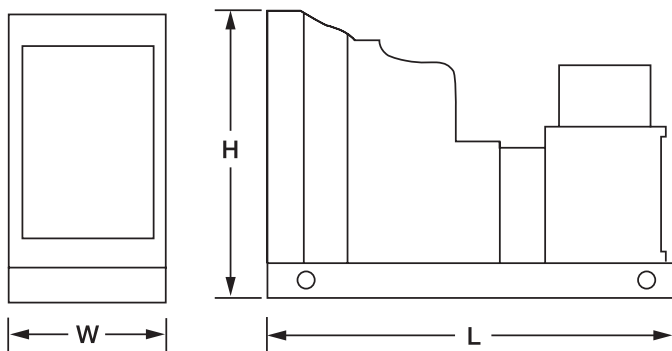
## Optional Agency Approvals

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

## Weight and Dimensions (Open Unit)

Weight – Wet lb(kg)	12300 (5579)
Overall Dimensions	Length x Width x Height
inches	149 x 70 x 85
mm	3785 x 1778 x 2159

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

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