

Ratings Range – 60 Hertz Operation

Standby: kW 665 - 800
kVA 831 - 1000

Prime: kW 640 - 720
kVA 875 - 900

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
IDLC800-2M	HCI634G-311	120/208	3	60	730/913	2536	700/875	2432
		127/220	3	60	775/969	2545	720/900	2365
		(1) 120/240	3	60	730/913	2198	700/875	2107
		139/240	3	60	800/1000	2408	720/900	2168
		220/380	3	60	665/831	1264	640/800	1217
		240/416	3	60	730/913	1268	700/875	1216
		254/440	3	60	775/969	1273	720/900	1182
		277/480	3	60	800/1000	1204	720/900	1084
	HCI634G-07	347/600	3	60	800/1000	963	720/900	867
	HCI634H-311	120/208	3	60	800/1000	2779	720/900	2501
		127/220	3	60	800/1000	2627	720/900	2365
		(1) 120/240	3	60	800/1000	2408	720/900	2168
		139/240	3	60	800/1000	2408	720/900	2168
		220/380	3	60	795/994	1512	720/900	1369
240/416		3	60	800/1000	1390	720/900	1251	
		254/440	3	60	800/1000	1314	720/900	1182
		277/480	3	60	800/1000	1204	720/900	1084

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 #	S12A2-Y2PTAW-2
Engine Type	4 Cycle, 12 Cylinder
Induction System	Turbocharged, Inter Cooler
Displacement, L (in ³)	33.9 (2071)
EPA Emissions Level	Tier 2
HP at Rated Speed BHP (kW _m)	1207 (900)
Rated RPM	1800
Bore and Stroke in(mm)	5.91 x 6.30 (150 x 160)
Compression Ratio	15.3:1
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)	26.4 (100.0)
Oil Pan w/Filter	31.7 (120.0)
Oil Filter Quantity	4
Oil Filter Type	Cartridge
Oil Cooler	Water Cooled
Recommended Oil	15W-40
Oil Press psi(kPa)	57 (393)

Engine Cooling System

Genset Max Ambient Temp °F(°C)	113 (45)
Engine Coolant Cap qt(L)	105.7 (100.0)
Engine + Radiator System Cap qt(L)	402.0 (380.4)
Water Pump Type	Centrifugal
Coolant Flow gpm (Lpm)	291 (1101.4)
Charge Cooler Flow gpm (Lpm)	124 (469.3)
Heat Rejected to Cooling Water @ Rated kW; Btu/min (kW)	20418 (358.9)
Heat Rejected to Charge Cooler @ Rated kW; Btu/min (kW)	16043 (282.0)
Heat Rejected to Ambient Air @ Rated kW; Btu/min (kW)	4375 (76.9)
Max Restriction of Cooling Air inH ₂ O(kPa)	0.5 (0.124)

Engine Exhaust System

Exhaust Manifold Type	Dry
Exhaust Flow @ Rated kW cfm(cmm)	8192 (232)
Exhaust Temp (dry manifold) °F(°C)	953 (497)
Max Back Pressure inH ₂ 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	25
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)	40042 (1134)
Combustion Airflow cfm(cmm)	3107 (88)
Heat Rejected to Ambient	
From Engine Btu/min(kW)	4375 (77)
From Alternator Btu/min(kW)	2275 (40)
Recommended Free Area Intake	
Louver Size ft ² (m ²)	87.0 (8.09)

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)	148 (560.2)
Fuel Filter	
Secondary Filter	2 µm
Secondary Water Separator	Not Included
Primary Filter	Optional
Primary Water Separator	Optional

Fuel Consumption – Standby Rating

100% Load gph(Lph)	65.2 (246.8)
75% Load gph(Lph)	46.8 (177.1)
50% Load gph(Lph)	32.2 (121.9)
25% Load gph(Lph)	19.3 (73.1)

Fuel Consumption – Prime Rating

100% Load gph(Lph)	59.3 (224.5)
75% Load gph(Lph)	42.6 (161.2)
50% Load gph(Lph)	29.3 (110.9)
25% Load gph(Lph)	17.6 (66.6)

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
Exciter Type	Brushless
Excitation System	PMG
Insulation	per NEMA MG1
Material	Class H
Standby Temp Rise	150°C
Prime Temp Rise	125°C
Lead Connection	12 Lead, Reconnectable
Stator Pitch	2/3
Amortisseur Winding	Full
Bearing	Single, Double Shielded
Drive Coupling	Flexible Disk
Unbalanced Load	20% of Standby Rating

Automatic Voltage Regulator	PMG	Std MX321
Voltage Regulation	PMG Regulator	No Load to Full Load +/- 0.5%
Load Acceptance		100% of Rating, One Step
Subtransient Reactance	480V, Per Unit	18%
TIF (1960 Weighting)		<50
Line Harmonics		5% Maximum
Motor Starting kVA	Alt @ 480V SkVA	30% Max Voltage Dip
	Alt @ 480V SkVA	HCI634G-311 - 2350
		HCI634H-311 - 2680

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

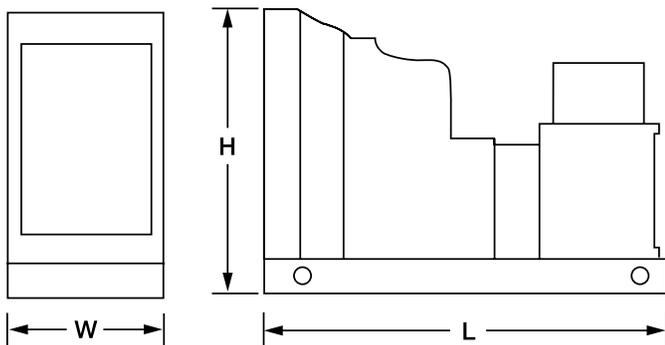
Optional Agency Approvals

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

Weight and Dimensions (Open Unit)

Weight – Wet lb(kg)	17410 (7897)
Overall Dimensions	Length x Width x Height
inches	168 x 82 x 93
mm	4267 x 2083 x 2362

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