BALDOR GENERATORS

IGLC155-2N

Gaseous Fuel

Ratings Range – 60 Hertz Operation

Liquid Propane:	kW	67 - 95
	kVA	67 - 119
Natural Gas:	kW	67 - 155
	kVA	67 - 194

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, 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 Power Features

- ✓ Heavy-duty industrial gaseous fuel 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 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-L / L-N	Phase	Hertz	150°C Rise Alternator Standby Rating – LP Fuel		150°C Rise Alternator Standby Rating – Natural Gas		125°C Rise Alternator Prime Rating – Natural Gas	
					kW / kVA	Amps	kW / kVA	Amps	kW / kVA	Amps
IGLC155-2N	UCI274C-311	208 / 120	3	60	92 / 115	320	93 / 116	323	90 / 113	313
		220 / 127	3	60	92 / 115	302	100 / 125	328	94 / 118	309
		240 / 120 (1)	3	60	92 / 115	277	93 / 116	280	90 / 113	271
		240 / 120 (1)	1	60	67 / 67	279	67 / 67	279	67 / 67	279
		240 / 139	3	60	93 / 116	280	106 / 133	319	100 / 125	301
		380 / 220	3	60	85 / 106	162	85 / 106	162	82 / 103	156
		416 / 240	3	60	92 / 115	160	93 / 116	162	90 / 113	156
		440 / 254	3	60	92 / 115	151	100 / 125	164	94 / 118	154
		480 / 277	3	60	93 / 116	140	106 / 133	160	100 / 125	151
	UCI274C-17	600 / 347	3	60	95 / 119	114	102 / 128	123	96 / 120	116
	UCI274E-06	240 / 120 (1)	1	60	94 / 94	392	132 / 132	550	115 / 115	479
	UCI274F-311	208 / 120	3	60	94 / 118	327	150 / 188	521	116 / 145	403
		220 / 127	3	60	95 / 119	312	155 / 194	509	116 / 145	381
		240 / 120 (1)	3	60	94 / 118	283	150 / 188	452	116 / 145	349
		240 / 120 (1)	1	60	95 / 95	396	108 / 108	450	108 / 108	450
		240 / 139	3	60	95 / 119	286	155 / 194	467	116 / 145	349
		380 / 220	3	60	93 / 116	177	137 / 171	260	115 / 144	219
		416 / 240	3	60	94 / 118	163	150 / 188	261	116 / 145	201
		440 / 254	3	60	95 / 119	156	155 / 194	255	116 / 145	190
		480 / 277	3	60	95 / 119	143	155 / 194	233	116 / 145	175
	UCI274F-17	600 / 347	3	60	95 / 119	114	155 / 194	187	116 / 145	140
	UCI274F-06	240 / 120 (1)	1	60	93 / 93	388	151 / 151	629	114 / 114	475

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.
Baldor reserves the right to implement specifications or design changes without notice.

Engine Application Data

Engine Specifications

Manufacturer	NG Engine
Engine Model #	D081TIC
Engine Type	4 Cycle, 6 Cylinder
Induction System	Turbocharged/ Charge Air Cooled
Displacement, L (in^3)	8.07 (493)
EPA Emissions Certification	40 CFR Part 60 & 1048
HP at Rated Speed BHP (kW_m) NG	237 (177)
HP at Rated Speed BHP (kW_m) Propane	159 (119)
Rated RPM	1800
Bore and Stroke in (mm)	4.37x5.47 (111x139)
Compression Ratio	10.5:1
Air Filter Type	Dry
Governor Type / Model	Electronic
Governor Manufacturer	EControls
Freq Reg NL to FL	Isochronous
Freq Reg Steady State	+/-0.5%

Engine Lubrication System

Oil Pan Capacity gal (L)	6.1 (23.0)
Oil Capacity w/Filter gal (L)	7.2 (29.2)
Oil Filter Quantity	1
Oil Filter Type	Cartridge
Oil Cooler	Water Cooled
Recommended Oil	15W-40 Low Ash
Oil Press psi (kPa)	43.5 (299)

Engine Cooling System

Genset Max Ambient Temp °F (°C)	122 (50)
Engine Coolant Cap qt (L)	20 (22.7)
Engine + Radiator System Cap qt (L)	88 (100.0)
Water Pump Type	Centrifugal
Coolant Flow gpm (Lpm)	63 (240)
Charge Air Cooler Flow cfm (cmm)	442 (12.5)
Heat Rejected to Charge Air Cooler @ Rated kW; Btu/min (kW)	760 (13.4)
Heat Rejected to Radiator @ Rated kW; Btu/min(kW)	9357 (164.5)
Max Restriction of Cooling Air in H_2O (kPa)	0.5 (0.124)

Engine Exhaust System

Exhaust Manifold Type	Wet
Exhaust Flow @ Rated kW cfm (cmm)	1129 (32.0)
Exhaust Temp (dry manifold) °F (°C)	1382 (750)
Min Back Pressure in H_2O (kPa)	0 (0)
Max Back Pressure in H_2O (kPa)	20.4 (5.1)
Exhaust Outlet Diameter in (mm)	3.5 (88.9)
Exhaust Outlet Type	Flange
Exhaust Catalyst	Included

Engine Electrical System

Charging Alternator Volts dc	24
Charging Alternator Amps	45
Grounding Polarity	Negative
Starter Motor Volts dc	24
Battery Recommendations	
Battery Volts dc	24
Min Cold Cranking Amps	900
Quantity Required	2

Ventilation Requirements

Cooling Airflow, scfm (cmm)	15100 (428)
Combustion Airflow, cfm (cmm)	317 (9.0)
Heat Rejected to Ambient	
From Engine, Btu/min (kW)	1308 (23)
From Alternator, Btu/min (kW)	620 (10.9)
Recommended Free Area Intake Louver Size, ft^2 (m^2)	31.0 (2.88)

Engine Fuel System

Recommended Fuel	
Natural Gas min HHV (Btu/ft^3)	1015
Propane Vapor min HHV (Btu/ft^3)	2650
Fuel Supply Pressure in-H_2O (kPa)	7-11 (1.7-2.7)
Fuel Line At Engine	
Supply Line, npt	2

Propane Fuel Consumption – Standby Rating

100% Load cfph (m^3ph)	517 (14.6)
75% Load cfph (m^3ph)	390 (11.0)
50% Load cfph (m^3ph)	283 (8.0)
25% Load cfph (m^3ph)	181 (5.1)

NG Fuel Consumption – Standby Rating

100% Load cfph (m^3ph)	1539 (43.6)
75% Load cfph (m^3ph)	1191 (33.7)
50% Load cfph (m^3ph)	845 (23.9)
25% Load cfph (m^3ph)	504 (14.3)

NG Fuel Consumption – Prime Rating

100% Load cfph (m^3ph)	1400 (39.7)
75% Load cfph (m^3ph)	1084 (30.7)
50% Load cfph (m^3ph)	769 (21.8)
25% Load cfph (m^3ph)	459 (13.0)

Engine Output Deratings - Standby

Rated Temp	77°F
Rated Altitude	325 ft
Max Altitude	10,000 ft
Temperature Derate	-1% / 8° F
Altitude Derate	-3% / 1000 ft

Alternator Specifications

Alternator Type	4-Pole, Rotating Field
Exciter Type	Brushless
Excitation System	
Shunt Connection	Standard
PMG	Optional
Insulation	per NEMA MG1
Material	Class H
Standby Temp Rise	150˚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		
Wound Field	SX460	
PMG	MX341, MX321	
Voltage Regulation	No Load to Full Load	
Std Regulator	+/- 1.5%	
PMG Regulator	+/- 1%, +/- 0.5%	
Load Acceptance	100% of Rating, One Step	
Subtransient Reactance		
480V, Per Unit	13%, 12%	
TIF (1960 Weighting)	<50	
Line Harmonics	5% Maximum	
Motor Starting kVA	30% Max Voltage Dip	
Alt @ 480V SkVA	UCI274C-311	340 kVA
Alt @ 480V SkVA	UCI274F-311	520 kVA

Genset Controller Specifications

Baldor InteliLite 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
- Over Speed Protection
- Battery Voltage Over / Under 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

Additional Standard Genset Features

- ✓ Formed Steel Sub-Base
- ✓ Integral Vibration Isolation
- ✓ Sub-Base Lifting Eyes
- ✓ Unit Mounted Radiator
- ✓ Engine Mounted Fan
- ✓ Radiator Fan Guard
- ✓ Battery Charging Alternator
- ✓ Battery Rack and Cables
- ✓ Unit Mounted Control Panel
- ✓ Spin-On Oil Filter
- ✓ Enamel Finish
- ✓ One Set - Operation / Maintenance Manual
- ✓ Factory Tested Prior to Shipment
- ✓ Limited Warranty

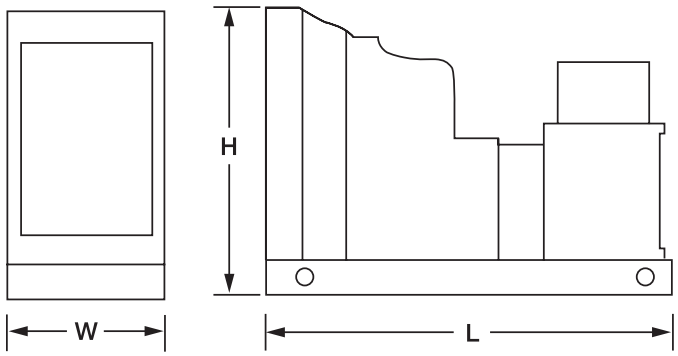
Optional Agency Approvals

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

Weight and Dimensions (Open Unit)

Weight – Wet lb (kg)	4345 (1971)
Overall Dimensions	Length x Width x Height
inches	118 x 48 x 66
mm	2997 x 1219 x 1676

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
- ❒ Hospital Grade 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

- ❒ Fuel Strainer
- ❒ Dual Fuel Automatic Changeover

Vibration Isolators

- ❒ Elastomer Isolator
- ❒ Standard Spring
- ❒ Seismic Spring

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