

Standby or Prime Power Features

- Heavy-duty industrial diesel engine
- Brushless synchronous alternators: four-pole construction, dynamically balanced
- Full featured microprocessor based controller: fully programmable for maximum flexibility
- Prototype tested and production tested
- Gen-set accepts rated load in one step
- UL2200 available – consult factory
- Optional weather-proof and sound attenuated enclosures available
- Full range of accessories and options available
- Heavy-duty construction for use in prime or standby application
- Manufactured in an ISO-9001 certified facility
- Backed by a world wide network of parts and service center

Gen Set Ratings

| Baldor Genset Model | kW Rating Standby | kW Rating Prime | Voltage Hi-Wye | Voltage Low-Wye | Voltage Delta | Number of Leads | Phase | Hz | Power Factor |
|---------------------|-------------------|-----------------|----------------|-----------------|---------------|-----------------|-------|----|--------------|
| IDLC100-JD2A | 100 | 90 | 480/277 | 240/139 | N/A | 12 | 3 | 60 | 0.8 |
| IDLC100-JD2A | 100 | 90 | 440/254 | 220/127 | N/A | 12 | 3 | 60 | 0.8 |
| IDLC100-JD2B | 100 | 90 | 416/240 | 208/120 | 240/120 | 12 | 3 | 60 | 0.8 |
| IDLC100-JD2B | 100 | 90 | 380/220 | N/A | N/A | 12 | 3 | 60 | 0.8 |
| IDLC100-JD2D | 100 | 90 | N/A | N/A | 240/120 | 4 | 1 | 60 | 1.0 |
| IDLC100-JD2H | 100 | 90 | 600/347 | N/A | N/A | 12 | 3 | 60 | 0.8 |
| IDLC100-JD2XB/A | 90 | 80 | 380/220 | N/A | N/A | 12 | 3 | 50 | 0.8 |

NOTES: For ratings and voltages not listed above refer to the Gen-Set Selector or consult factory
 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
 Base Load (Continuous) ratings are continuous per DIN 6271, BS5514 and ISO-8528 with no sustained overload capacity
 Consult factory for Base Load ratings
 Altitude derate is 4% for each 1000 feet over 5000
 Temperature derate is 1% for 10°F over 100°F ambient

Controls Digital Control Module

MEC2 Features

- Large Backlit LCD with alpha-numeric readout
- Microprocessor Based Design
- 16 programmable alarms/shutdowns set points
- 4 programmable inputs
- Alarm horn
- Not in Automatic Alarm
- Digital Three Phase Voltage and Current Monitoring
- Password Protected Front Panel Programming
- 4 Programmable Outputs
- Local Emergency Stop Switch
- Optional NFPA110 Level I

Engine Protections

- Digital Oil Pressure Gauge
- Digital Water Temperature Gauge
- Digital Battery Voltmeter
- Overspeed Shutdown
- Emergency Stop Shutdown
- Loss of Speed Signal
- Overcrank Shutdown

Designed To Meet/Exceed the Standards Below:

- UL 508
- UL 2200
- NFPA 70
- NFPA 110

Engine Technical Data

| | |
|--|-------------------------------------|
| Manufacturer | John Deere |
| Engine Model | PE6068TF150 |
| Engine Type | 4 cycle, 6 cylinders |
| Engine Horsepower | 165 |
| Aspiration | Turbocharged |
| Configuration | In-line |
| Displacement - cu. in. (liters) | 414 (6.8) |
| Bore and Stroke - in. (mm) | 4.19 x 5 (106 x 127) |
| Compression Ratio | 17.0:1 |
| Air Filter Type | Dry |
| Governor Type | Mechanical |
| Governor Model | Stanadyne |
| Injection Pump Type/Model | Direct Injection |
| Frequency Regulation, steady state | +/-0.5% |
| Frequency Regulation, no load to full load | 4% Droop (Opt. Electronic Governor) |
| Battery Voltage | 12 VDC |
| Water Pump Type | Centrifugal |
| Coolant Cap. - radiator cooled - gals - liters | 4.9 5.9 |
| Coolant Capacity - engine only - gals - liters | 3.0 11.4 |
| Oil Pan Capacity - gals - liters | 4.3 16.1 |
| Rec'd Oil Type - SF/CC/CD-10°F to 90°F | 10W-40 |

| Engine Operational Values | English 50 Hz | Metric 50 Hz | English 60 Hz | Metric 60 Hz |
|---|------------------|-----------------|------------------|-----------------|
| Maximum ambient temperature - F° - C° | 104/122 | 40/50 | 104/122 | 40/50 |
| Heat rejected to coolant - Btu/min - kWm | 3070 | 54 | 3525 | 62 |
| Max. power at rated rpm - BHP - kWm | 126 | 94.00 | 165 | 123.09 |
| Coolant flow - gpm - l/s at 1 PSI | 32 | 2 | 38 | 2.9 |
| Exhaust temperature - F° - C° | 1018 | 548 | 1011 | 544 |
| Exhaust flow - cfm - l/s | 625 | 295 | 787 | 371 |
| Normal oil press. (low/high) - PSI - kPa | 15/50 | 105/345 | 15/50 | 105/345 |
| Max fuel flow to injection pump - gph - kg/hr | 29 | 93 | 30 | 96 |

Gen Set Technical Data

Alternator Technical Data

| | | | |
|---------------------|-------------------------|----------------------------|--------------------------|
| Generator Frame | 27 | Voltage Regulation NL - FL | +/- 1.5% |
| Exciter | Brushless | Underspeed Protection | Standard |
| Cooling Fan | Cast alloy aluminum | Overexcitation Protection | Optional |
| Bearing | Single, double shielded | Overvoltage Protection | Optional |
| Connection Type | Reconnectable | Loss of Sensing Protection | Standard |
| Insulation Type | Class H | Overspeed | 2250 RPM |
| Windings | 100% copper | Standards | NEMA, IEC, IEEE, CSA, BS |
| Pitch | 2/3 | Phase Sequence | A(U), B(V), C(W) |
| Amortisseur Winding | Full | TIF (1960 Weightings) | <50 |
| Voltage Regulator | SX460 | Excitation System | PMG - optional |

Alternator Performance Data

| | Model IDLC100-JD2A | Model IDLC100-JD2B | Model IDLC100-JD2D | Model IDLC100-JD2H |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Temperature rise by resistance - °C (Stand-By) | 150/40 | 150/40 | 150/40 | 150/40 |
| Generator model number | UCI274C | UCI274D | UCI274C | UCI274C |
| Generator kW at 125/105/80°C over 40°C ambient (480 Volt , 60Hz) | 100/90/78 | 117/105/88 | 100/90/78 | 100/90/78 |
| SKVA output with 30% voltage dip max. 100% recovery at 60 Hz | 345 | 420 | 345 | 345 |
| Maximum skva at 90% sustained voltage dip | Consult Baldor | Consult Baldor | Consult Baldor | Consult Baldor |
| Subtransient reactance at voltage listed | 13.00% | 13.00% | 13.00% | 13.00% |
| Line - line harmonic maximum total | 5.00% | 5.00% | 5.00% | 5.00% |

• Consult factory for oversized alternator adders.

Installation/Application Data

| | English 50 Hz | Metric 50 Hz | English 60 Hz | Metric 60 Hz |
|---|------------------|-----------------|--|-----------------|
| Ventilation requirements | | | | |
| a. Cooling airflow required - cfm - l/s (unit mounted radiator) | 4983 | 2351 | 4983 | 2351 |
| b. Combustion air required - cfm - l/s | 210 | 99 | 270 | 127 |
| Total ventilation requirements - cfm - l/s (a. + b.) | 5193 | 2450 | 5253 | 2478 |
| Maximum cooling air restriction - in.H ₂ O - in.hg | 1.5 | 0.037 | 0.5 | 0.037 |
| Recommended "free area" intake louver size ft ² - m ² | 6.3 | 0.585 | 6.3 | 0.585 |
| a. Heat rejected to ambient, engine - Btu/min - kWm | 920 | 16 | 1025 | 18 |
| b. Heat rejected to ambient, generator - Btu/min - kWm | 242 | 4.25 | 285 | 5 |
| Total heat rejection to ambient - Btu/min (a. + b.) | 1162 | 20 | 1310 | 23 |
| Exhaust system requirements | | | | |
| Exhaust gas flow - cfm - l/s | 625 | 295 | 787 | 371 |
| Exhaust temperature (dry manifold) - °F - °C | 1018 | 548 | 1011 | 544 |
| Maximum back pressure - in.hg - kPa (inclusive of silencer) | 3 | 41 | 3 | 41 |
| Exhaust outlet size - in. - mm | 4 | 101.6 | 4 | 101.6 |
| Emissions - NO _x - g/BHP-hr - g/kW-hr | Not Regulated | | Meets EPA Tier One/CARB Consult factory for actual values | |
| Emissions - HC - g/BHP-hr - g/kW-hr | | | | |
| Emissions - CO - g/BHP-hr - g/kW-hr | | | | |
| Emissions - Particulates - PM - g/BHP-hr - g/kW-hr | | | | |
| Fuel system requirements | | | | |
| Fuel consumption - 1/4 load - gph - Lph | 2.0 | 7.6 | 2.4 | 9.1 |
| Fuel consumption - 1/2 load - gph - Lph | 3.0 | 11.4 | 4.2 | 16.0 |
| Fuel consumption - 3/4 load - gph - Lph | 4.7 | 17.8 | 6.3 | 23.8 |
| Fuel consumption - full load - gph - Lph | 6.2 | 23.5 | 8.2 | 30.9 |
| Heat Exchanger Cooling system requirements | | | | |
| Minimum raw water (city water) flow - gpm - lps | Consult Baldor | Consult Baldor | Consult Baldor | Consult Baldor |
| Maximum supply water temperature - °F - °C | 80°F | 12.44°C | 80°F | 12.44°C |
| Remote Cooling system requirements | | | | |
| Maximum coolant static head - ft. - m | 46 | 14 | 46 | 14 |
| Ventilation required (based on 25°F temp rise) - cfm - lps | 2582 | 44 | 2911 | 51 |

Accessories and Options

Control Panel

- Louver Relay – 10 Amp
- Run Relay – 10 Amp
- Dry Contacts For Alarms
- Remote E-Stop
- Control Panel Heater
- Tachometer
- Remote Annunciator
- Remote Communication
- Panel Lights W/Switch
- Generator Voltage Adjust
- Modem For Remote Communication

Engine Exhaust System

- Industrial Silencer
- Residential Silencer
- Critical Silencer
- Exhaust Flex
- Exhaust Extension
- Rain Cap
- _____

Generator Accessories

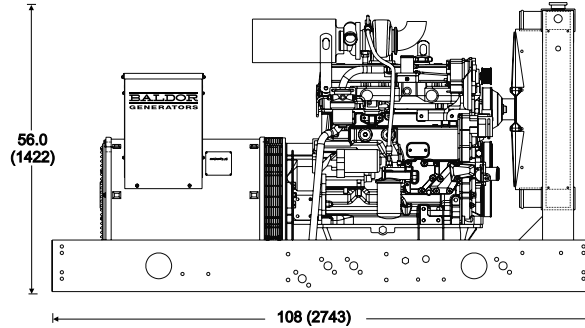
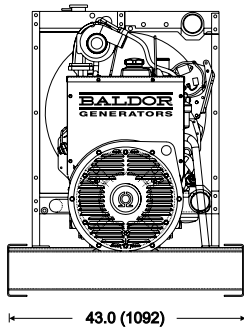
- Main Line Circuit Breaker
- Exciter Field Circuit Breaker
- Ground Fault Module W/Breaker Shunt Trip
- Ground Fault Module W/O Breaker Shunt Trip
- Reconnectable Link Bars
- Drip Cover IP22
- Manual Voltage Control
- Space Heater
- RTD's Stator Windings
- RTD's Bearing (Rear)
- PMG
- MVC300 Manual Voltage Control

Engine Electrical System

- Batteries
- Battery Rack
- Battery Cables
- Battery Charger - Automatic
- Battery Charger - Trickle
- _____

Engine Fuel System

- Weather Proof Enclosure
- Sound Attenuated Enclosure
- Trailer Mounted
- Vibration Isolators
- Coolant Heater
- Bypass Oil Filter
- Export Crating
- _____
- _____
- _____
- _____
- _____



Dimensions – in (mm)

Weight – lbs. (Kg)
2045 (928)

Cubes (Approximate)
80.9 ft

*Open unit configuration,
accessories not included

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