

DIESEL GENERATOR SET

RATINGS (60Hz – 1800rpm @ 0.8p.f)

Model	ESP		DCR		DCP	
	kVA	kWe	kVA	kWe	kVA	kWe
IRPG 3000 D	3750	3000	3750	3000	3250	2640

PRODUCT STANDARD FEATURES

General features

- Complies with U.S. EPA Stationary Emergency Use Only (Tier 2) emission standards
- Tier IV emission standards can be met with exhaust treatment available in containerized package
- Accepts 100% block load in one step
- UL listed(UL2200).
- Meets NFPA 110 10 start time requirement
- Conforms to ISO 8528G3 load acceptance

Baudouin Engine

- EPA Tier2 Certified for Stationary Emergency Use Only
- Optimized components design provides enhanced reliability and durability
- Platform standardization and modular design reduce total cost of ownership
- Baudouin ECU provides the capability for function expansion

Cooling System

- Skidmounted 50° C (122° F) radiator as standard option
- Enhanced cooling efficiency with hightemperature/low-temperature(HT/LT) system

Air Intake and Exhaust System

- Multiple singlestage turbochargers deliver optimal response
- Silencer available as an option

Emission EPA Tier II Compliant

Tier IV available with containerized package

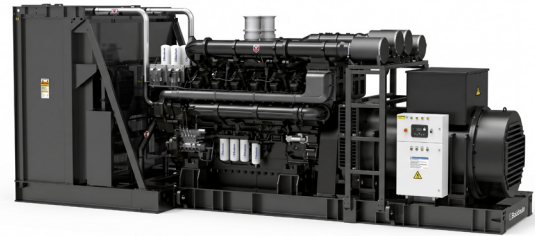


Image shown may not reflect actual configuration

Electrical System

- Standard starting system comes with 24 Vdc electric starter motors and 1 x battery charging alternator
- Redundant dual starting system available as an option

Alternator

- High Efficiency Brushless, 4 Pole, IP23 dripproof revolving field
- Design built with Class H insulation
- Low reactance with 2/3 pitch windings on the stator
- Directcoupled by highelasticated coupling
- Sustained overcurrent >300% in 10 sec
- Direct drive centrifugal blower fan cooling
- Excitation by PMG

Generator Set Controller

- Deep sea brand controller: DSE7420
- (DSE7320/DSE8610/DSE8620 are Optional.)
- Display status message provide protection auto shutdown at fault detection

Warranty

- 4 years/1000hour warranty for standby rating.
- Extended service protection is available to provide extended coverage options.

- All ratings are based on operating conditions under ISO 85281, ISO 3046, DIN6271. Performance tolerance of $\pm 5\%$.
- Test conditions: 100 kPa, 25°C air inlet temperature, relative humidity of 30%, with fuel density 0.84 kg/L. Derating may be required for conditions outside these; please contact the factory for details.

GENERATOR SET SPECIFICATIONS		
Model		IRPG 3000 D
Governor and regulation class		In accordance with ISO 85285 Class G3 performance
Phase number and connection		3 phase, 4 wires, Ytype
Cooling method		Closed looped watercooled
Starting method		DC 24V Electric starter
Steadystate voltage deviation		$\leq \pm 1\%$
Steadystate frequency band		$\leq 0.5\%$
Coolant capacity of engine and radiator	L(gal.)	860.5(227.3)
Oil capacity low/high	L(gal.)	405/500(107/132)
ENGINE SPECIFICATIONS		
Brand		Baudouin
Model		16M55G8D2/6
Gross Power	kWm (bhp)	ESP3350 (4492)
		DCP2930(3929)
Brake Mean Effective Pressure@ESP	kPa (psi)	2552 (370)
Cylinder / Type / Aspiration		16 / Vee Type / Turbocharged and Aftercooled
Bore x Stroke	mm (in.)	180 x 215 (7x8.5)
Displacement	L (in ³)	87.5 (5337.5)
Compression ratio		16.5:1
Max. exhaust back pressure	mBar(psi)	150(2.18)
Fuel supply flow (Rated flow of fuel pump)	L/h(gal./h)	3400(898)
Airflow Required for radiator*	m ³ /min(CFM)	2596.2(91684)
Airflow Required for engine air intake@ ESP	m ³ /min(CFM)	249.7(8818)
Radiated Heat to Ambient@ ESP	kJ/s(Btu/s)	331(313.7)
* See radiator data sheet for detailed specification		
FUEL CONSUMPTION		
100% ESP	L/h(gal./h)	836.9(221)
75% ESP	L/h(gal./h)	645.8(170.6)
50% ESP	L/h(gal./h)	454.6(120)
25% ESP	L/h(gal./h)	263.5(69.6)
ALTERNATOR SPECIFICATIONS		
Coupling / No. of Bearing		Coupling / Double
Winding Pitch		2/3
Type of Excitation		PMG
Cooling type		Air
Voltage regulation method		AVR
Winding temperature sensor		PT100
Bearing temperature sensor		PT100

Options

- ☐ Silencer
- ☐ Rubber isolator
- ☐ without Radiator

Rating definitions

Emergency standby power (ESP):

ESP is the maximum power available for a varying load for the duration of a main power network failure. The average load factor over 24 hours of operation should not exceed 70% of the engine's ESP power rating.

Typical operational hours of the engine are 200 hours per year, with maximum usage of 500 hours per year. No overload capability is allowed. The engine is not to be used for sustained utility paralleling applications.

Data Center rate (DCR):

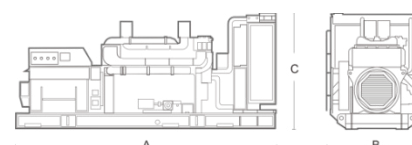
DCR is the maximum power that genset is capable of delivering while supplying a variable load. Average power output is 85% of the rated power, no over load.

Typical peak demand up to 100% of rated kWe for up to 5% of the operating time. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year. DCR rated generators for UPTIME INSTITUTE TIER III & TIER IV Data Center shall be evaluated by a sitespecific survey.

Data Center power (DCP):

DCP is the maximum power that genset is capable of delivering while supplying a variable or continuous load and during unlimited run hours.

An overload capability of 10% is available for 1 hour within every 12hour period.



Open Generator Set

This outline drawing is to provide representative configuration details for Model series only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Dimension and Weight

Model	Voltage	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Dry wt. Kg (lb)
IRPG 3000 D	480V	8283 (326.1)	3234 (127.3)	3456 (136.1)	32055 (70522)

Note: Sizes and weights represent a set with standard features. See the outline drawings for the detailed configurations of sizes and weights. features. See the outline drawings for the detailed configurations of sizes and weights

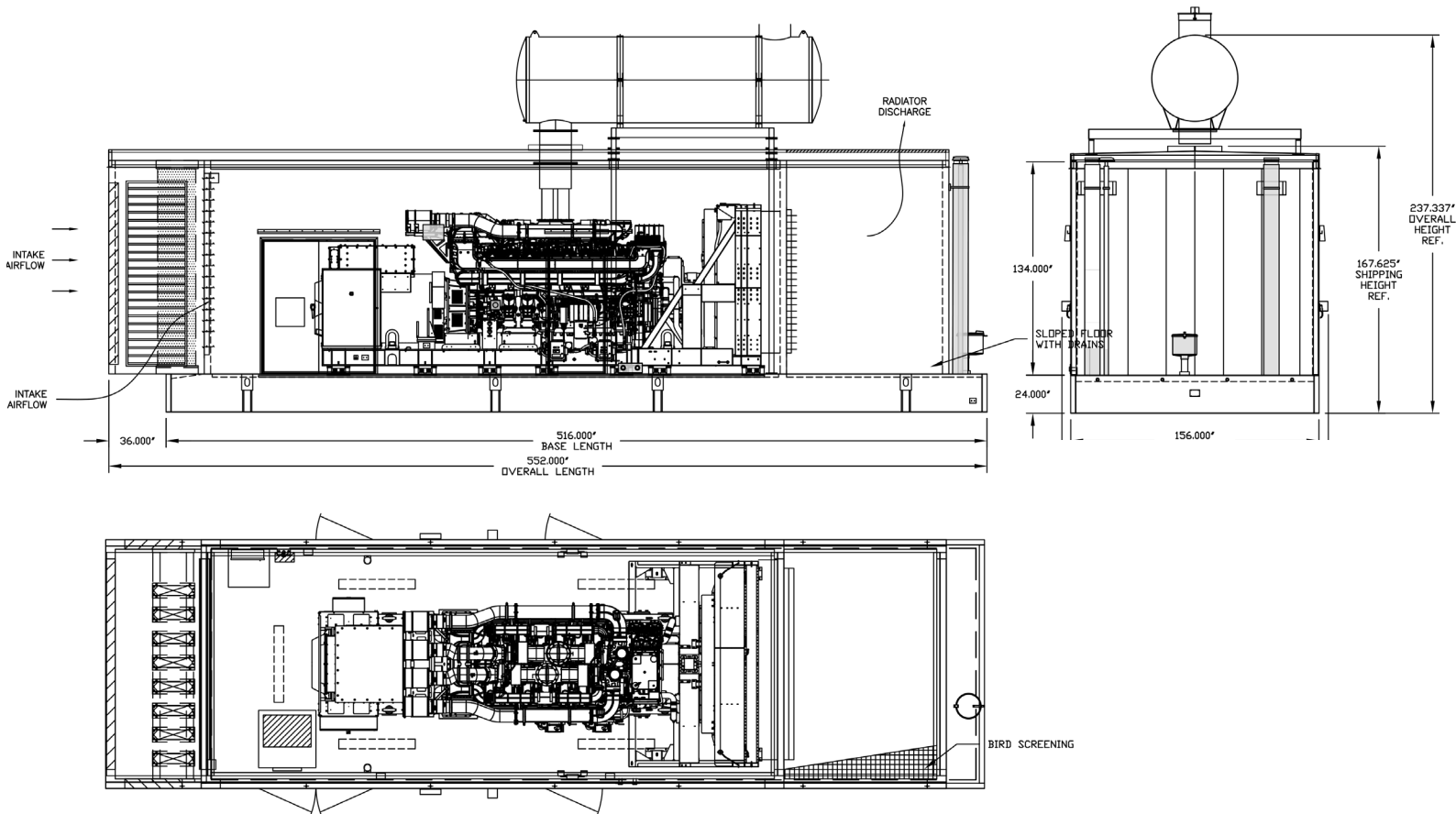
Codes and standards

ISO 9001	This generator set is designed and manufactured in facilities certified to ISO 9001.	ISO 8528	This generator set has been designed to comply with ISO 8528 regulation.
UL 2200	This generator set is designed and manufactured to comply with UL certification.	NFPA 110	The generator set can comply to a single step in accordance with NFPA 110

The generator set is designed and manufactured in facilities certified to standards ISO9001:2015 and ISO14001:2015. The generator set is prototype-tested, factory-built and production tested and is in compliance with the relevant standards:

- ISO 8528-13, ISO 3046, DIN627
- UL 2200

Note: Certifications may not be available in all model configurations.



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For more than a century and a half, Ingersoll Rand has delivered engineering innovation for environments where downtime is not an option.

Our global manufacturing footprint and expansive worldwide service network provide the scale, speed, and resilience demanded by today's data center and IT infrastructure leaders.

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supporting complex engineered systems



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to meet aggressive project timelines



24/7 Global Support
with emergency response readiness



Proven expertise
across mission critical infrastructure

Extensive North American service footprint

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