AGi24P-1-240-HD-E

STANDBY POWER RATING 24 KW, 24 KVA, 60 HZ.

PRIME POWER RATING

20 KW, 20 KVA, 60 HZ.







GENERAL SPECIFICATIONS

General Specifications	
Model	AGi24P-1-240-HD
Туре	Diesel Standby Generator
Power Rating	24,000 Watt (Standby) 20,000 Watt (Prime)
Standby Power Output	120 Volt @ 200 Amp 240 Volt @ 100 Amp
Outputs	120 Volt 15 Amp Duplex 5-15R 120 / 240 Volt 30 Amp Twist Lock L14-30 Main load terminal connections
Alternator	Brushless with Automatic Voltage Regulator
Engine	Perkins 404D-22TG 4 Cylinder 2.2 Litres
Housing	Sound Attenuated, Weather Resistant
Instrumentation	Illuminated Auto-Start Controller DynaGen TG350
Generator Dimensions	59" x 33" x 46"
Generator Weight	1350 lbs
Sound Level	< 68 dB @ 23 feet
Maintenance Intervals	Oil Changes - 500 Hours
Approvals	CSA / EPA



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STANDARD FEATURES

GENERAL

- Small Compact Design
- Powered by Perkins clean diesel engine
- Complete generator Instrumentation and control via an advanced generator controller
- Can be used full or part-time
- Weather resistant design
- Available in different sizes and output configurations
- Compatible with all two-wire start systems
- Available in single or three phase power options

ENGINE

- Exhaust Silencer
- Oil Pressure Switch
- Coolant Temperature Switch
- Coolant Temperature Sensor
- Coolant Level Sensor
- EZ-Oil Drain Valve with Oil Drain Extension
- Primary Fuel Filter

COOLING SYSTEM

- Factory-Installed Radiator
- Uses ethylene glycol antifreeze
- Optional 120 VAC Engine Block Coolant Heater

ENGINE ELECTRICAL SYSTEM

- Starter Battery
- Battery charging alternator
- Battery cables
- Battery Tray
- Solenoid activated starter motor

ALTERNATOR SYSTEM

- UL / CSA Approved
- Brushless Excitation
- Sealed Bearings
- Class H insulation
- Voltage Regulator
- Main Circuit Breaker

GENERATOR CONSTRUCTION

- All stainless steel fasteners
- Steel frame and canopy enclosure with powder coated finish
- Genset mounted on vibration isolators

ENCLOSURE

- Galvannealed Steel Enclosure
- Powder Coat Finish
- Stainless steel fasteners
- High performance sound-absorbing material
- Lockable door handles
- Weather stripping around doors
- Weather resistant construction
- Stamped air-intake louvers or vents

FUEL TANK

• Optional 100 and 200 gallon tanks available



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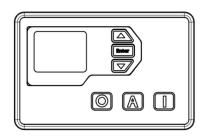
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CONTROL SYSTEM

FEATURES



- Clear generator instrumentation, protection and control
- Easy to use in manual or automatic modes
- Designed for harsh conditions with extreme shock and vibration
- 150 Event Log
- Programmable Exerciser
- Maintenance Counter
- Passcode Protected
- Automatic shutdowns and warnings
- Pre-heat and post-heat timers
- Fuel Level
- Oil Pressure
- Engine Temperature
- Frequency

- Engine Speed | RPM
- Fuel Level
- Voltage
- Current (optional)
- Load Balance
- Programmable setpoint warnings, alarms levels and sensor trim feature
- Programmable low battery auto start / exercise
- 2-Wire start compatible
- Computer programmable via USB Port Year Manufacturer Warranty
- TG410 Model Includes CANBUS J1939 and MODBUS data

ALARMS

- 150 Event Log
- Alarms and Warning Logging
- Programmable Low Pressure Shutdown
- Programmable Coolant Temperature Shutdown
- Coolant Level
- Engine Speed
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms and warnings spelled out (no codes)

CONTROLLER SPECIFICATIONS	
Model	DynaGen TG350 - Standard (TG410 Optional)
Operating Voltage	5.5 to 38 Volts DC Cranking dropouts to 0 VDC for 50 mS Also meets SAEJ113-11
Standby current draw	50 ma
Protection	Reverse battery and overload protected
Operating Temperature	-40c - 70c (-40 - +150 F)
Vibration and Shock	SAEJ1455
Electromagnetic Compatibility	Meets or exceeds MIL-STD-461E Conducted Emissions
Configurable Switched Inputs	5
Configurable Switched Outputs	4
Warranty	5 Years



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GENERATOR OPTIONS

ENGINE OPTIONS

- Battery Charger 1 Amp
- Battery Charger 4 Amp
- Block Heater 400 Watt
- HOTstart Circulation Pump 1000 Watt
- Battery Warmer
- Spare Filters
- Ambient Air Heater | Anti-Condensation Heater

CIRCUIT BREAKER OPTIONS

- Shunt Trip
- Auxiliary Contact

GENERATOR SET

- Remote monitoring and control (cellular based)
- Load Center
- Coolant heater ball valves
- Fluid containment pans

ENCLOSURE OPTIONS

- Ambient air heater
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit

CONTROL SYSTEM

- E-Stop | Red Mushroom-Type
- Cellular remote monitoring and control
- Modbus Terminal Block
- Canbus Terminal Block
- Alarm Signal Block
- Engine Run Signal Block
- ATS Signal Block
- Battery Disconnect Switch
- Ambient air heater
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit



24,000 Watt Diesel Generator AGI24P-1-240-HD-E



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ENGINE SPECIFICATIONS

ENGINE SPECIFICATIONS	Deutine
Make	Perkins
Model	404D-22TG
Number of cylinders	4
Cycle	Four stroke
Induction system	Turbo Charged
Compression Ratio	23,3:1
Bore	84 mm
Stroke	100 mm
Cubic capacity	2.216 litres
Coolant Capacity	9.3 litres (2.4 US gallons)
Oil Capacity	10.6 litres (2.8 US gallons)
Direction of rotation	Anti Clockwise when viewed from flywheel
Firing order	1,3,4,2
Estimated total weight of Electropak (dry)	242 kg 533 lb
Maintenance	Oil Changes 500 Hours
Starter	12 Volts
Battery Alternator	65 Amp
Battery Size	Group 65 850 CCA
Flywheel	J620 SAE 4
Bell Housing	J620 SAE 7.5
Dimensions LxWxH	

ENGINE PERFORMANCE	Note: All data based on operation to ISO 3046-1:2002 standard reference conditions
Speed variation at constant load	± 0,5%
Test conditions - air temperature	25 °C
Test conditions - barometric pressure	100 kPa
Relative humidity	31.5%
Air inlet restriction at maximum power (nominal)	3 kPa
Exhaust back pressure at maximum power (nominal)	10.2 kPa
Fuel temperature (inlet pump)	40 °C
Sound Level Average sound pressure level for bare engine - WITHOUT inlet and exhaust or canopy enclosure at 1 metre	79 dB(A)
All ratings certified to within	± 5%





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If the engine is to operate in ambient conditions other than those of the test conditions, suitable adjustments must be made for these changes. For full details, contact Perkins Technical Service Department. Emissions Statement: Certified against the requirements of EU2007 (EU97/68/EC Stage II) and EPA Interim Tier 4 (EPA 40 CFR Part 1039 Interim Tier 4) legislation for nonroad mobile machinery, powered by constant speed engines

FUEL CONSUMPTION RATES

Standby Power	9.3 L / Hour 2.46 Gallons / Hour
Prime Power	8.3 L / Hour 2.19 Gallons / Hour
75% Prime Power	6.2 L / Hour 1.64 Gallons / Hour
50% Prime Power	4.3 L / Hour 1.14 Gallons / Hour

Prime power rating is the maximum power accessible at the variable load for an unlimited number of hours per year in a variable load setting **Standby Power** rating is the maximum power available. No overload is permitted. Average variable load factor is 70% **Continuous Power** is the non-varying load for an unlimited number of hours.

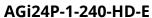
DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability. **Prime** - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours.

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^{*}All ratings and specifications are subject to change.





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PRIME POWER RATING 20 KW, 20 KVA, 60 HZ.

ALTERNATOR SPECIFICATIONS

Model	SM180E	
Туре	Brushless	
Prime Power	27.5 kW	
Standby Power	30.0 kW	
Efficiency	87.4%	
Approvals	I EC60034,NEMA MG1-32,IS08528,CSA C22.2-100, VDE 0530, GB755	
Insulation	Class H	
Voltage Regulation AVR Model VR301	± 0.5%	
THD	No load<1.5%	
Altitude	<=1000m	
Winding Pitch	2/3	
Protection	IP23	
Weight	159 kG 350.5 lb	
4 Pole Alternator	Brushless with AVR	
Voltage Regulation	±0.5%	
Rated Output	120 / 240 Volt Single Phase 30 kW	
Insulation	Class H	
Warranty	5 Years	
Ratings based on 60Hz / 1800RPM / 40 ℃ / PF 0.8		

