

Key Generator Components

2 Engine

- Perkins Tier 3 Engine
- Equivalent to engine utilized by competitor
- Fully supported maintenance of engine, parts and associated generator components by Perkins national dealer network
- Perkins University trains all dealers specific to MEG generator
- Preventative maintenance program available
- Optional engine configurations for propane and natural gas available

4 Enclosure

- Significant dBA improvement – up to 7 dBA when compared with competitor
- Max operating ambient temperature = 137°F (competitor tests out at 104°F)
- New baffle design exceeds manufacturer specifications and is approved for warranty continuation by Perkins
- Patent pending
- Powder coating is rated for 600 hours of salt spray

5 Controller

- Utilizing Basler DGC-2020
- Compares directly with and is equivalent in all respects to competitor controller

6 Alternator

- Utilizing nationally recognized Stamford alternator
- Compares directly with and is equivalent in all respects to competitor alternator

Fuel Tank

- UL certified (UL 142)
- Double walled construction
- 48 hour run time capacity as standard

6 Warranty

- Generator and components provide a standard factory warranty of one year, along with on-going dealer support.

6 Service

- Visit http://www.cat.com/en_US/support/dealer-locator.html or <http://distributorlocator.perkins.com/> to find a local service center.

Engine

Competitor		Perkins® Perkins 1104D
General		
EPA Compliance	Stationary Emergency	Stationary Emergency
Cylinders	4	4
Type	Diesel	Diesel
Displacement	4.5L	4.41L
Bore	105mm	105mm
Stroke	132mm	127mm
Compression Ratio	17.5:1	18.2:1
Intake Air Method	Turbocharged	Turbocharged
Cylinder Head Type	2 valve	2 valve
Piston Type	Aluminum	Aluminum
Crankshaft Type	Forged Steel	Forged Steel
Engine Block Type	Cast Iron/Wet Sleeve	Cast Iron/Wet Sleeve
Engine Governing		
Governor	Electronic Isochronus	Mechanical
Frequency Regulation	0.25%	3%
Lubrication System		
Oil Pump Type	Gear	Gear
Oil Filter Type	Full Flow	Full Flow
Crankcase Capacity	13.6L	14.7L
Cooling System		
Cooling System Type	Closed	Closed
Water Pump	Belt Driven Centrifugal	Belt Driven Centrifugal
Fan Type	Pusher	Pusher
Fan Speed	2538	1963
Fan Diameter	26 in.	23 in.
Coolant Heater Wattage	1500	N/A
Coolant Heater Standard Voltage	120V AC	N/A
Fuel System		
Fuel Type	ULSD	LSD
Fuel Specifications	5 microns	5 microns
Fuel Injection Pump Make	Stanadyne	Stanadyne
Fuel Pump Type	Engine Driven Gear	Engine Driven Gear
Injector Type	Mechanical	Mechanical
Fuel Supply Line	1/4" NPT	5/16"
Fuel Return Line	1/4" NPT	1/4"
Fuel Pump Lift	36 in.	36 in.
Total Fuel Flow	13.6 gph	11.1 gph

Engine (Continued)

	Competitor	Perkins® Perkins 1104D
Fuel Consumption (gph)		
STBY 25%	1.15	1.37
STBY 50%	2.25	2.21
STBY 75%	3.21	3.25
STBY 100%	4.15	4.13
Prime 25%	1.06	1.27
Prime 50%	2.07	2.11
Prime 75%	2.95	2.99
Prime 100%	3.83	3.82
Electrical System		
System Voltage	12V DC	12V DC
Battery Charging Alternator	Std	Std
Battery Size (at OC)	925CCA	640CCA
Battery Voltage	(1) 12V DC	(1) 12V DC
Ground Polarity	Negative	Negative
Engine		
Rated Engine Speed	1800	1800
STBY HP	80	85
Prime HP	72	76
Piston Speed	1559 ft/min	1499 ft/min
Exhaust		
Flow STBY	497	448
Flow Prime	467	424
Temp STBY	850	945
Temp Prime	800	918
Outlet Size	3	4
Origin		
	Europe	North America

- Tier 3 Engine
- Fully supported maintenance of engine, parts and associated generator components by Perkins network of over 3,000 national dealers
- Perkins University trains all dealers specific to MEG generator
- Preventative maintenance program available

Enclosure

SIGNIFICANT
dBA
IMPROVEMENT

137°F

Max Operating Ambient
*Compared to competitor 104°F



65 dBA @ 23'
competitor = 72 dBA

Intake Baffle

- Exceeds manufacturer specifications
- Perkins tested and approved for warranty continuation
- Air intake provides increased air flow
- dBA reduced significantly
- Quieter and cooler running performance

Optional H-Frame

- Reduces compound space requirements
- Mount main breaker, ATS and communication module to the H-Frame and deliver intact for ease of installation and maintenance



Controller & Integrated Monitoring System

Feature Description	Competitor	Basler DGC-2020 OR Deep Sea-7410
*Programmable Crank Limiter	Yes	Yes
*Optional Remote Annunciator	Yes	Yes
*Optional Remote Relay Panel	Yes	Yes
*Programmable Exercise Timer	Yes	Yes
*Programmable Logic Control	Yes	Yes
RS-232 Port	Yes	Yes
RS-485 Port	Yes	Yes
*Utility Monitoring	Yes	Yes
2-Wire Start	Yes	Yes
*Power Output (kW)	Yes	Yes
*Power Factor	Yes	Yes
*Reactive Power	Yes	Yes
*All Phase AC Voltage	Yes	Yes
*All Phase Current	Yes	Yes
*Oil Pressure	Yes	Yes
*Coolant Temp	Yes	Yes
*Coolant Level	Yes	Yes
*Oil Temp	Yes	Yes
*Fuel Pressure	Yes	Yes
*Engine Speed	Yes	Yes
*Battery Voltage	Yes	Yes
*Frequency	Yes	Yes
*Date / Time Fault History	Yes	Yes
Waterproof Plug In Connectors	Yes	Yes
*Audible Alarms and Shutdowns	Yes	Yes
Not In Auto Flashing Indicator	Yes	Yes
Auto / Off / Man Switch	Yes	Yes
E-Stop	Yes	Yes
*Remote Communication RS-485	Yes	Yes
*Low Fuel Alarm	Yes	Yes
*Low Oil Pressure Alarm	Yes	Yes
*Coolant Temperature Alarm	Yes	Yes
*Engine Speed Alarm	Yes	Yes
*Over Voltage Alarm	Yes	Yes
*Under Voltage Alarm	Yes	Yes
*Low Battery Voltage Alarm	Yes	Yes

Monitoring Capabilities

- Over 150 points of monitoring capability
- 20 key targeted points managed daily
- Remote start, stop, and cycling capabilities
- Capability to add monitoring services for lights, batteries, security, and HVAC systems

***Items marked indicate programmable min. and max.**

Alternator

	Competitor	Stamford
Specifications		
Standard Model	390	UC224E
Poles	4	4
Field Type	Revolving	Revolving
Insulation Class - Rotor	H	H
Insulation Class - Stator	H	H
Total Harmonic Distortion	<5%	<2%
Telephone Interference Factor	<50	<50
Standard Excitation	Synchronous Brushless	Synchronous Brushless
Bearings	1 - Pre Lubed and Sealed	1 - Pre Lubed and Sealed
Coupling	Direct, Flexible Disc	Direct, Flexible Disc
Load Capacity - Standby	100%	100%
Prototype Short Circuit Test	YES	YES
Voltage Regulator	Digital	Digital
Number of Sensed Phases	3	3
kW Output 120/240V Prime	45 kW 188 AMPS	50 kW 208 AMPS
Power Factor	1	1

Warranty

Generator and components provide a standard factory warranty of one year, along with on-going dealer support.

Service

Fully-supported maintenance of engine, parts and associated generator components is available by both Caterpillar and Perkins' dealer networks. With more than 1,600 Caterpillar and 3,000 Perkins locations scattered across the globe, you are sure to find one near you. A key part of Perkins' value offering is its global product support network which ensures all its engines are kept running wherever they are used in the world. Their expert technicians are trained to diagnose repair and maintain power generation systems. Visit http://www.cat.com/en_US/support/dealer-locator.html or <http://distributorlocator.perkins.com/> to find a local service center.