



DIESEL GENERATOR SET

Model: **GCW700-60S**

Standby: **765.1 kVA, 612.1 kW**

Configuration: **Enclosed**

Prime: **694.0 kVA, 555.2 kW**

Pramac Code:

GCW700-60S-1993

DESCRIPTION

Pramac generators are designed and produced to provide the best performing and most reliable product available. All factories are ISO 9001 certified emphasizing our absolute commitment to quality in the design and production of our products. Every generator is 100% factory tested. Most generators come standard with auto-start capability, full genset monitoring, radiator (liquid-cooled models), battery, engine fluids, oil drain pump, lifting point(s), internal silencer (enclosed models), sound attenuation (enclosed models), failure alarms, heavy duty vibration dampeners, and a 12 month warranty.

FEATURES

- Heavy duty Perkins 2806C-E18 TAG3 engine
- Clean power with the Stamford HCI 544F alternator
- Precise genset controls with the AC3000 control unit
- Easy access display of all critical genset measures
- Fully programmable controller (digital versions)
- Full sound and weather attenuation (enclosed configuration)
- Safety guards for all electrical connections and moving parts
- Standard fuel tank with 396.3 gallon capacity
- Emergency stop switch on control panel (not HSB models)
- Easy access for maintenance
- Lockable latches for enclosed models
- Regulator provides 1.5% voltage regulation
- Very efficient alternator, 95.0% @ 3/4 load
- Engineered vibration dampening system
- Standard lifting system (enclosed models)
- Rugged base frame for versatile application
- Internal silencer (enclosed models)
- Complete with engine fluids and battery (not HSB)

GENERAL SPECIFICATIONS - GENSET

(Reference Power conditions are ISO 8528, barometric pressure 100 kPa, temperature 25°C, humidity 30%.)

Standby Power	765.1 kVA	
	612.1 kW	920.3 Amps
Prime Power	694.0 kVA	
	555.2 kW	834.7 Amps
Voltage	480 Volt	
Frequency	60 Hertz	
Phase	3	
Power Factor	0.8 Cosφ	
One step load acceptance (Speed droop 5%)	0 %	
Engine Speed	1800 rpm	

RATING DEFINITIONS

Prime Rating

Applicable for supplying continuous power at variable loads in lieu of commercially purchased power. This is the maximum power available at variable loads with no limit on the number of annual hours. This rating allows for a 10% overload for a limited number of hours, typically 1 hour every 12 hours.

Standby Rating

Applicable for supplying continuous power at variable loads in the event of a failure in commercially purchased power. This rating does not allow for any overload.

SITE DERATING

Local conditions may require derating of the generator output. Use these guidelines for derating as needed: 3% for each 1000 ft. above sea level, 1.5% per 10°F over 77°F, and 1.5% per 10% relative humidity above 30%. Actual derating varies slightly by engine model.

APPLICATION DATA FOR MODEL GCW700-60S

ENGINE

Perkins engines are world renowned for their durability, advanced technology and low emissions. The application details for the model used in the GCW700-60S are listed in the table below. More details may be available upon request.

ENGINE SPECIFICATIONS

Manufacturer:	<i>Perkins</i>	
Model:	<i>2806C-E18 TAG3</i>	
Stroke:	<i>4 Diesel</i>	
Fuel:	<i>DIESEL</i>	
EPA:	<i>TBD</i>	
Number and disposition of cylinders:	<i>6 in line</i>	
Total displacement:	<i>18130</i> cc	<i>18.1</i> Liter
Air intake:	<i>Turbo intercooler</i>	
Starting system:	<i>Electric</i>	
Speed:	<i>1800</i> rpm	
Speed governor:	<i>Electronic</i>	
Continuous power COP:	<i>485</i> kW	<i>650.1</i> HP
Prime power PRP:	<i>585</i> kW	<i>784.2</i> HP
Standby power LTP:	<i>645</i> kW	<i>864.6</i> HP
Lube oil capacity (max):	<i>56</i> Ltr	<i>59.2</i> Qt
Coolant capacity (max):	<i>61</i> Ltr	<i>64.5</i> Qt
Fuel consumption @ 75% PRP:	<i>103.42</i> Ltr/h	<i>27.3</i> Gal/h
Fuel consumption @ 100% PRP:	<i>137.89</i> Ltr/h	<i>36.4</i> Gal/h
Max lube oil consumption @ PRP:	<i>0.5</i> %	
Electrical circuit:	<i>24</i> Volt	
Engine derating:	<i>1.00</i>	
Battery charger:	<i>24</i> Volt	<i>0</i> Amp
Fan	<i>Mechanical</i>	

ALTERNATOR

Stamford alternators are among the world leaders in cutting edge technology. This model is a 4 pole, Class H, rated at 700kW Prime Power with Electronic voltage regulation. Complete specs are listed in the table below.

ALTERNATOR SPECIFICATIONS

Manufacturer:	<i>Stamford</i>	
Model:	<i>HCI 544F</i>	
Poles:	<i>4</i>	
Speed:	<i>1800</i> rpm	
Voltage:	<i>480</i> Volt	
Frequency:	<i>60</i> Hz	
Voltage Regulation:	<i>1.5</i> %	
Frequency Regulation:	<i>0.5</i> %	
Cont. H 125/40°C rating - COP. Basic Continuous:	<i>825.0</i> kVA	
Standby 150/40°C rating - PRP. Peak Continuous:	<i>875.0</i> kVA	
Standby 163/27°C rating - LTP:	<i>906</i> kVA	
Power factor:	<i>0.8</i> Cosφ	
Standby 150/40° active rating - PRP pick continuous PR active	<i>700</i> kW	
Efficiency @ 75% load:	<i>95</i> %	
Efficiency @ 100% load:	<i>94.9</i> %	
Admitted overload:	<i>10% per 1h every 12h</i>	
Voltage regulation system:	<i>Electronic</i>	
Alternator IP protection:	<i>21</i>	
Alternator insulation:	<i>Class H</i>	
Alternator derating:	<i>1.00</i>	

NOTE: 12 wire alternators are reconnectable to any 3-phase voltage as well as single phase at 2/3 of 3-phase rating.

APPLICATION DATA FOR MODEL GCW700-60S

GENERAL INSTALLATION DATA

Combustion air volume flow @ PRP:	0 m3/min	0.0 ft3/min
Cooling fan air flow rate:	0 m3/min	0.0 ft3/min
Exhaust gas volume @ PRP:	0 m3/min	0.0 ft3/min
Exhaust gas temperature @ PRP:	0 °C	32.0 °F
Max admitted total exhaust backpressure:	0 mbar	0.0 psi
Recomended exhaust pipe dia. for 5 mt lenght:	mm	0.0 in
Recomended number and size air intake openings:	n° x m ²	0.0 n° x ft ²
Starting Battery:	0 n° x Ah	
Standard Circuit Breaker:	1000A	

GENSET CONTROL PANEL

Controller	Sices, Model AC3000	
Function	Automatic	
Controller functions:		
Shutdowns:	Alarms:	Displays:
Low Oil Press., High Eng. Temp., +/- Voltage, Overload, Short Circ., +/- Frequency, E-Stop, Batt Ch. Fail.	Low Oil Press., High Oil/Coolant Temp., Start/Stop Fail, Low Coolant Lvl, Low Fuel, Low Temp, +/- Batt Volts	Digital: Voltage (3 phases), Mains Voltage, Freq, Amps, Batt Volts, KVA, PF, Hours, RPM, Fuel %, Eng. Temp.
Other	External fuel pump controls, GSM	
Receptacles	None	

WEIGHTS AND MEASURES

Length:	5100 mm	200.8 in
Width:	1870 mm	73.6 in
Height:	3000 mm	118.1 in
Weight:	7000 kg	15432.3 Lbs
Fuel tank capacity (location):	(Internal) 1500.0 Ltr	396.3 Gal
Running time @ 75% PRP (100% PRP):		14.5 (10.9) hr
Noise pressure level @ 7 mt:		-25 dB(A)

OPTIONS

Contact your authorized Pramac distributor for more information.

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