

# WGP-P60/S

## Perkins Series

### Features:

- Rotate speed governor: Mechanical governor
- Excitation system: Self excited, SHUNT
- A.V.R model: SX460
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 12V sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy (Only for Soundproofed sets)
- 50°C radiator
- Oil pump on the engine
- Steel base frame with fork holes
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for daily running
- Drain points for fuel tank
- Operation Manual / Specifications



### Dimensions and Weights

Model	L	W	H
WGP-P60	1900	800	1350
WGP-P6S	2300	1100	1550

### Output Ratings

Genset Model	Prime Power	Standby Power
WGP-P60	60kVA/48kW	66kVA/52.8kW
WGP-P60S	60kVA/48kW	66kVA/52.8kW

Ratings at 0.8 power factor

### Notes:

#### \*Prime Power

Continuous duty operation, under variable load 24/24h-10% over load

#### \*\*Standby Power

Standby duty, operation under variable load, without over load;

### Standard Reference Conditions

Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998,

### Ratings and Performance Data

Engine Model:	Perkins 1103A-33TG2
Alternator Brand:	Stamford
Alternator Model:	UCI 224E
Control System:	Auto Genset / AMF
Circuit Breaker Type:	3 Pole MCCB
Frequency & Phase:	50Hz & 3PH
Engine Speed: RPM	1500
Fuel Tank Capacity: L	
WGP-P60	10 hrs
WGP-P60S	10 hrs
Fuel Consumption: l/hr (100% Load)	
- Prime Power	13.9
-Standby Power	15.4

**Engine Model: 1103A-33TG2 / 59.3kW@1500rpm**

**Cooling system**

Radiator	
face area	0.276 m <sup>2</sup>
rows and materials	1 rows, Aluminium
matrix density and material	12.5 fins/inch Alum
width of matrix	526 mm
height of matrix	524.2 mm
pressure cap setting	107 kPa
Estimated cooling air flow reserve	/

**Fan**

diameter	457 mm
drive ratio	1.25:1
number of blades	7
material	Composite
type	pusher

**Coolant**

Total system capacity	
with radiator	10.21 litres
without radiator	4.41 litres
Maximum top tank temperature	110°C
Max static pressure head on pump	30.4 kPa
Temperature rise across engine	7.5°C
Max permissible external system resistance	TBA kPa
Thermostat operation range	82 - 93°C
Recommended coolant:	50% anti freeze/ 50% water

**Duct allowance**

Maximum additional restriction (duct allowance) to cooling airflow and resultant minimum airflow

Ambient clearance 50% Glycol	Duct allowance Pa	m <sup>3</sup> /sec
/	/	/
/	/	/

**Electrical system**

alternator	65 amps, 12 V
starter motor	3KW, 12 V
Minimum cranking speed	105 rev/min

**Cold start recommendations**

Minimum starting temperature	Grade of engine lubricating oil	Battery specifications	
°C			
0	20W	660	1
-15	10W	660	1
-20	5W	660	1

**Exhaust system**

Maximum back pressure	10 kPa
Exhaust outlet size	/
horizontal	/
vertical	56 mm

**Fuel system**

Type of injection	Direct injection
Fuel injection pump	Rotary
Fuel injector	Multi-hole
Nozzle opening pressure	29.0 Mpa
Maximum particle size	25 microns

**Fuel lift pump**

type	Mechanical
flow/hour	120-150 litres/hr
pressure	30-75 kPa
Maximum suction head	0.8 m
Maximum static pressure head	20 kPa
Governor type	Electronic

**Fuel specification**

**USA Fed Off Highway - EPA2D 89.330-96**

**Europe Off Highway - CEC RF-06-99**

**Note: For further information on fuel specifications and restrictions estrictions.**

**refer to the OMM Fuels section for this engine model**

**Fuel consumption**

Power rating		
g/kWh (litres/hr)		
110%	100%	75%
15.4	13.9	10.43

**Induction system**

Maximum air intake restriction	
clean filter	5 kPa
dirty filter	8 kPa
air filter type	Dry element type

**Lubrication system**

Lubricating oil capacity	
Maximum sump capacity	7.81 litres
Total system	8.31 liters
Minimum sump capacity	6.21 litres

**Lubricating oil pressure**

Minimum sump capacity	120 kPa
relief valve opens	415 - 470 kPa
at maximum no-load speed	276 - 414 kPa
Normal oil temperature	125°C
oil flow at rated speed	13 litres/min.

Alternator Model: UCI 224E

Alternator Physical Data

Manufactured by:	Stamford
Model:	UCI 224E
No. of Bearings:	Single
Insulation Class:	H
Winding Pitch Code:	2/3
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	Self excited,shunt
AVR Model:	SX460

Alternator Operating Data

Overspeed: rpm	2250rpm
Voltage Regulation: (Steady state)	±1.0%
Wave Form NEMA = TIF:	<50
Wave Form IEC = THF:	<2%
Air Flow: m3/s	0.1
Altitude: m	≤1000

Alternator Performance Data:	WGP-P60	WGP-P60S
Time constants/400V:Ms		
T'd	28	28
T''d	7	7
T'do	700	700
Ta	6	6
Short Circuit Capacity** %	1/Xd	1/Xd
Reactances: Per Unit		
Xd	2.24	2.24
X'd	0.17	0.17
X''d	0.12	0.12

Voltage Technical Data WGP-P60

Voltage	Prime kVA	Standby kVA
380/220	60	66
400/230	60	66
415/240	60	66
440/254	60	66

Voltage Technical Data WGP-60S

Voltage	Prime kVA	Standby kVA
380/220	60	66
400/230	60	66
415/240	60	66
440/254	60	66

Control System DSE4620



Features:

- Large back-lit icon LCD display.
- 3-phase generator sensing.
- 3-phase generator and mains (utility) sensing.
- 600 V ph-ph nominal system compatibility.
- Generator & load power monitoring (kW, kV A, kV Ar, pf).
- Generator overload protection (kW).
- Configurable inputs & outputs.
- Fuel & crank outputs.
- Magnetic pick-up speed sensing.
- Battery voltage monitoring.
- Configurable event log (50).
- DSE Configuration Suite PC Software.
- Engine speed protection, engine hours counter, engine pre-heat, engine run-time scheduler, engine idle control for start/stop.

Control System DSE7420



Features:

- Microprocessor control, with high stability and credibility .
- Mains supply and generator operation monitoring.
- Indicating operation status and fault conditions.
- Multiple protections; multiple parameters display such as pressure, temperature.
- Manual and automatic work mode selectable.
- Real time clock for time and date display, overall runtime display, 99 log entries
- Overall power output display.
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed.
- Communication with PC via RS485 or RS232 interface, using MODBUS protocol.
- Engine ECU is available.
- Common USB cable is usable for parameter configuration.
- Multi-language is available

Optional

<p>Engine</p> <ul style="list-style-type: none"> <li>• Water Jacket Preheater</li> <li>• Fuel-water separator</li> <li>• Oil pump</li> <li>• Oil preheater</li> <li>• Battery preheater</li> </ul>	<p>Alternator</p> <ul style="list-style-type: none"> <li>• PMG excitation</li> <li>• Alternator heater</li> <li>• Winding Temperature Measuring</li> <li>• Anti-damp and anti-corrosion treatment</li> <li>• Anti-condensation heater</li> </ul>	<p>Generator Set</p> <ul style="list-style-type: none"> <li>•Tools with the machine</li> <li>•Coolant (-30°C)</li> </ul>
<p>Canopy</p> <ul style="list-style-type: none"> <li>• Hired type</li> <li>• Trailer</li> </ul>	<p>Fuel System</p> <ul style="list-style-type: none"> <li>• Low fuel level alarm</li> <li>• Automatic fuel feeding system</li> <li>• Fuel T-valves</li> <li>• Dual Wall Integral Fuel Tanks</li> <li>• Dual Wall Sub-base Fuel Tanks</li> <li>• Automatic Fuel Fill Options</li> <li>• Fuel level shut down sensor</li> </ul>	<p>Control System</p> <ul style="list-style-type: none"> <li>• AMF function</li> <li>• ATS control cabinet</li> <li>• Double HZ &amp; Volt</li> <li>• ABB &amp; MCCB</li> </ul>
<p>Air Inlet system</p> <ul style="list-style-type: none"> <li>• Air pre-heater</li> </ul>	<p>Lube system</p> <ul style="list-style-type: none"> <li>• Manual sump pump</li> <li>• Lubricant oil pre-heater</li> </ul>	<p>Starting /Charging system</p> <ul style="list-style-type: none"> <li>• Jacket water heater</li> </ul>



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E-mail: sales@waltpower.com  
 Walt reserves the right to make changes in model, technical specification, color, configuration and accessories without prior notice.  
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