# **WGP-P75S-6**

#### **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    | Н    |
|------------|------|------|------|
| WGP-P75-6  | 1900 | 800  | 1350 |
| WGP-P75S-6 | 2300 | 1100 | 1550 |

#### 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,





#### **Output Ratings**

| Genset Model | Prime Power | Standby Power |
|--------------|-------------|---------------|
| WGP-P75-6    | 68kVA/55kW  | 75kVA/60kW    |
| WGP-P75S-6   | 68kVA/55kW  | 75kVA/60kW    |

Ratings at 0.8 power factor

| Ratings and Performance Data |  |  |
|------------------------------|--|--|
| Perkins 1103A-33TG2          |  |  |
| Stamford                     |  |  |
| UCI 224D                     |  |  |
| Auto Genset / AMF            |  |  |
| 3 Pole MCCB                  |  |  |
| 60Hz & 3PH                   |  |  |
| 1800                         |  |  |
|                              |  |  |
| 10 hrs                       |  |  |
| 10 hrs                       |  |  |
|                              |  |  |
| 13.9                         |  |  |
| 15.4                         |  |  |
|                              |  |  |

## Engine Model: 1103A-33TG2 / 67.5kW@1800rpm

#### 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/<br>50% water |

#### **Duct allowance**

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

| Ambient clearance 50% Glycol | Duct allowance Pa | m³/sec |
|------------------------------|-------------------|--------|
| 1                            | 1                 | 1      |
| 1                            | 1                 | 1      |

#### **Electrical system**

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

#### **Cold start recommendations**

| Minimum<br>starting<br>temperature | Grade of<br>engine<br>lubricating<br>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            | <i>l</i> |
| 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                         | Mechnical         |
|------------------------------|-------------------|
| 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 224D

#### **Alternator Physical Data**

| Manufactured by:           | Stamford           |
|----------------------------|--------------------|
| Model:                     | UCI 224D           |
| No. of Bearings:           | Single             |
| Insulation Class:          | Н                  |
| 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<br>Performance Data: | WGP-P75-6 | WGP-P75S-6 |
|---------------------------------|-----------|------------|
| Time constants/480V: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-P75-6

| Voltage | Prime | Standby |
|---------|-------|---------|
|         | kVA   | kVA     |
| 110/220 | 68    | 75      |
| 220/440 | 68    | 75      |
| 230/460 | 68    | 75      |
| 240/480 | 68    | 75      |

#### Voltage Technical Data WGP-P75S-6

| Voltage | Prime | Standby |
|---------|-------|---------|
|         | kVA   | kVA     |
| 110/220 | 68    | 75      |
| 220/440 | 68    | 75      |
| 230/460 | 68    | 75      |
| 240/480 | 68    | 75      |

#### **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**

| Engine                 | Alternator                             | Generator Set             |
|------------------------|--|---------------------------|
| Water Jacket Preheater | PMG excitation                         | •Tools with the machine   |
| Fuel-water separator   | Alternator heater                      | •Coolant (-30°C)          |
| Oil pump               | Winding Temperature Measuring          |                           |
| Oil preheater          | Anti-damp and anti-corrosion treatment |                           |
| Battery preheater      | Anti-condensation heater               |                           |
| Canopy                 | Fuel System                            | Control System            |
| Hired type             | Low fuel level alarm                   | AMF function              |
| Trailer                | Automatic fuel feeding system          | ATS control cabinet       |
|                        | Fuel T-valves                          | Double HZ & Volt          |
|                        | Dual Wall Integral Fuel Tanks          | ABB & MCCB                |
|                        | Dual Wall Sub-base Fuel Tanks          |                           |
|                        | Automatic Fuel Fill Options            |                           |
|                        | Fuel level shut down sensor            |                           |
| Air Inlet system       | Lube system                            | Starting /Charging system |
| Air pre-heater         | Manual sump pump                       | Jacket water heater       |
|                        | Lubricant oil pre-heater               |                           |

#### WALT GLOBAL POWER EQUIPMENT CO.,LTD

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

Please contact the salesman before ordering. 2018 by WALT, All right reserved