

GCW22P (ALT. LSM)



Main Features

| | | |
|----------------------|------------|-----|
| Frequency | Hz | 50 |
| Voltage | V | 230 |
| Power factor | cos ϕ | 1 |
| Phase and connection | | 1 |

Power Rating

| | | |
|-------------------|-----|-------|
| Standby power LTP | kVA | 18.00 |
| Standby power LTP | kW | 18.00 |
| Prime power PRP | kVA | 16.00 |
| Prime power PRP | kW | 16.00 |

Ratings definition (According to standard ISO8528 1:2005)

PRP - Prime Power:

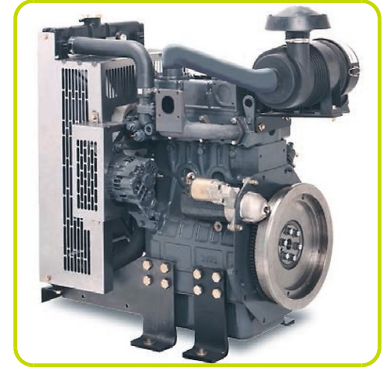
It is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output over 24 h of operation shall not exceed 70 % of the prime power.

LTP - Limited-Time running Power:

It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 h of operation per year (whose no more than 300 for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

Engine specifications

| | | |
|-------------------------------------|-----------------|------|
| Engine manufacturer | Perkins | |
| Model | 404D-22G | |
| [50Hz] Exhaust emission level | Stage IIIA | |
| Engine cooling system | Water | |
| Nr. of cylinder and disposition | 4 in line | |
| Displacement | cm ³ | 2216 |
| Aspiration | Natural | |
| Speed governor | Mechanical | |
| Prime gross power PRP | kW | 18.7 |
| Maximum gross power LTP | kW | 20.6 |
| Oil capacity | l | 10.6 |
| Coolant capacity | l | 7 |
| Fuel | Diesel | |
| Specific fuel consumption @ 75% PRP | g/kWh | 238 |
| Specific fuel consumption @ PRP | g/kWh | 237 |
| Starting system | Electric | |
| Starting engine capability | kW | 2 |
| Electric circuit | V | 12 |



Engine Equipment

Standards

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1

Fuel system

Rotary type pump

Lube oil system

Wet steel sump with filler and dipstick

Filter

- Fuel filter
- Air filter
- Oil filter

Cooling system

- Mounted radiator
- Thermostatically-controlled system with belt driven coolant pump and pusher fan



Low Voltage Alternators - 4 pole



10 to 3300 kVA - 50 Hz / 12.5 to 3900 kVA - 60 Hz
General features and ratings

Leroy-Somer™


EMERSON™

1500 R.P.M. - 1 Phase - P.F. 1



| RATINGS 50 Hz | |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
|  SE series (4 wires) |  PA parallel (4 wires) |
| 230 V | 115 V |

8.12 - Dedicated winding M

| | | | | | kW / kVA : 115/230 V | | | |
|--------------|---|-------|---|-------|----------------------|-----------|-------------|-------------|
| Excitation | | | | | 40 °C cont. | | 40 °C St.by | 27 °C St.by |
| TYPE | | SHUNT | | wires | H : 125 K | F : 105 K | H : 150 K | H : 163 K |
| LSA 40 VS1 | - | JM/4 | - | 4 | 10.5 | 9.5 | 11 | 11.4 |
| LSA 40 VS2 | - | JM/4 | - | 4 | 12 | 11 | 12.7 | 13.2 |
| LSA 40 S3 | - | JM/4 | - | 4 | 13.2 | 12 | 14 | 14.5 |
| LSA 40 S4 | - | JM/4 | - | 4 | 14.5 | 13.2 | 15.4 | 16 |
| ■ LSA 40 M5 | - | JM/4 | - | 4 | 16 | 14.6 | 17 | 17.6 |
| LSA 42.3 VS1 | - | JM/4 | - | 4 | 18.2 | 16.6 | 19.3 | 20 |
| LSA 42.3 VS2 | - | JM/4 | - | 4 | 20.3 | 18.5 | 21.5 | 22.3 |
| LSA 42.3 VS3 | - | JM/4 | - | 4 | 22.4 | 20.4 | 23.7 | 24.6 |
| LSA 42.3 S4 | - | JM/4 | - | 4 | 25 | 22.8 | 26.5 | 27.5 |
| LSA 42.3 S5 | - | JM/4 | - | 4 | 28 | 25.5 | 29.7 | 30.8 |
| LSA 42.3 M7 | - | JM/4 | - | 4 | 31.5 | 28.7 | 33.4 | 34.7 |
| LSA 42.3 M8 | - | JM/4 | - | 4 | 35 | 31.9 | 37.1 | 38.5 |
| LSA 42.3 L9 | - | JM/4 | - | 4 | 42 | 38.2 | 44.5 | 46.2 |
| LSA 44.3 S3 | - | JM/4 | - | 4 | 57 | 51 | 60 | 63 |
| LSA 44.3 S5 | - | JM/4 | - | 4 | 69 | 62 | 73 | 76 |
| LSA 44.3 M8 | - | JM/4 | - | 4 | 82 | 74 | 87 | 90 |

Genset equipment

BASE FRAME MADE OF WELDER STEEL PROFILE, COMPLETE WITH:

- Anti-vibration mountings properly sized
- Visual fuel level indicator
- Integrated support legs.

PLASTIC FUEL TANK, COMPLETE WITH:

- Filler neck
- Air breather (ventilation pipe)
- External fuel refilling

OIL DRAININ PIPE WITH CAP:

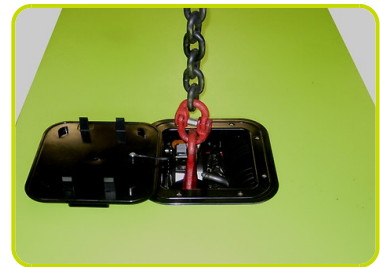
- Oil draining facilities

CANOPY:

- Single piece hinged soundproof canopy equipped with pneumatic arms and handles to lift up the canopy allowing easy access to the genset for maintenance purposes.
- Simple handling operations with central lifting eye

SOUNDPROOF:

- Noise attenuation thanks to soundproofing material (polyurethane foam) and efficient residential silencer placed inside the canopy.



Dimensional data

| | | |
|--------------------|--------|------|
| Length | (L) mm | 1645 |
| Width | (W) mm | 870 |
| Height | (H) mm | 1072 |
| Dry weight | Kg | 586 |
| Fuel tank capacity | l | 51 |

Installation data

| | | |
|-------------------------------|---------------------|------|
| Exhaust gas flow @ PRP | m ³ /min | 3.64 |
| Exhaust gas temperature @ LTP | °C | 445 |

Control panel availability

| | |
|-------------------------|-----|
| AUTOMATIC CONTROL PANEL | ACP |
|-------------------------|-----|



ACP - Automatic control panel

Automatic control panel mounted on the genset, complete with digital control unit AC03 for monitoring, control and protection of the generating set.

INSTRUMENTATION DIGITAL (AC-03)

- Mains voltage.
- Generating set voltage (3 phases).
- Generating set frequency
- Generator set current (1 phase).
- Battery voltage
- Hours-counter.

COMMANDS AND OTHERS

- Four operation modes: OFF - Manual starting - Automatic starting - Automatic test
- Pushbutton for forcing Mains contactor or Genset contactor
- Push-buttons: start/stop, fault reset, up/down/page/enter selection
- Emergency stop button.
- Remote starting availability.
- DC system disconnection switch
- Automatic battery charger
- Settable PASSWORD for protection level

PROTECTIONS WITH ALARM

- Engine protections: low oil pressure, high engine temperature
- Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage, battery charger failure

PROTECTIONS WITH SHUTDOWN

- Engine protections: low oil pressure, high engine temperature
- Genset protection: under/over voltage, overload, under/over battery voltage
- Circuit breaker protection: III poles
- Differential protection

OTHERS

- Cover protection Power switch



OUT PUT PANEL ACP

Plinth row for connection from ACP to LTS panel.

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