

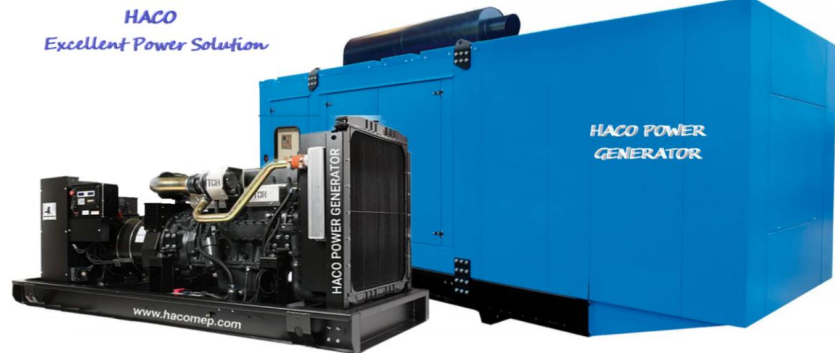
HCV385

Standby Power (KVA / KW): 385 / 308

Prime Power (KVA / KW): 350 / 280

Standard features

- Brand name: HACO POWER GENERATOR
- Engine : VMAN
- Charge alternator : 24V
- Governor : Electronic
- Single bearing alternator IP 23
- Rated speed : 1500 RPM
- Speed control type : Electronic
- Insulation class H/H
- Radiator 50°C max with coolant cap
- Skid and vibration isolators
- Dry type air filter
- Main line circuit breaker
- 24V battery and cable
- User's manual



(Figure)

Weight and Dimensions

| GEN-Set | Dimension (L x W x H) | Weight |
|-------------|-----------------------|---------|
| Open Type | N/A | N/A |
| Silent Type | 3500 x 1600 x 2000 mm | 3200 kg |

Generator Ratings

| Voltage | Hz | Phase | Power factor | Standby AMP | Standby Rating (KVA/KW) | Prime Rating (KVA/KW) |
|---------|----|-------|--------------|-------------|-------------------------|-----------------------|
| 400/230 | 50 | 3 | 0.8 | 526 | 385/308 | 350/280 |

Haco Power generator

User compliant with ISO 9001 and CE standard, which include the following directives:

- 2006/42/EC Machinery safety
- 2006/95/EC Low voltage
- EN 60204-1: 2006+A1: 2009, EN ISO 12100: 2010, EN ISO 13849-1: 2008, EN, 12601:2010
- IS/IEC60034-1, IS 1460, ISO 8528
- ISO3046, ISO 9001, IS 13018

Standard reference Conditions

Note: Standard reference condition 25°C (77°F) air inlet temp, 100m (328ft) A.S.L 30% relative humidity. Fuel consumption dat with diesel fuel with specific gravity of 0.85 and conforming to BS 2869: 1998, Class A2

Warranty

All equipment carries full manufacturer's warranty. Extended warranty terms available. For details on warranty cover please contact your local dealer, or visit our website: <http://www.hacomep.com>

(1) PRP (Prime Power):

According to ISO8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power.10% overload available for governing purposes only.

(2) ESP (Standby Power):

According to ISO 8528-1, 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 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

Engine Data

VMAN

| | |
|------------------------|---|
| Manufacturer | VMAN |
| Engine Specification | D11 - 4cycle |
| Made in | Shanghai - China |
| Rated RPM | 1500 RPM |
| Prime Power | N/A |
| Standby Power | 360 kWm |
| Cycle | 4 stroke, compression ignition |
| Induction system | Turbocharged, air to air charge cooling |
| Cylinder / Arrangement | 6 / V |
| Displacement | 10.964 L |
| Bore and Stroke | 128 mm×142 mm |

Compression ratio

| | |
|-------------------|----------|
| Compression ratio | 14.6 : 1 |
|-------------------|----------|

Methods

| | |
|---------------------|----------------------|
| Methods speed | Electronic |
| Methods lubrication | Forced oil pump |
| Methods colling | By water with blower |

Oil System

| | |
|------------------------------|------|
| Total oil capacity w/filters | 19 L |
|------------------------------|------|

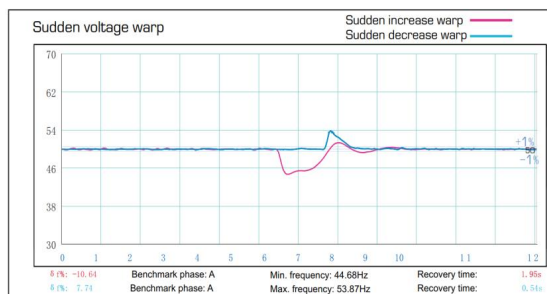
Generator Data

BURG

Alternator

| | |
|---------------------------|----------|
| Model | B-385-4 |
| Number of phase power | 3 |
| Factor (Cos Phi) | 0.8 |
| Pole | 4 number |
| Bearing | 1 number |
| Coupling | Direct |
| Exciter type | AREP |
| Insulation system | Class H |
| Protection | IP23 |
| Voltage regulation (Max.) | ±1% |
| Winding Pitch | 2/3 |

Emergency frequency curve

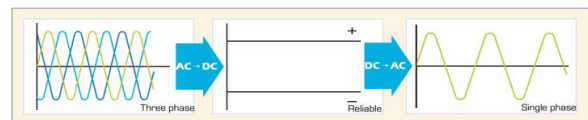


Other

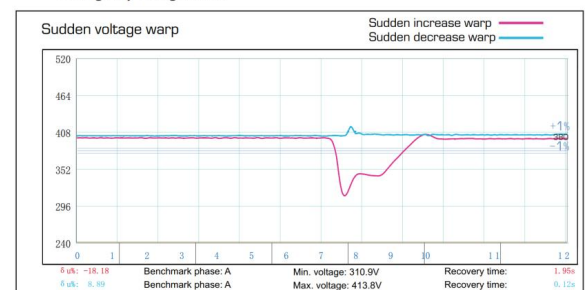
| | |
|----------------------|-------------------|
| Fuel filter | Paper core, whole |
| Oil filter | Paper core, whole |
| Type lubricating oil | 15W40 – CF4 |

Fuel System

| | |
|-----------------------------|-------------|
| Fuel consumption 25% prime | 20.65 L / h |
| Fuel consumption 50% prime | 34.35 L / h |
| Fuel consumption 75% prime | 50.53 L / h |
| Fuel consumption 100% prime | 67.82 L / h |



Emergency voltage curve



| | |
|--|---|
| Stator Winding | Double layer lap |
| Waveform distortion | No load < 1.5 % |
| Total Harmonic Distortion | Non distorting balanced linear load < 5 % |
| Maximum Unbalanced Load across phases (With the condition that none of the phases exceeds its rated current) | Less than or equal to 25% |
| Telephone Interference | THF<2% |
| AVR | MX321 |

Control Panel

SmartGen

- Control Panel is Smartgen HGM6120 a new control module for single gen-set applications, and it is an Automatic Start Control Module and is simple to operate, and the module includes USB, RS232 and RS485 for expansion device connectivity.

- Specifications: Frequency meter, Ammeter, Voltmeter Alarms and faults Oil pressure, water temperature, No start-up, Overspeed, Min / max alternator, Min / max battery voltage, Low fuel level, Emergency stop.

- Engine parameters: Hours counter, Oil pressure, Water, temperature, Engine speed, Battery voltage, Fuel level.

Option

| Engine | Alternator | Generator Sets | Fuel System |
|--|--|--|---|
| <ul style="list-style-type: none"> - Water Jacket Pre-heater - Fuel heater | <ul style="list-style-type: none"> - Winding Temp measuring Instrument - Alternator Pre - heater - PMG - Anti-damp and anti-corrosion treatment - Anti-condensation heater - Winding and bearing RTD | <ul style="list-style-type: none"> - Tools with the machine - Extended range fuel tank - Bunded fuel tank | <ul style="list-style-type: none"> - Low fuel level alarm - Automatic fuel feeding system - Fuel T-valves |
| Canopy | Lub oil system | Cooling System | Control Panel |
| <ul style="list-style-type: none"> - Rental type - Canopy - Trailer | <ul style="list-style-type: none"> - Oil temp sensor - Oil Pre-heater | <ul style="list-style-type: none"> - Front heat protection | <ul style="list-style-type: none"> - Remote control panel - ATS - Synchronizing controller - Adjustable earth leakage relay |

Note: All data sheets are for reference only and subject to change without prior notice.