

MLC400

Specifications

| | | | |
|-----------|----------------|---------------|------------------|
| Frequency | Voltage | Prime power | Continuous power |
| 50Hz | AC 230/400V | | 400kW |
| Speed | Noise(Open) | Noise(Silent) | |
| 1500rpm | ≤105dB (A) @7m | ≤82dB (A) @7m | |

Standard configuration

| | | |
|------------------------------------|---------------------------|-----------------------------------|
| ◆Electronic governor ECU | ◆DC24V Charging generator | ◆Water tank radiator, cooling fan |
| ◆Ingress protection rating IP23 | ◆Insulation class H | ◆SmartGen automatic controller |
| ◆Air filter | ◆Silencers | ◆Battery floating charger |
| ◆Battery pack and connection cable | ◆Circuit breaker | ◆Forklift slot |
| ◆Shock Absorber | ◆Vibration damper | ◆Generator set usage information |
| ◆Package: PE film | | |

Engine parameters

| | |
|---------------------|--|
| Engine Brand | Cummins |
| Engine Model | K19N-G4 |
| Engine Speed | 1500 rpm |
| Prime power | N/A |
| Continuous power | 450kW |
| Bore×Stroke | 159×159 mm |
| Displacement | 19L |
| No. of cylinders | 6-L type,4 Cycle |
| Governor type | ECU |
| Air Intake method | Turbocharged and Aftercooled |
| Compression Ratio | 11:1 |
| Start-up method | DC24V electrical start with charging generator |

Gas System

| | | | | |
|--|------------------------------|----------|----------|----------|
| Minimum Fuel Inlet Pressure @ Inlet of GMF Sensor Housing(kPa) | 7 | | | |
| Maximum Fuel Inlet Pressure @ Inlet of GMF Sensor Housing(kPa) | 34 | | | |
| Maximum Fuel Pressure Variation | +/-3% | | | |
| Acceptable Fuel | Pipeline Quality Natural Gas | | | |
| Minimum Fuel Methane Number*—MN | 80 | | | |
| Minimum Fuel Energy Content*—BTU/scf(MJ/m ³) | 886(33) | | | |
| Gas Consumption (m ³ /h) | | | | |
| Continuous power | 100% Load | 75% Load | 50% Load | 25% Load |
| 450kW | 119.8 | 93.6 | 66.3 | 39.6 |

Air Intake system

| | |
|---|-----|
| Maximum Allowable Intake Air Restriction with Clean Element (kPa) | 3.7 |
|---|-----|

MINLONG Power

with Dirty Element (kPa)

6.2

Cooling system

Coolant Capacity

Engine Only(L)

34.1

After-cooler Only(L)

4.7

Thermostat (Modulating) Range (°C)

82-93

Maximum Coolant Temperature into the Aftercooler (°C)

54

Lubrication system

Oil Pressure

@ Minimum Low Idle (kPa)

138

@ Governed Speed (kPa)

345-483

Maximum Allowable Oil Temperature (°C)

121

Total System Capacity (Including By-Pass Filter) (L)

84.4

Exhaust system

Max. exhaust back pressure (kPa)

10.0

Exhaust gas temperature@ COP100%load(°C)

519

Exhaust flow Volume@ COP100%load(L/s)/(CFM)

1305/2765

Alternator parameter

Alternator brand

GZSTF Power

Alternator model

STF400-1-4

Rated output power @400 V (kW)

400

No. of bearings

1

Insulation class

H

Voltage Regulation (steady state)

≤±1%

Ingress protection rating

IP23

Coil pitch

2/3

Connection

Three-phase, four-wire

Excitation method

Brushless self-excitation

Power factor

0.8

Efficiency

0.95

TIF

<50

THF

<2%

Control function

Operation function

Power switch, start, stop, emergency stop, closing/opening, etc.

Controller Model

SmartGen HGM6110

Display

132x64 pixel LCD with backlight

Communicaton

USB, RS485

Configurable Inputs/Outputs

4/4

Ingress Protection Rating

IP65

Display function

Phase voltage, line voltage, current, frequency, phase sequence, active power, reactive

power, apparent power, power factor, accumulated power generation, engine speed, oil pressure, cooling water temperature, running time, accumulated start-up times, battery voltage, etc.

| | |
|---------------------|--|
| Protective function | Over-speed, under-speed, over-voltage, under-voltage, over-frequency, under-frequency, over-current, over-power, low oil pressure, high water temperature, low battery voltage, charging failure, etc. |
|---------------------|--|

Power Ratings definitions

| Ratings Definitions | Operating condition |
|-----------------------|--|
| Continuous power(COP) | 1.Unlimited using time per year. 2.Continuous power is the maximum power available at a constant load factor. 3.No overload capability is allowed. |

Size&Weight

| | Length/A | Width/B | Height/C | Weight |
|-------------|----------|---------|----------|--------|
| Silent type | 5000mm | 2000mm | 2550mm | 6500kg |

