

C55D5 | INDUSTRIAL RANGE POWERED BY CUMMINS

LEISTUNG
e n e r g i e



POWER DEFINITION

PRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1.

ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed.

TERMS OF USE

According to the standard, the nominal power assigned by the genset is given for 25 ° C Air Inlet Temperature, of a barometric pressure of 100 kPa (100 m A.S.L.), and 30 % relative humidity. For particular conditions in your installation, refer to the derating table.

TERMS OF USE

For the generating sets used indoors, where the acoustic pressure levels depend on the installation conditions, it is not possible to specify the ambient noise level in the exploitation and maintenance instructions.

You will also find in our exploitation and maintenance instructions a warning concerning the air noise dangers and the need to implement appropriated preventive measures.

| SERVICE | | PRP | EPS |
|-----------------------|---------|-------------------|-----|
| POWER | kVA | 50 | 55 |
| POWER | kW | 40 | 44 |
| RATED SPEED | r.p.m | 1500 | |
| STANDARD VOLTAGE | V | 400/230 | |
| AVAILABLE VOLTAGES | V | 380/220 · 415/240 | |
| RATED AT POWER FACTOR | Cos Phi | 0,8 | |

Generator Specification

| | | | | |
|---|---|---|---|--|
|  WATER-COOLED |  THREE PHASE |  50 HZ |  DIESEL |  STACKABLE CANOPY |
|---|---|---|---|--|

Weight And Dimensions



| Dimension | | Open | Silent |
|------------|----|------|--------|
| Length(L) | mm | 1750 | 2517 |
| Width(W) | mm | 980 | 1055 |
| Height(H) | mm | 1480 | 1250 |
| Net Weight | Kg | 858 | 1250 |
| Fuel Tank | L | 140 | 70 |



Engine Specifications

General Engine Data

| | | |
|-------------------------------------|---------------------|---------|
| Engine brand | CUMMINS | |
| Engine ref. | 4BTA3.9G2 | |
| Engine type | 4-stroke diesel | |
| Governor type | Electronic | |
| Injection | Direct | |
| Aspiration | Naturally Aspirated | |
| Number of cylinders and arrangement | 4-L | |
| Bore and stroke | mm | 102*120 |
| Displacement | L | 3.9 |
| Cooling system | Water-cooled | |

General Engine Data

| | | |
|-------------------------------------|-----------------------------|------|
| Lube oil consumption with full load | 0.5%-1% of fuel consumption | |
| Compression Ratio | 17.3:1 | |
| Engine oil capacity | L | 10.9 |
| Total coolant capacity | L | 21.9 |
| Air Filter | Type | Dry |

Fuel

| | | |
|-----------------------------|-----|------|
| Consumption @ 100% load ESP | L/H | 14.1 |
| Consumption @ 100% load PRP | L/H | 12.9 |
| Consumption @ 75% load PRP | L/H | 10.0 |
| Consumption @ 50% load PRP | L/H | 7.0 |



- Diesel engine
- 4-stroke cycle
- Water-cooled
- 12V electrical system
- Water separator filter
- Dry air filter
- Radiator with pusher fan
- Electronic governor
- Hot parts protection
- Moving parts protection
- Water jacked heater (Optional)
- Radiator water level sensor (Optional)
- Oil heater (Optional)
- Heavy duty air filter (Optional)

Alternator Specifications

Alternator Specifications

| | |
|--------------------------------|------------|
| Number of phase | 3 |
| Power factor (Cos Phi) | 0.8 |
| Poles | 4 |
| Winding Connections (standard) | Star-serie |
| Insulation | H class |
| Enclosure(according IEC-34-5) | IP23 |

Alternator Specifications

| | |
|-------------------|--------------------------------|
| Excitation system | Self-excited, brushless |
| Voltage regulator | AVR (Electronic) |
| No. of bearings | Single bearing |
| Coupling system | Flexible disc |
| Coating type | Standard (Vacuum impregnation) |



- Self-excited and self-regulated
- IP23 protection
- H class insulation
- Alternator pre-heater (Optional)
- Winding temp. measuring instrument (Optional)
- PMG/AREP/MAUX (Optional)

Application Data

Fuel system

| | | |
|--------------------------------------|---|--------|
| Fuel oil specifications | | Diesel |
| Standard fuel tank capacity (Open) | L | 140 |
| Standard fuel tank capacity (Silent) | L | 100 |

Air system

| | | |
|------------------|-----|-------|
| Intake air flow | L/s | 34.5 |
| Cooling air flow | L/s | 2.101 |

Exhaust system

| | | |
|-------------------------------|-----|-----|
| Maximum exhaust temperature | °C | 548 |
| Exhaust gas flow | L/s | 134 |
| Maximum allowed back pressure | kPa | 10 |

Starting System

| | | |
|---------------------|-----|-----|
| Starting power | kW | 3.7 |
| Recommended batter | Ah | 60 |
| Number of Batteries | | 2 |
| Auxiliary voltage | Vdc | 24V |

Genset version

- Steel chasis
- Emergency stop button
- Anti-vibration shock absorbers
- Trailer type (Optional)
- Chassis with integrated fuel tank
- Fuel level gauge
- High mechanical strength
- Epoxy polyester powder coating
- Fuel tank drain plug
- Steel residential silencer - 20dbA attenuation
- Battery charger
- Stackable canopy design

This document is not contractual - The Leistung Energie Limited reserves the right to modify any of the characteristics stated in this document without notice, in a constant effort to improve the quality of its products. *ISO 8528. .

Leistung Energie gensets are 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

Standard reference Conditions

Ambient conditions of reference according to ISO 8528-1:2018 normative: 1000 mbar, 25°C, 30% relative humidity.

Weights and dimensions based on standard products. Illustrations may include optional equipment.

Technical data described in this catalogue correspond to the available information at the moment of printing.

Control Panel Data

| Features of the Control Panel | Basic Model (Standard) | Advanced Model (Optional) |
|--------------------------------------|------------------------|---------------------------|
| • Voltage between phases | ○ | ○ |
| • Voltage between neutral and phase | ○ | ○ |
| • Current intensities | ○ | ○ |
| • Frequency | ○ | ○ |
| • Apparent power [Kva] | ○ | ○ |
| • Active power [Kw] | ○ | ○ |
| • Reactive power [kVAr] | ○ | ○ |
| • Power factor | ○ | ○ |
| • Voltage between phases | ○ | ○ |
| • Emergency stop | ○ | ○ |
| • Binary inputs | 6/6 | 7/7 |
| • Analog inputs | 3 | 3 |
| • 2x10A Current outputs | ○ | — |
| • I/O Configuration | ○/○ | ○/○ |
| • D+ Function | ○ | ○ |
| • Speed sensor | ○ | ○ |
| • Amf/Mrs | ○/○ | ○/○ |
| • GCB/MCB | ○/○ | ○/○ |
| • 3ph voltage measurement Gen./Mains | ○/○ | ○/○ |
| • 3ph current measurement | ○ | ○ |
| • kW/kWh/Kva | ○ | ○ |
| • Engine reading | ○ | ○ |
| • Engine protection | ○ | ○ |
| • Alternator protection | ○ | ○ |
| • Earth current protection | — | ★ |
| • History file | 150 | 350 |
| • RTC/Battery | ○/— | ○/○ |
| • PLC | — | — |
| • 4G | ★ | — |
| • Airgate | — | ★ |
| • ECU CAN | ○ | ○ |
| • MODBUS | ★ | ★ |
| • MODBUS IP | ★ | ★ |
| • SNMP | — | ★ |
| • SNMP TRAPS | — | — |
| • RS232 | ★ | ★ |
| • RS485 | ★ | ★ |
| • GSM/GPRS modem | ★ | ★ |
| • Remote screen | ★ | ★ |
| • Software for PC | ★ | ★ |
| Standard: ○ | Optional: ★ | Not Available: — |