

# Cummins KTA50-G3

## Diesel Generator Set

### PRIME POWER

1250 kVA / 1000 kW

### STANDBY POWER

1375 kVA / 1100 kW



### Specifications

|                     |                           |
|---------------------|---------------------------|
| Voltage / frequency | 400/230 V, 50 Hz          |
| Power factor        | 0,8                       |
| Rated current       | 1804 A                    |
| Model name          | DPX-18819                 |
| Engine              | Cummins KTA50-G3          |
| Alternator          | Stamford S6L1D-H41        |
| Control panel       | DSE 8620MK2               |
| Fuel type           | Diesel                    |
| Dimensions          | 606 x 244 x 259 cm (20ft) |
| Weight              | 16.600 kg                 |

### Ratings definitions

#### PRIME POWER PRP

Prime power available in variable load application in accordance with ISO 8528. A 10% overload capacity is available for a period of 1 hour within a 12-hour period of operation. Average power consumption should not exceed 80% PRP for each 24 h of work.

#### STANDBY POWER ESP

Emergency standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload allowed; limited to 500 operating hours per year and 300 operating hours of continuous duty.

#### STANDARD REFERENCE CONDITIONS

Output ratings are presented at 25 °C air inlet temperature, barometric pressure 100 kPa and relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 50 °C), humidity (up to 70%) and higher altitudes. Under specific site conditions, genset output power may derate.

### Directives, Standards & Certifications

| Category                    | References                                                                                                               |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| EU Directives               | 2006/42/EC, 2014/30/EU                                                                                                   |
| Product standards           | EN 60204-1:2018, EN ISO 12100:2010, EN 55012:2007+A1:2009, EN ISO 8528-13:2016, EN 61000-6-1:2019, EN IEC 61000-6-4:2019 |
| Manufacturer certifications | ISO 9001:2015 / GB/T 19001-2016, ISO 14001:2015 / GB/T 24001-2016, ISO 45001:2018 / GB/T 45001-2020                      |



# Technical Data

## Engine

|                     |                              |
|---------------------|------------------------------|
| Model               | KTA50-G3                     |
| Brand               | Cummins                      |
| Number of cylinders | 16                           |
| Aspiration          | Turbocharged and aftercooled |
| Fuel system         | Direct Injection Cummins PT  |
| Displacement        | 50,3 L                       |
| Bore x stroke       | 159 x 159 mm                 |
| Compression ratio   | 13.9:1                       |
| Rated speed         | 1500 r/min                   |
| Engine power        | 1100 kWm                     |
| Emission standard   | Fuel Optimised (non-Stage V) |
| Oil capacity        | 177 L                        |
| Recommended oil     | 15W-40 API CI-4              |

## Alternator

|                    |                           |
|--------------------|---------------------------|
| Model              | S6L1D-H41                 |
| Alternator brand   | Stamford                  |
| Phase              | 3                         |
| Voltage            | 400 V                     |
| Wiring type        | 6 wires                   |
| Bearing            | 1                         |
| Power factor       | 0,8                       |
| Frequency          | 50 Hz                     |
| Prime power        | 1250 kVA                  |
| Excitation type    | Separately excited by PMG |
| Voltage regulation | +/- 1 %                   |
| Protection grade   | IP 23                     |
| Insulation class   | H                         |

## Fuel consumption

|                           |         |
|---------------------------|---------|
| 110% load (Standby power) | 293 L/h |
| 100% load (Prime power)   | 261 L/h |
| 75% load (Prime power)    | 199 L/h |
| 50% load (Prime power)    | 139 L/h |
| 25% load (Prime power)    | 76 L/h  |

## Warranty

12 months from date of purchase or 1500 hours.

# Features & Control

## Standard features

Full synchronisation package

Internal box silencer

Set of RACOR pre-filters

Internal double wall fuel tank

4 Pole Schneider Motorized Circuit Breaker

3 Way valve system with external connections

Extended busbar for up to 10 cables

Internal lighting

Jacket water heater and Battery Charger

Air inlet filtration

## Controller

Model: DSE 8620MK2

7 configurable digital inputs

Built-in governor and AVR control

Base load (kW export) functionality

Mains (utility) de-coupling protection

Generator power (kW, kVA) monitoring

Overload (kW & kV Ar) protection

Emergency stop

Start failure

