

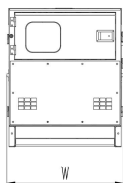
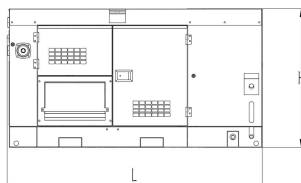


● Generator Specification

Model	SE-K450C5		
Frequency	Hz	50	60
Prime power	kW/kVA	328/410	NA
Standby power	kW/kVA	360/450	NA
Rated voltage	V	380~415	220~480
Phase/Power factor	3Ph / 0.8		
Governor	ECU		
Performance	G3		

● Dimensions & Weight & Fuel Capacity

L*W*H	mm	4328*1450*2150
Weight	kg	Refer to drawing
Fuel Capacity	L	730



standards:ISO8528-5:2025(GB/T2820.5-2025),ISO12100:2010,I SO13849-1:2023,IEC60204-1:2016,IEC60947-1:2020,2006/42/E C Machinery safety, 2006/95/EC Low voltage

●**Prime Power (PRP):** For variable load applications, with no usage hours limit throughout the year; the average permissible output power over 24 consecutive hours shall not exceed 70% of the operating power.

●**Emergency Standby Power (ESP):** For applications during power outages or under test conditions, the maximum annual usage time shall not exceed 200 hours. The average permissible output power during 24 hours of continuous operation shall not exceed 70% of the standby rated power.

● Voltage & Current

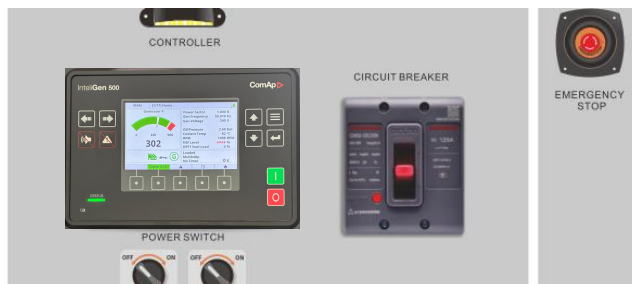
Rate voltage	Current (50Hz)		Current (60Hz)	
	Rated	Standby	Rated	Standby
220V	NA	NA	NA	NA
380V	622.9A	683.7A	NA	NA
400V	591.8A	649.5A	NA	NA
415V	570.4A	626.1A	NA	NA
440V	NA	NA	NA	NA
480V	NA	NA	NA	NA

● Noise level

0% load & 7m	dB(A)	TBD
75% load & 7m	dB(A)	TBD

Control system

Controller	ComAp	IG500-G2
Breaker	Schneider	MCCB 4P 630A
Battery	Varta	6-QW-120(850)



Diesel Engine

● Specification

Brand		Cummins	
Model		QSG12-G4	
Rated speed	rpm	1500	1800
Rated power	kW	371	NA
Standby power	kW	409	NA
Compression ratio		NA	
Cylinders		6	
Bore * stroke	mm	132*144	
Displacement	L	11.8	
Intake method		TA-A	
Low idle speed		700-900	

● Lubrication system

Lub. Method	Fully forced pressure feed type		
Max. Oil Temp	°C	NA	
Oil pan capacity	L	High level 34.1	
Oil pan capacity	L	Low level NA	

● Fuel consumption

		50Hz	60Hz
110% load	L/h	92	NA
100% load	L/h	82	NA
75% load	L/h	60	NA
50% load	L/h	41	NA
25% load	L/h	22	NA

Notes: (1) In accordance with GB19147-2006 automotive diesel fuel, standard 0# diesel fuel test, at 20°C, approximately 0.835 g/cm³. (2) Data sourced from the original diesel engine data sheet.

● Fuel system

Fuel pump type	Cummins HPCR	
Feed pump	Mechanical	
Inlet pipe diameter	mm	Φ19
Return pipe diameter	mm	Φ19
Fuel filter	Full flow, cartridge type	

● Air intake & exhaust system

Maximum back pressure	kPa	NA
Maximum intake resistance		
-Clean filter	kPa	NA
-Dirty filter	kPa	NA
Exhaust Gas Temperature	°C	NA

● Cooling system

Cooling method	Water-cooled	
Std. T-stat Temp	°C	NA
Max. coolant temp (Prime)	°C	NA
Max. coolant temp (Standby)	°C	NA
Coolant capacity (Engine)	L	14
Coolant capacity (radiator)	L	65
Minimum Pressure Cap	kPa	NA
Radiator	°C	50

● Electrical system

Control voltage	V	24
Starter power	kW	NA
Battery power	CCA	850

AC Alternator					
50HZ		Con. H - 125/40°C		Standby 160/27°C	
KACHAI	V	kW	kVA	kW	kVA
STAMFORD	V	kW	kVA	kW	kVA
S4L1D-G4	380	344	430	380	475
S4L1D-F4	400	332	415	372	465
S4L1D-F4	415	332	415	364	455
60HZ		Con. H - 125/40°C		Standby 160/27°C	
KACHAI	V	kW	kVA	kW	kVA
STAMFORD	V	kW	kVA	kW	kVA
● Main specification					
Excitation method		Self-Excited			
Power factor		0.8 (lagging)			
Number of bearings		single bearing			
Insulation/Temperature Rise		H/H			
Protection level		IP23			
Winding pitch		2/3			
Cooling method		Air-cooled			

Key Features

● **Usage conditions (please contact Kachai if the usage conditions deviates)**

● Installation location: Outdoor or indoor (well-ventilated).

● Ambient temperature: -25 ~ 45°C

● Relative humidity: below 90%

● Altitude ≤ 1000m

● **Factory testing items:**

● Start-up & shutdown test at room temperature

● Protection function test

● Speed regulation performance test

● Load test (0%, 10%, 25%, 50%, 75%, 100%, 110%)

● **Standard paint**

The paint color is based on Kachai's standards, but can also be customized according to the color code provided by the customer.

● Kachai possesses a most advanced fully automated spraying production line, equipped with sandblasting equipment to ensure higher quality;

● The enclosure is painted using Henkel's pretreatment process from Germany and outdoor powder coating from a well-known brand.

● Base frame powder coating: sandblasting process and well-known brand outdoor powder coating;

● **Warranty period**

● The generator is valid for 12 months after delivery, or for 1000 hours of operation (whichever comes first), or for 14 months from the date of shipment to the first customer (i.e., long-term non-installation and use).

Green Generation Company reserves the right to modify any function without prior notice. Weight and dimensions are based on standard products. Illustrations may include optional equipment. The technical data described in this catalog is consistent with the information available at the time of printing. Illustrations and images are for reference only and may not be identical to the actual product. Industrial designs are patent pending.

Key Features

- Heavy-duty, direct-injection, water-cooled diesel engines offer maximum reliability;
- Vertical shaft fan-cooled closed-type water tank radiator;
- Brushless alternators reduce maintenance requirements and meet H/H level insulation and temperature rise requirements;
- Automatic voltage regulators (AVR) enable precise voltage regulation;
- The heavy-duty chassis features a sheet metal structure, and the engine and generator are fitted with natural rubber shock absorbers connected to the chassis to minimize unit vibration.
- The silent, soundproof, weather-resistant steel shell. The fully enclosed design ensures safe operation without human intervention. The built-in fuel tank is equipped with a direct-reading mechanical fuel gauge.
- Powder coatings with advanced pretreatment and spraying processes are durable and waterproof.
- The standard configuration includes an oil-water separator, which can effectively remove some of the water from the fuel and extend the engine's service life
- The automatic start/stop control function allows the generator to start automatically in the event of a public power outage;
- A comprehensive engine and generator detection and protection system that monitors and protects parameters such as water temperature, oil pressure, voltage, and power in real time.
- Standard configuration includes a 3-pole main circuit breaker .
- Standard configuration includes Varta maintenance-free batteries, battery negative terminal circuit breaker, and battery charger.
- Complete technical documentation, including: generator set instruction manual, outline drawings, electrical schematics, and accompanying materials for the engine and generator.

Optional Features

- ☐ Heavy-duty desert air filter & cyclone air filter pre-filter
- ☐ Fuel-water separator with manual/electric oil pump
- ☐ Fuel-water separator with electric heating and electric oil pump
- ☐ Oil heater
- ☐ AC/Fuel Heated Water Jacket Heater
- ☐ Manual oil drain pump
- ☐ Remote water tank and heat exchanger
- **Alternator**
 - ☐ PMG/AREP Excitation system (base number ≥ 224)
 - ☐ Harsh Environment Protection
 - ☐ Air intake filter (Power drop 5%)
 - ☐ IP44 protection grade (Power drop 10%)
 - ☐ Winding RTD (Winding Temperature Sensing Component)
 - ☐ Bearing RTD (Bearing Temperature Measurement Component)
- **Electrical components**
 - ☐ RS485, 4G and GPS Wireless communication card
 - ☐ ABB or Schneider main circuit breaker
 - ☐ 4P breaker
 - ☐ Electric circuit breaker (standby current ≤ 1600A)
 - ☐ AGM Maintenance-free batteries (non-hazardous goods)
 - ☐ Automatic parallel/synchronization system
 - ☐ ATS cabinet (Dual power transfer cabinet)
 - ☐ Aviation sockets (European /Australian standard, etc.)
 - ☐ Other brands/models of controllers
- **Mechanical structure**
 - ☐ Independent steel fuel tank (500 ~ 6600L)
 - ☐ Silent 12 & 24-hour fuel tank
 - ☐ Double-walled fuel tank
 - ☐ Trailer chassis
 - ☐ Air intake/exhaust noise reduction array
 - ☐ Quick switch for built-in and external fuel tanks