

Generator set
Sound-proof type
E41KS

# **SPECIFICATIONS**





# 1 Standards & Conditions

#### **Design Standards**

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

Electrical devices have obtained the certification of:

- CSA
- UL

# **Environmental Operating Conditions**

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters.

# **Factory Inspection**

- Inspection items.
- · Protection devices working test.
- · Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

#### **Painting Process**

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

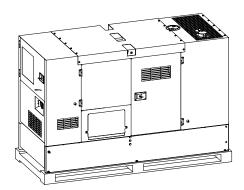
# 2 General Features

- Sˇà[æengine V3800-CR-TE5BG2
- Close coupled to Š^\[^ÂÛ[ { ^\ alternator LSA42.3M7
- Qc^||ā\* ^} of
   fontrol module PLC-7420
- ABB main circuit breaker: 63A
- Rotate speed governor: ECU
- Exhaust gas purification system with EGR and DOC
- Excitation system: Self excited, SHUNT
- Key switch

- · Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/72AH battery and charger
- · Lockable battery isolator switch
- · Power coated canopy
- 50°C radiator
- · Oil pump on the engine
- · Steel base frame
- Vibration isolators between the engine/alternator and base frame
- · Dry type air filter
- · Base fuel tank for 25 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

# 3 Equipment Specification

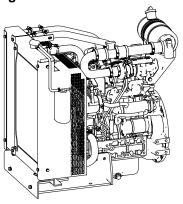
#### General technical data



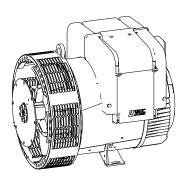
Model	E41KS
Structure type	RS
Tank capacity	180L
Dry weight	1404kg
Sound pressure level @7m	66dBA
Dimensions L×W×H	2508x1081x1709mm
Prime Power	41kVA/32.8kW
Standby Power	45kVA/36.1kW

Voltage	208	3V	220V		230	V	240V	
Ampere	124.	9A	118.1A		112.	12.3A		08.3A
Genset Fuel Consumption								
Frequency/Load 25%			50%	7	5%	100%		110%
60Hz (L/h) N/A		5.8	8	3.2	10	.7	12.1	

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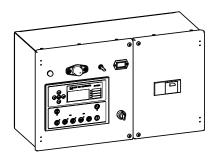


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Engine Manufacturer/Brand	Kubota
Engine Model	V3800-CR-TE5BG2
Dimensions L×W×H	815×552×791mm
Dry Weigh (approx.)	290Kg
Number of Cylinders	4
Bore	100mm
Stroke	120mm
Displacement	3.7L
Compression Ratio	19.0
Type of injection	Center Direct Injection
Intake System	Turbocharged
Intake Resistance	≤ 1.96kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of FuelNo.2-D S15, U	Itra Low Sulfur Fuel Only
Type of OilClass CJ-4/CK-4 oil	as per API classification
Oil Capacity	13.2L
Type of Coolant	Glycol mixture
Coolant Capacity	19L
Back Pressure	≤7.1kPa
Prime Power	38kW
Fuel Consumption(100%load)	10.7L/h



Alternator Manufacturer/Brane	dLeroy Some
Alternator Model	LSA42.3M7
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	H
Winding Pitch	2/3
Terminals	12
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250 rpm
Air Flow 0.1	10m³/s(50HZ),0.13m³/s(60HZ)
Voltage Regulation	±0.5%
Total harmonic TGH / THCat	no load < 3 % - on load < 2%
Telephone Interference	THF<2%;TIF<50

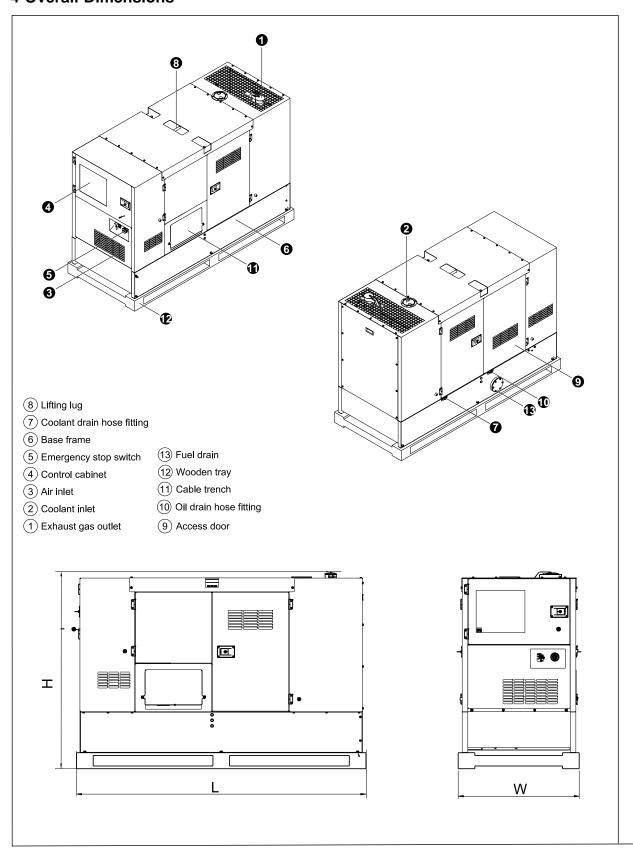
# PLC-7420 Control System



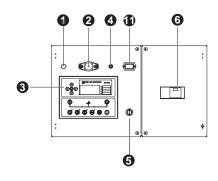
PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

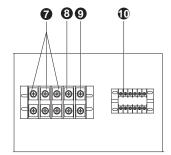
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

# **4 Overall Dimensions**

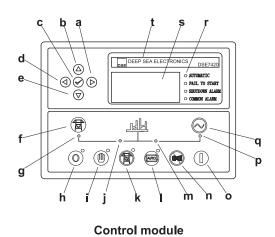


# **5 Control System**





Control & field wiring cabinet



Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control module
4	Control cabinet lamp switch
5	Key switch
6	Main circuit breaker
7	Live wire terminal
8	Neutral wire terminal
9	Ground wire terminal
10	Remote control/Mains input
11	Time counter

a Button (next page) b Button (increase value / previous item) c Button (accept) d Button (previous page)	
c Button (accept)	
1 /	
d Button (previous page)	
1 0 7	
e Button (decrease value / next item)	
f Button (transfer the load to the mains su when in Manual mode only)	pply,
9 Mains supply available LED	
h Stop / Reset button	
i Manual button (Manual control mode)	
j Mains supply on load LED	
k Test button (Test mode)	
I Auto button (Auto mode)	
m Genset on load LED	
n Mute/Lamp test button	
o Start button (Manual)	
p Genset available LED	
Button (transfer the load to the genset, when in Manual mode only)	
r Alarm LED (4 alarm items)	
s LCD display	
t Control module name	

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