

Generator set
Sound-proof type
DT43C5S-AU

# SPECIFICATIONS



# 50 Hz @ 1500rpm,3-phase/5-wiring



### 1 Standards & Conditions

# **Design Standards**

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

# **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 90%.
- Altitude: Below one thousand (1000) meters above sea level.

#### **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.

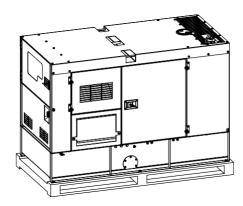
# **2 General Features**

- Cummins engine 4BT3.9-G1
- Close coupled to Stamford alternator S1L2-N1
- Microprocessor control module PLC-920
- Schneider main circuit breaker: 63A
- · Rotate speed governor: Mechanical governor
- · Excitation system: Self excited, SHUNT
- A.V.R model: SX440
- Key switch
- Emergency stop switch
- ATS(automatic transfer switch)receptacle

- Remote run connector
- 1x12V/60AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- · Steel base frame
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 34 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

# 3 Equipment

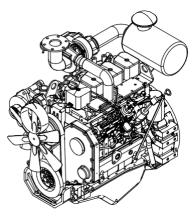
#### General technical data



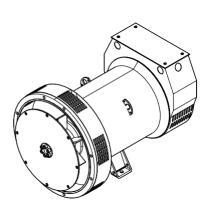
Model	DT43C5S-AU
Fuel tank	340L
Dry weight	1173kg
Sound pressure level @ 7m	62.0dBA
Dimensions LxWxH	2300x946x1735mm
Standby Power	47kVA/38kW
Prime Power	43kVA/34kW

Voltage		380V 400V 41		5V			
Ampere	65.3A		62	62.1A		59.8A	
Genset Fuel Consumption							
Frequency/Load		25%	50%	75%	100%	110%	
50Hz (L/h)		2.7	5.2	7.9	10.0	11.2	

# 3RZHU 6\VWHP

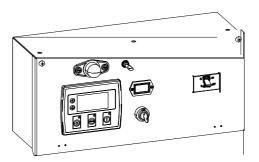


~
Engine Manufacturer/BrandCummins
Engine Model
Dimensions LxWxHN/A
Dry Weigh (approx.)321kg
Number of Cylinders4
Bore
Stroke120mm
Displacement
Compression RatioN/A
Type of injectionDirect injection
Intake SystemTurbo charged
Intake Resistance
Cooling SystemWater cooled
FanPusher
Battery Voltage/24V
Type of FuelNo.2 or ASTM D2
Type of OilAPI CD/SE or CCMCD4
Oil Capacity
Type of Coolant
Coolant Capacity
Back Pressure≦10.1kPa
Standby Power
Prime Power



Alternator Manufacturer/Brand	Stamford
Alternator Model	S1L2-N1
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% coppe
Insulation Class	
Winding Pitch	2/3
Terminals	12
Drip Proof	P23
Altitude	≤1000m
Overspeed	2250rpm
Air Flow	N/A
Voltage Regulation	±1.0%
Total Harmonic TGH / THCat no load	< 1.5 % - on load < 5%
Telephone Interference	THF<2%:TIF<50

# **PLC-920 Control System**

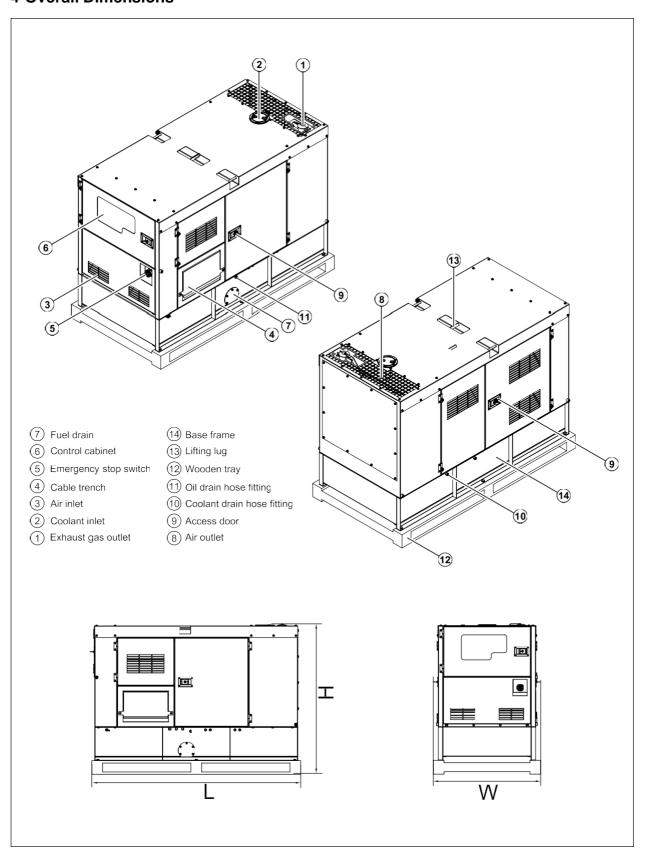


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first fault condition of an engine failure.

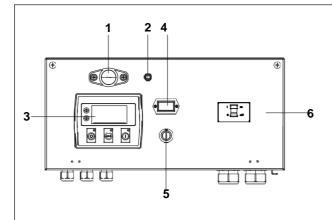
# **Standard Control Function**

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

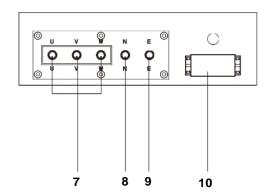
# **4 Overall Dimensions**



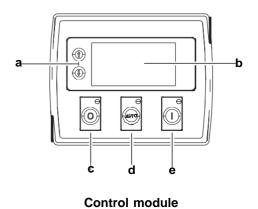
# 5 Control System



Ref.	Description
1	Control cabinet lamp
2	Control cabinet lamp switch
3	Control module
4	Time counter
5	Key switch
6	Main circuit breaker
7	Live wire terminals
8	Neutral wire terminal
9	Ground wire terminal
10	Mains input/remote communication connector



Control & field wiring cabinet



Ref.	Description
а	Navigation button£» Accept (Configuration mode only)
b	Main status display
С	Stop/reset button£»  Next page (Configuration mode only)
d	Auto start button£»  Decrease value/next item (Configuration mode only)
е	Start button£» Increase value/next item (Configuration mode only)

1000033791-A2-E

10.2020