

Generator set
Sound-proof type
SDT20P5S-AU

SPECIFICATIONS



50 Hz @ 1500rpm,1-phase/3-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.

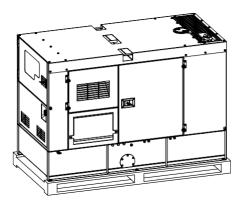
2 General Features

- PowerLink engine 4D2.7G1
- Close coupled to PowerLink alternator PL1J
- Microprocessor control module PLC-920
- Main circuit breaker: 100A
- 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 24 hours running
- · Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment

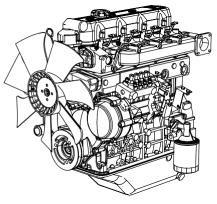
General technical data



Model	SDT20P5S-AU
Tank capacity	140L
Dry weight	730kg
Sound pressure level @ 7m	65.0dBA
Dimensions LxWxH	1750x820x1000mm
Standby Power	22kVA/18kW
Prime Power	20kVA/16kW

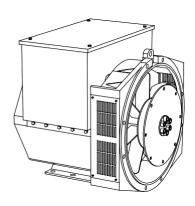
Voltage	220V		230V 240V		40V	
Ampere	90.9A		87.0A	8	83.3A	
Genset Fuel Consumption						
Frequency/Load	25%	50%	75%	100%	110%	
50Hz (L/h)	1.7	3.0	4.2	5.7	6.6	

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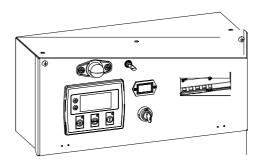
Engine Manufacturer/Brand	Powerlink
Engine Model	4D2.7G1
Dimensions LxWxH	750x565x696mm
Dry Weigh (approx.)	260kg
Number of Cylinders	
Bore	90mm
Stroke	105mm
Displacement	2.7L
Compression Ratio	18.5
Type of injection	Direct injection
Intake System	Natural aspirated
Intake Resistance	≦5kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	V
Type of Fuel	No.2 or ASTM D975
Type of Oil	API CF/SE or CCMCF4
Oil Capacity	6.5L
Type of Coolant	Glycol mixture
Coolant Capacity	5.0L
Back Pressure	≦10.1kPa
Standby Power	24kW
Prime Power	22kW

Alternator



Alternator Manufacturer/Brand	PowerLink
Alternator Model	PL1E
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	H
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

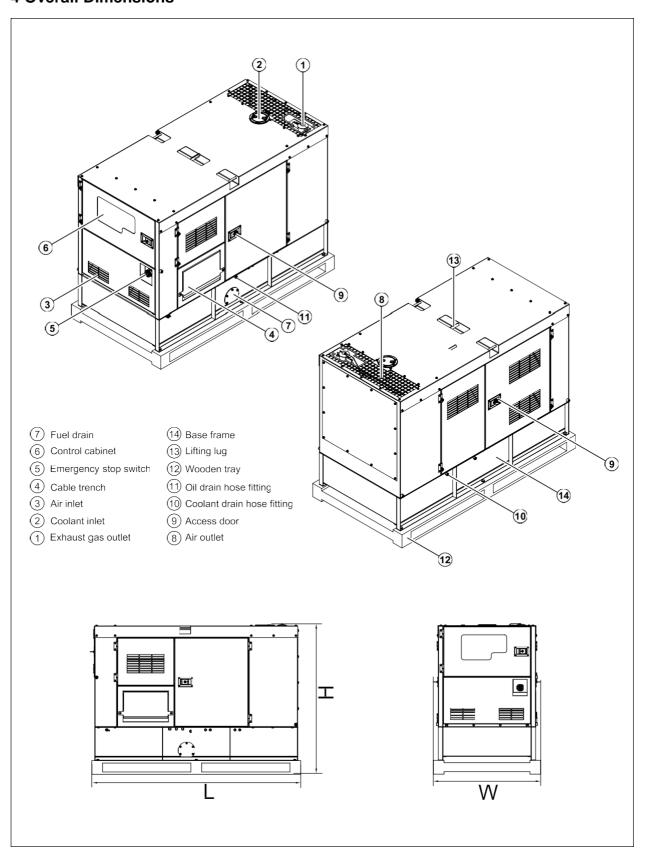


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first fault condition of an engine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

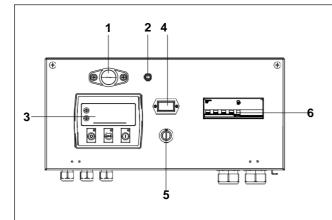
Standard Control Function

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

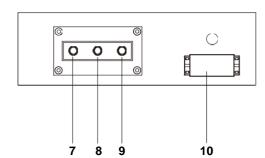
4 Overall Dimensions



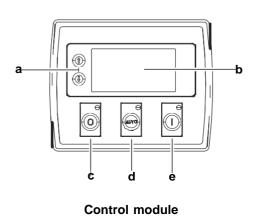
5 Control System



Description
Control cabinet lamp
Control cabinet lamp switch
Control module
Time counter
Key switch
Main circuit breaker
Live wire terminals
Neutral wire terminal
Ground wire terminal
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)

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