

1 STANDARDS & CONDITIONS

DESIGN STANDARDS

The designs and the productions are in conformity with:

- Conformance Européenne (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 45°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.

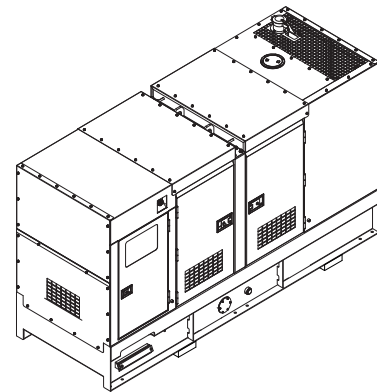
2 GENERAL FEATURES

- Powerlink engine VR6-13TAG3
- Close coupled to Power alternator PL5S
- Microprocessor control module PLC-920
- Main circuit breaker: 800A
- 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

- 2x12V/120AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame with forklift slots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank with 12 hours running
- Drain points for fuel tank
- Operator's Manual / Specifications

3 EQUIPMENT SPECIFICATION

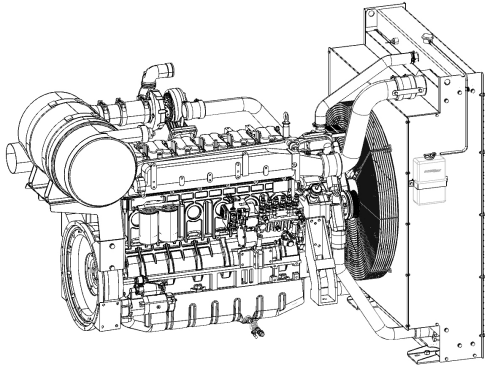
GENERAL TECHNICAL DATA



Model.....	VR450XS-AU
Tank capacity.....	1200L
Dry weight.....	4800kg
Sound pressure level @ 7m.....	74.0dBA
Dimensions L×W×H.....	4240x1420x2500mm
Standby Power	495kVA/396kW
Prime Power	450kVA/360kW

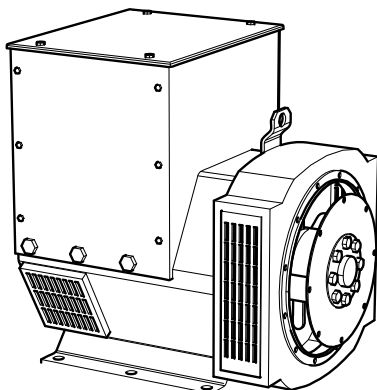
Voltage	380V	400V	415V		
Ampere	683.7A	649.5A	626.0A		
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	26	50	73	99	109

POWER SYSTEM



Engine Manufacturer/Brand.....	Powerlink
Engine Model.....	VR6-13TAG3
Dimensions L×W×H.....	2372x1120x1488mm
Dry Weigh (approx.)	1950kg
Number of Cylinders.....	6
Bore.....	129mm
Stroke.....	165mm
Displacement.....	12.94L
Compression Ratio.....	16.5
Type of injection.....	Direct injection
Intake System.....	Turbocharged and charge air cooled
Intake Resistance	≤ 5kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel.....	No.2 or ASTM D975
Type of Oil	API CF/SE or CCMCF4
Oil Capacity	34.0L
Type of Coolant	Glycol mixture
Coolant Capacity	58.0L
Back Pressure.....	≤ 10.1kPa
Standby Power	441kW
Prime Power	401kW

ALTERNATOR



Alternator Manufacturer/Brand	Powerlink
Alternator Model	PL55
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	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

DSE4520 CONTROL SYSTEM

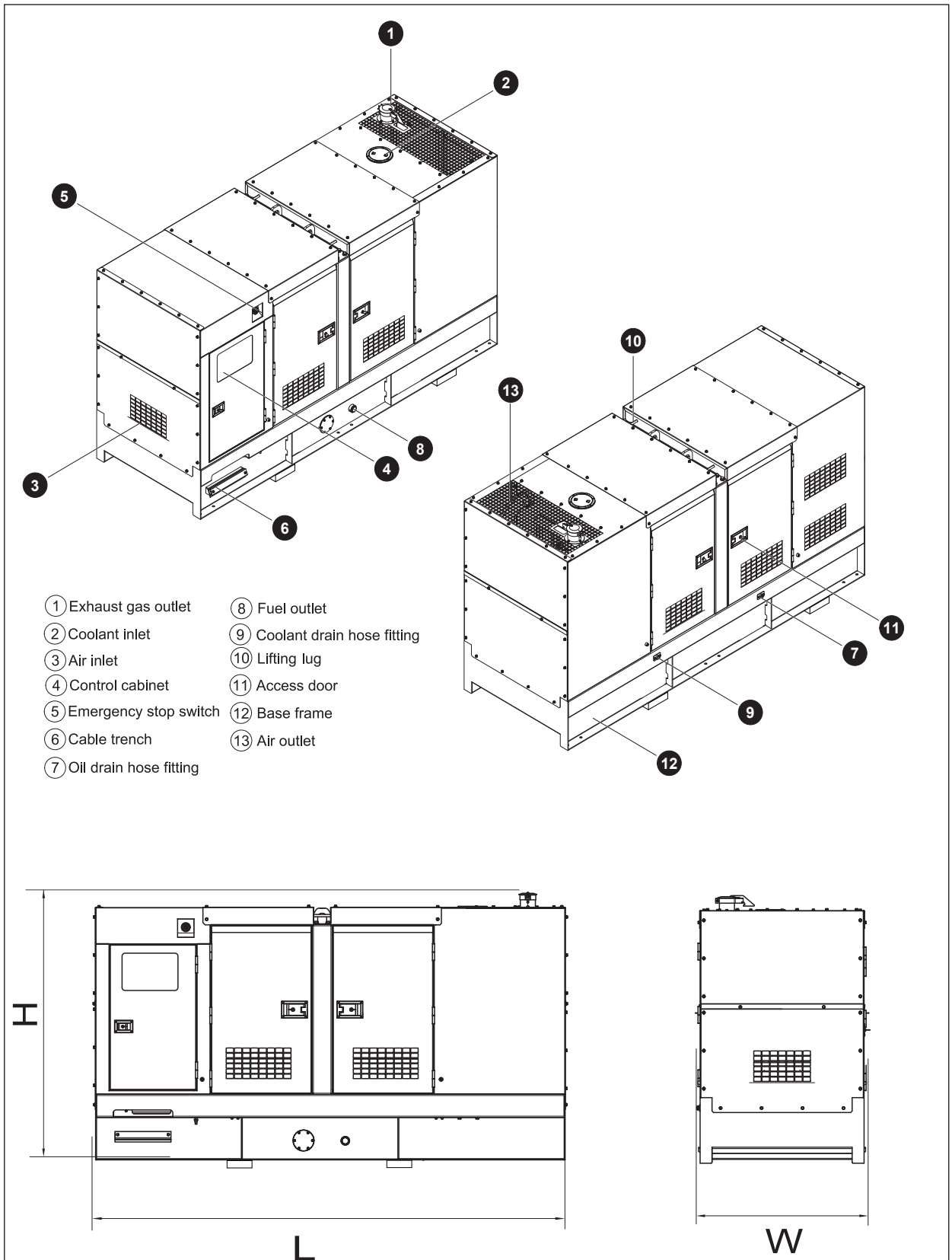


The DSW4520 is a compact Auto Mains (Utility) Failure Control Module that have been developed to provide an outstanding range of features within a compact enclosure.

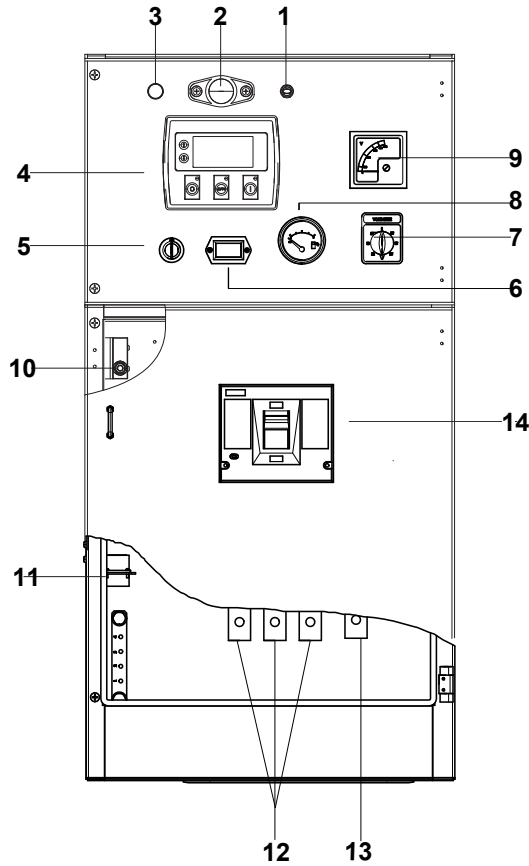
Product highlights:

- Large back-lit icon LCD display.
- Heated display option.
- 3-phase generator sensing.
- 3-phase generator and mains (utility) sensing.
- 600 V ph-ph nominal system compatibility.
- Generator & load power monitoring (kW, kVA, Kv Ar, pf).
- Generator overload protection (kW).
- Configurable inputs & outputs.
- Battery voltage monitoring.
- CAN & alternator speed sensing.
- Engine speed protection, engine hours counter, engine pre-heat, engine run-time scheduler, engine idle control for start/stop.

4 OVERALL DIMENSIONS

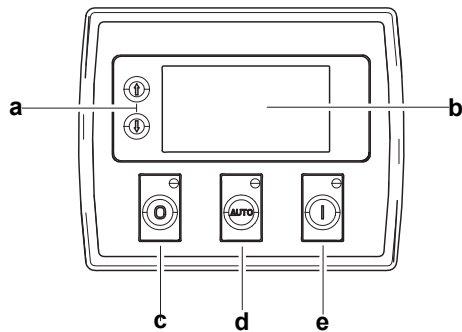


5 CONTROL SYSTEM



Control & field wiring cabinet

Ref.	Description
1	Control cabinet lamp switch
2	Control cabinet lamp
3	Charge indicator
4	Control module
5	Key switch
6	Time counter
7	Voltage changer-over switch
8	Fuel level meter
9	Voltage meter
10	Limit switch
11	Mains input/Remote control/ATS connector
12	Live wire terminal
13	Neutral wire terminal
14	Main circuit breaker



Control module

Ref.	Description
a	Navigation button«» Accept (Configuration mode only)
b	Main status display
c	Stop/reset button«» Next page (Configuration mode only)
d	Auto start button«» Decrease value/next item (Configuration mode only)
e	Start button«» Increase value/next item (Configuration mode only)