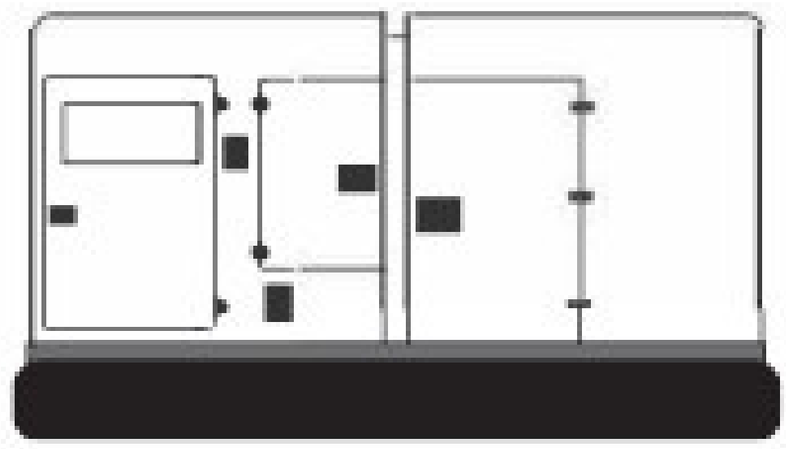
ZENITH

THE PINNACLE OF POWER

ZPDG550S

SPECIFICATIONS



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ZPDG550S

50 Hz @ 1500rpm, 3-phase/4-wiring

Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-5:2005
- GB/T2820.5-2009

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated)
- Ambient temperature: -25 degrees C TO 45 degrees C. The coolant heater is needed when the temperature is below 5 degrees C
- Humidity: Less than 80%
- Altitude: Below one thousand (1000) metres.

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 colours are based on the manufacturer’s standard.
- The customer could also choose the colour which the manufacturer offers.

General Features

- Perkins engine 2506A-E15TAG2
- Close coupled to a Leroy Somer alternator TAL473C
- Microprocessor control module DSE-7420
- Motorised circuit breaker
- Rotate speed governor: Electronic fuel injection governor
- Excitation System: Self excited, SHUNT
- A.V.R.Model: R150
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2 x 12V/120AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50 degrees C, radiator
- Oil pump on the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 9 hours running
- Drain points for fuel tank
- Operation Manual/Specifications

Equipment Specifications

General technical data

Model : ZPDG550S

Tank capacity: 840L

Dry weight: 2318kg

Noise Level: @ 7m: 77.3dBA

Dimensions LxWxH: 4592x1535x2555mm

Standby Power: 550kVA/440kW

Prime Power: 500kVA/400kW

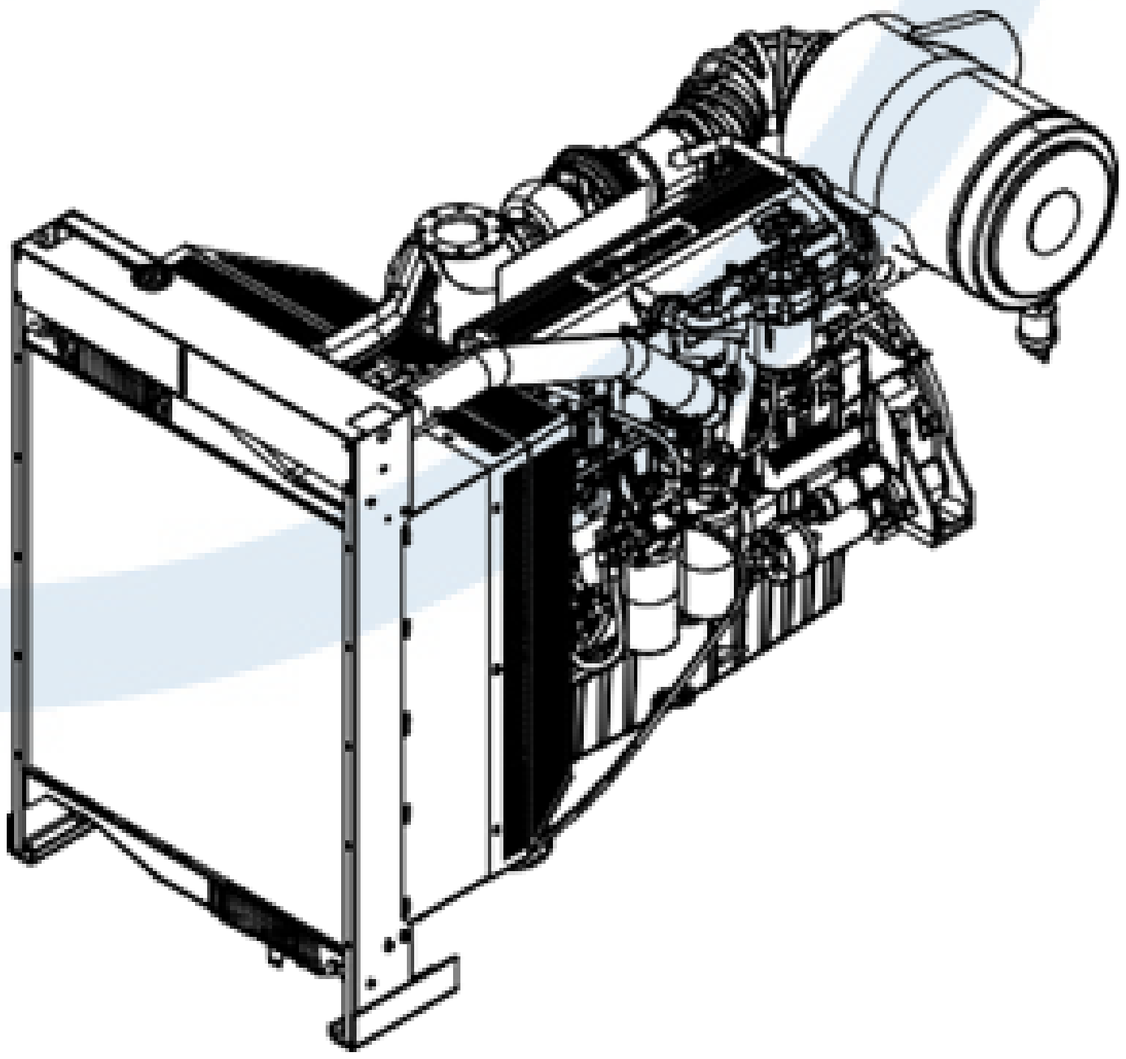
Voltage	380V	400V	415V	440V
Ampere	759.7A	721.7A	695.6A	656.1A

Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	55.0	81.0	106.0	115.0

Power System

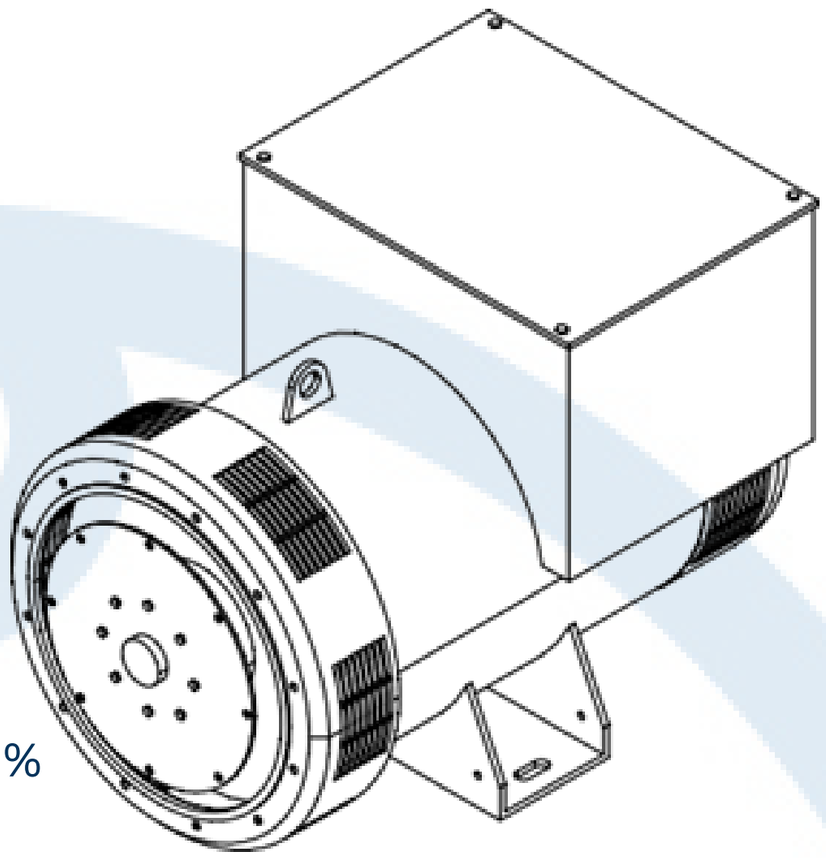
Engine

Engine Manufacturer/Brand: Perkins
Engine Model: 2506A-E15TAG2
Dimensions: 2657×1120×1718mm
Dry Weigh (approx.) : 1633kg
Number of Cylinders: 6
Bore: 137mm
Stroke: 171mm
Displacement: 15.2L
Compression Ratio: 16
Type of injection: MEUI
Intake System: Turbocharged, air-to-air charge cooled
Intake Resistance: 6.2kPa
Cooling System: Water cooled
Fan: Pusher
Battery Voltage: 24V
Type of Fuel: BS2869 class A2 or BS EN590
Type of Oil: API CI4 or ACEA E5
Oil Capacity: 62L
Coolant capacity: .58L
Type of Coolant: Glycol mixture
Back Pressure: . 6.8kPa
Standby Power: 495kW
Prime Power: 451kW
Fuel Consumption(100%load): 211g/kW.h



Alternator

Alternator Manufacturer/Brand: Leroy Somer
Alternator Model : TAL0473C
Exciter: Brushless
Cooling Fan: Cast alloy aluminium
Windings: 100% copper
Insulation Class: H
Winding Pitch: 2/3
Terminals: 6
Drip Proof: IP23
Altitude: ≤1000m
Overspeed: 2250rpm
Air Flow: 0.9m³/s(50Hz),1.1m³/s(60Hz)
Voltage Regulation: ±0.5%
Total harmonic TGH / THCat no load < 1,5 % - on load < 5 %
Telephone Interference: THF<2%;TIF<50

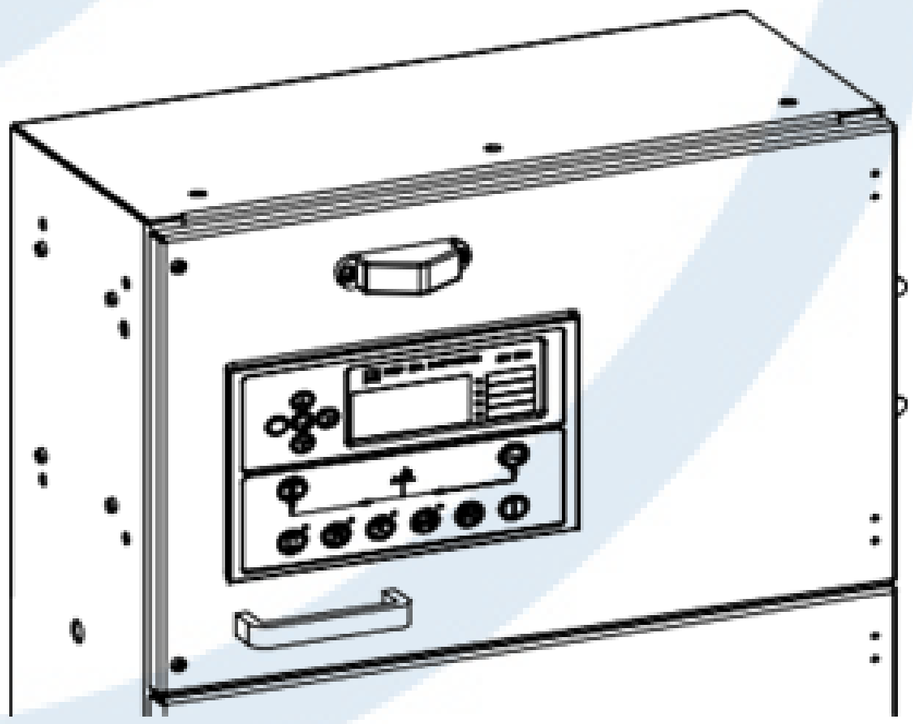


DSE-7420 Control System

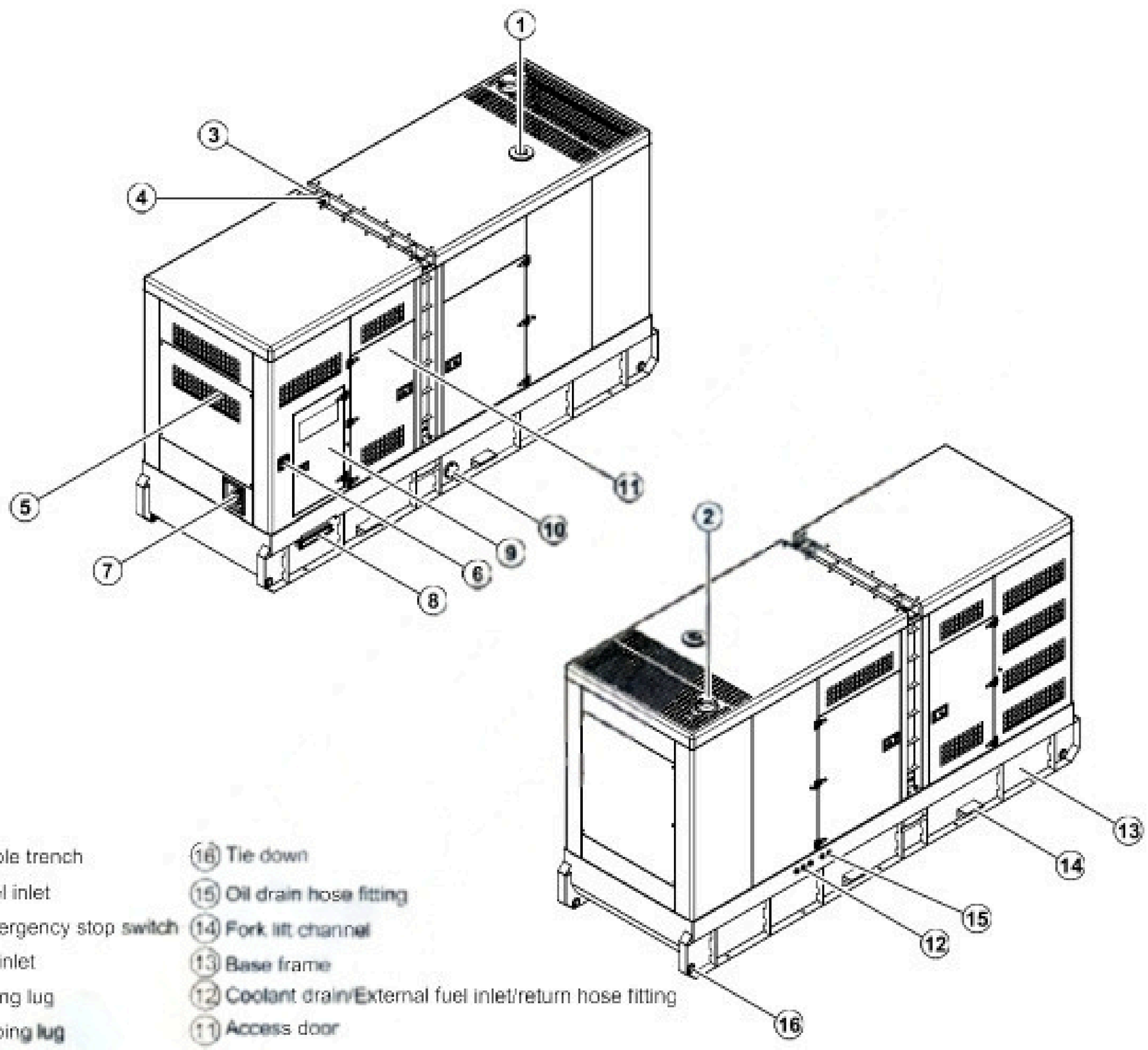
DSE-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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.

Standard Control Function

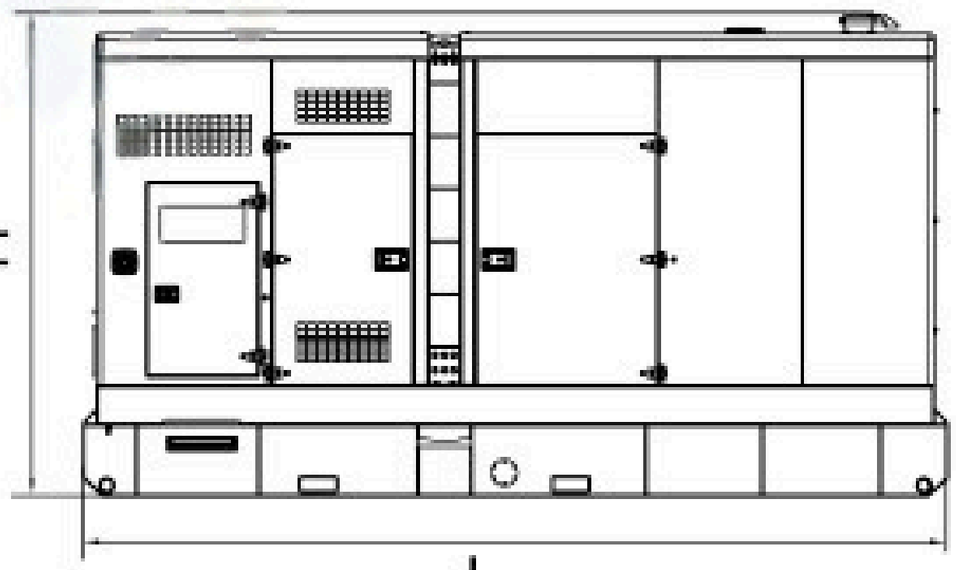
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, 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

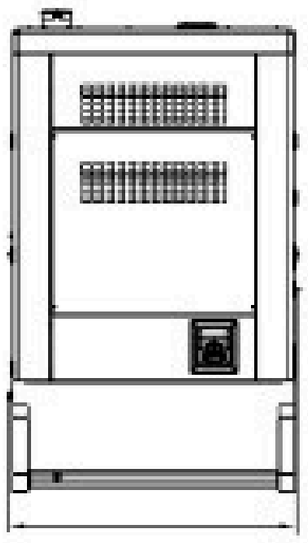


Overall Dimensions

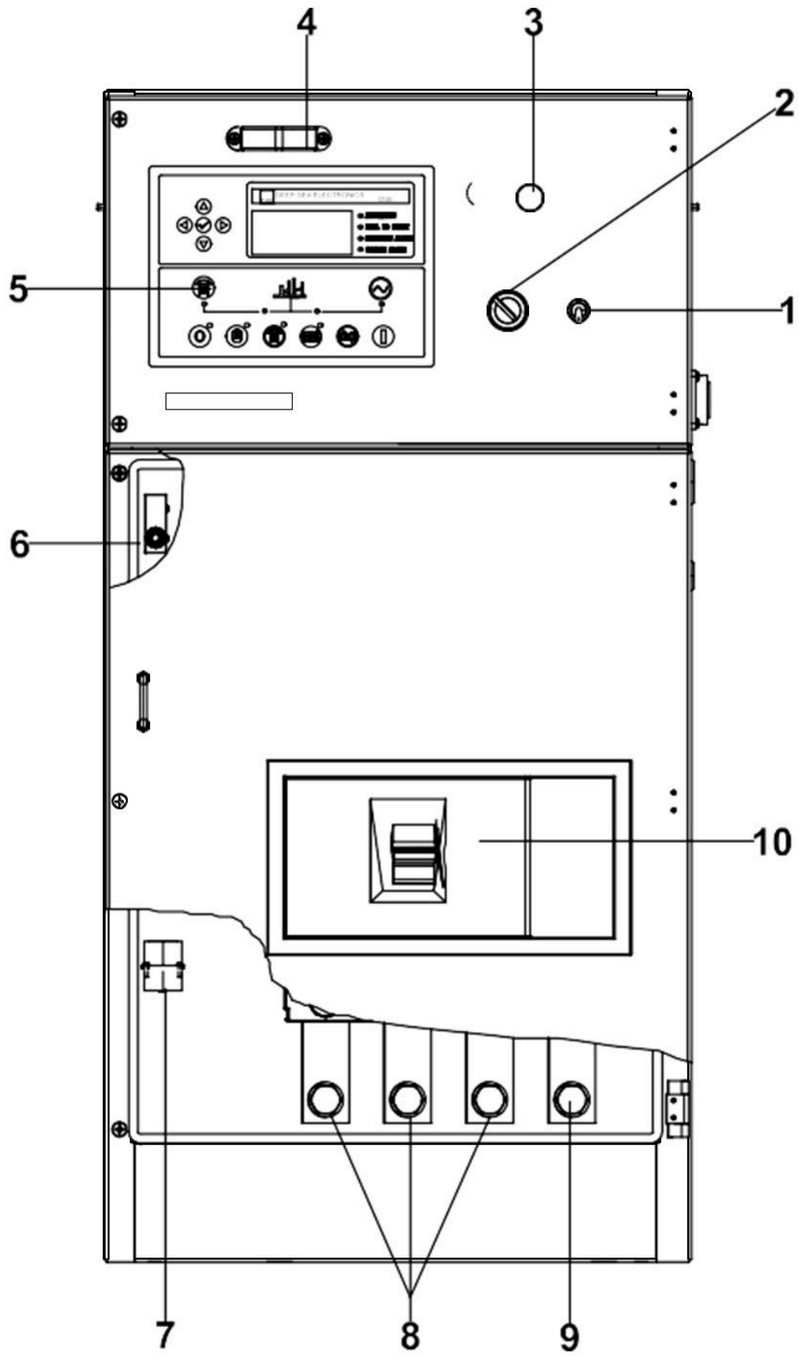


(8) Cable trench
(7) Fuel inlet
(6) Emergency stop switch
(5) Air inlet
(4) Lifting lug
(3) Roping lug
(2) Exhaust gas outlet
(1) Coolant inlet
(16) Tie down
(15) Oil drain hose fitting
(14) Fork lift channel
(13) Base frame
(12) Coolant drain/External fuel inlet/return hose fitting
(11) Access door
(10) Fuel drain
(9) Control cabinet



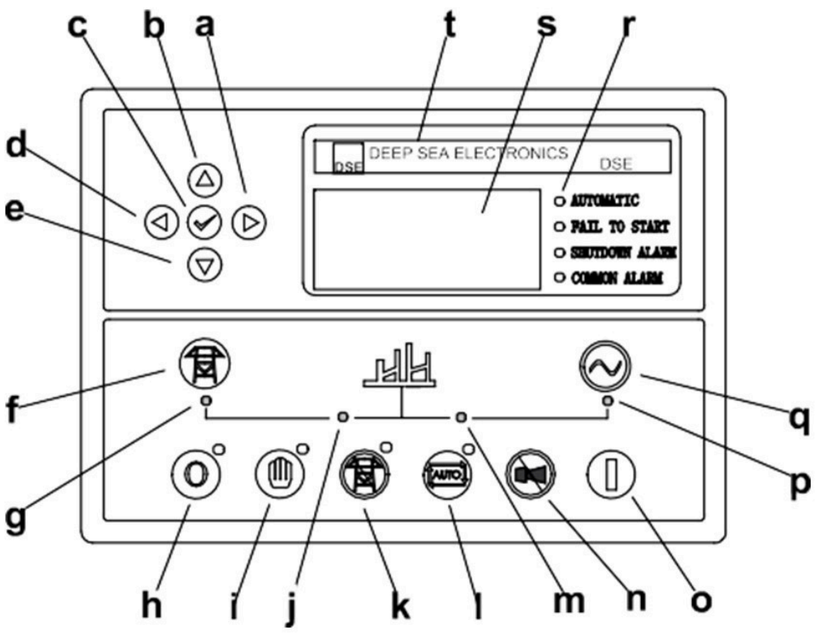


Control System



Control & field wiring cabinet

Ref.	Description
1	Control panel lamp switch
2	Key switch
3	Charge indicator
4	Control panel lamp
5	Control module
6	Limit switch
7	Mains input/remote/ATS/AMF communication connector
8	Live wire terminals
9	Neutral wire terminal
10	Main circuit breaker



Control Panel

a	Button (next page)
b	Button (increase value / previous item)
c	Button (accept)
d	Button (previous page)
e	Button (decrease value / next item)
f	Button (transfer the load to the mains supply, when in Manual mode only)
g	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)
l	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
o	Start button (Manual)
p	Genset available LED
q	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