ZENITH

THE PINNACLE OF POWER

ZPDG198S

SPECIFICATIONS

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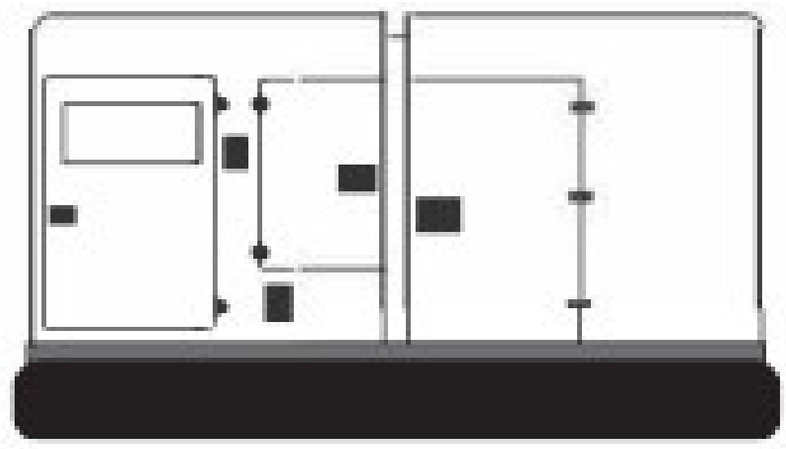


ZPDG198S

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 50 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 1106A-70TAG3
- Close coupled to a Leroy Somer alternator TAL-A44-L
- Microprocessor control module PLC-7420
- Main circuit breaker: 320A
- Rotate speed governor: Mechanical governor
- Excitation System: Self excited, SHUNT
- A.V.R.Model: R120
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1 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 10 hours running
- Drain points for fuel tank
- Operation Manual/Specifications

Equipment Specifications

General technical data

Model : ZPDG198S

Tank capacity: 380L

Dry weight: 2577kg

Sound pressure Level: @ 1m/7m: 74.1 dBA

Dimensions LxWxH: 3468*1112*1848mm

Standby Power: 198kVA/158kW

Prime Power: 180kVA/144kW

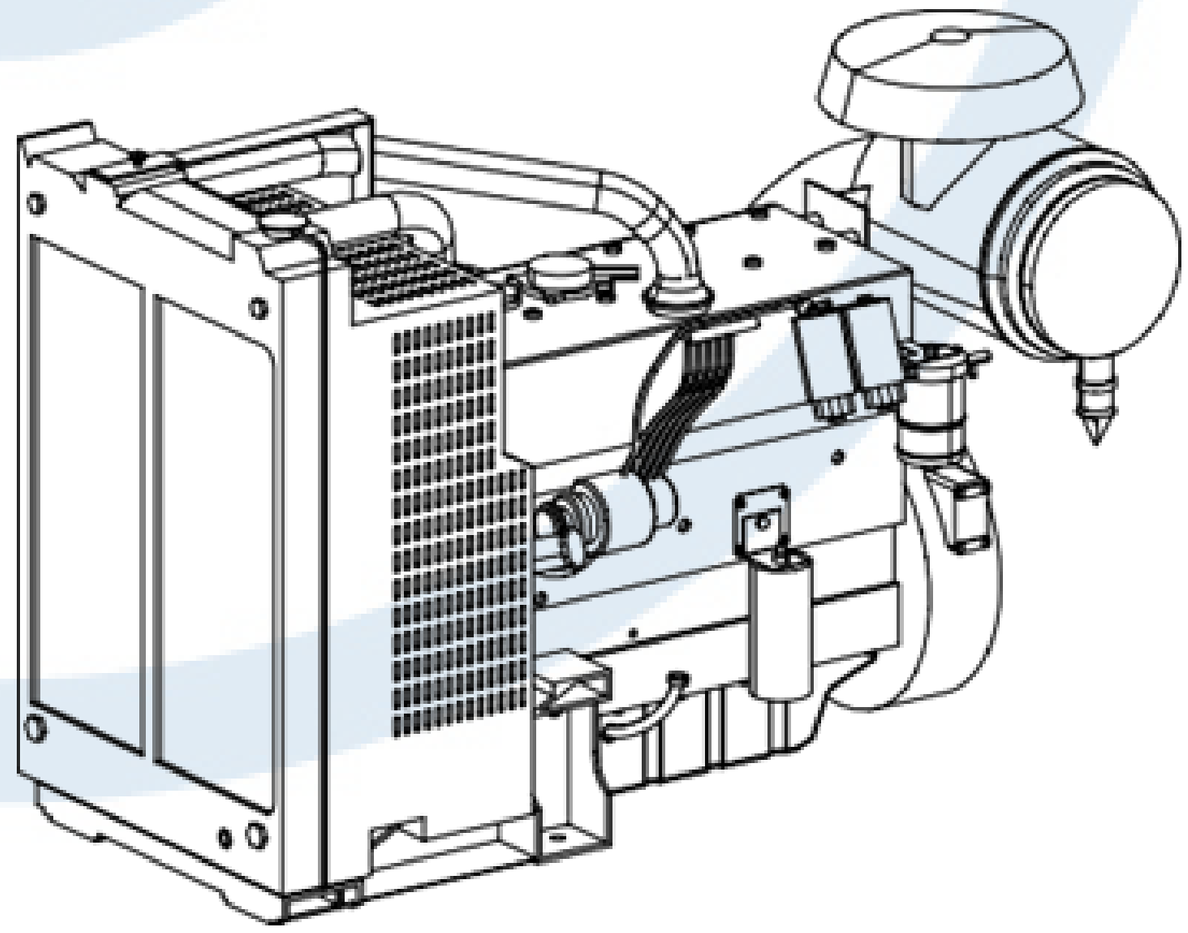
Voltage	380V	400V	415V	440V
Ampere	273.4A	259.8A	250.4A	236.1A

Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	10.8	20.1	31.8	41.6	44.6

Power System

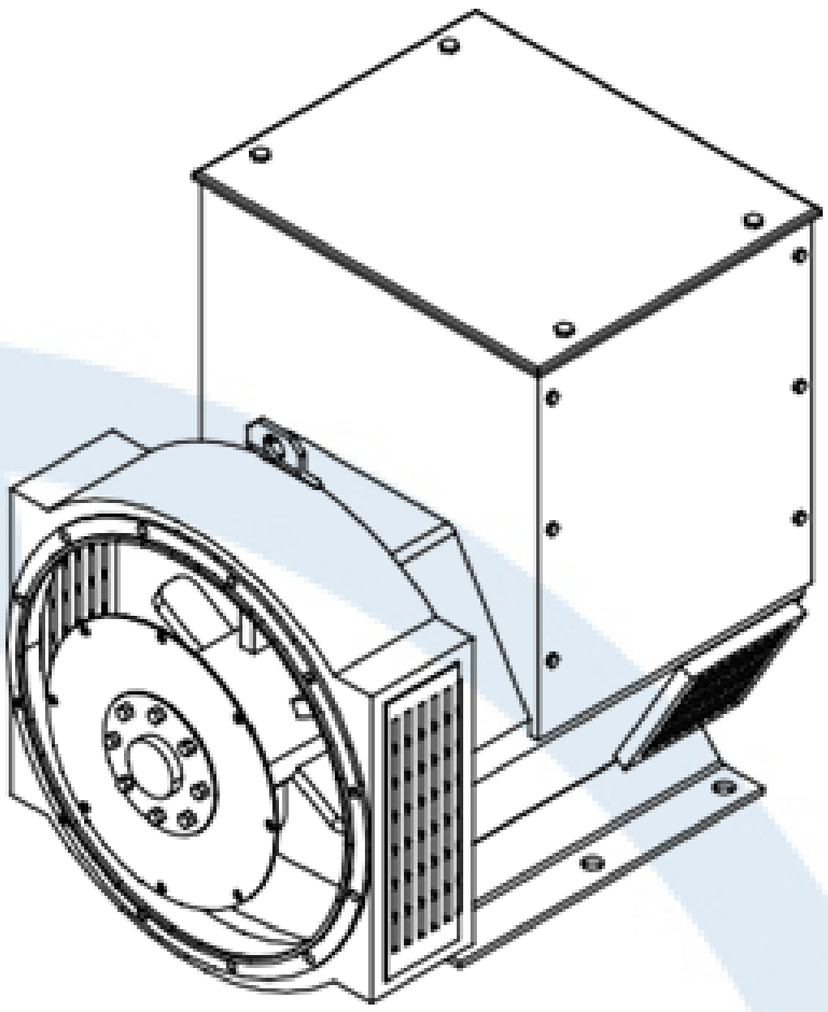
Engine

Engine Manufacturer/Brand: Perkins
Engine Model: 1106A-70TAG3
Dimensions: L×W×H: 1763×756×1142mm
Dry Weigh (approx.) : 788kg
Number of Cylinders: 6
Bore: 105mm
Stroke: 135mm
Displacement: 7.0L
Compression Ratio: 16
Type of injection: Direct injection
Intake System: Turbocharged and air charge cooled
Intake Resistance: 8kPa
Cooling System: Water cooled
Fan: Pusher
Battery Voltage: 12V
Type of Fuel: ASTM D975, Class 1D & Class 2D
Type of Oil: API-CH4/ACEA E5
Oil Capacity: 16.5L
Type of Coolant: Glycol mixture
Coolant Capacity: 21L
Back Pressure: 6.0kPa
Standby Power: 160kW
Prime Power: 144kW
Fuel Consumption(100%load): 41.6L/h



Alternator

Alternator Manufacturer/Brand: Leroy Somer
Alternator Model : TAL-A44-L
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: 0.29m³/s(50Hz), 0.34m³/s(60Hz)
Voltage Regulation: ±1.0%
Total harmonic TGH / THCat no load < 3.5 % - on load < 5%
Telephone Interference: THF<2%;TIF<50

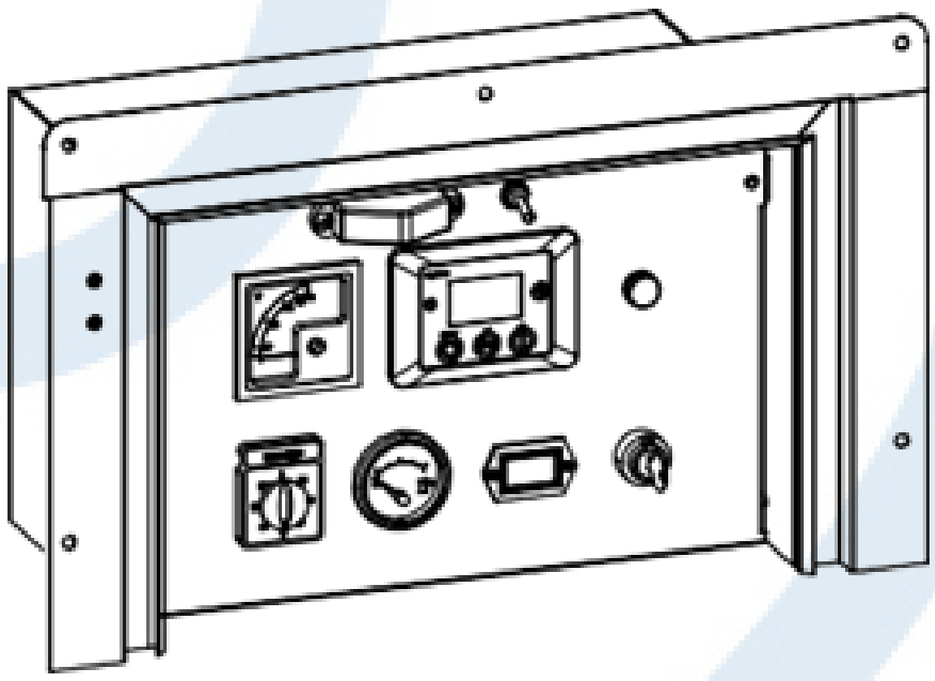


PLC-920 Control System

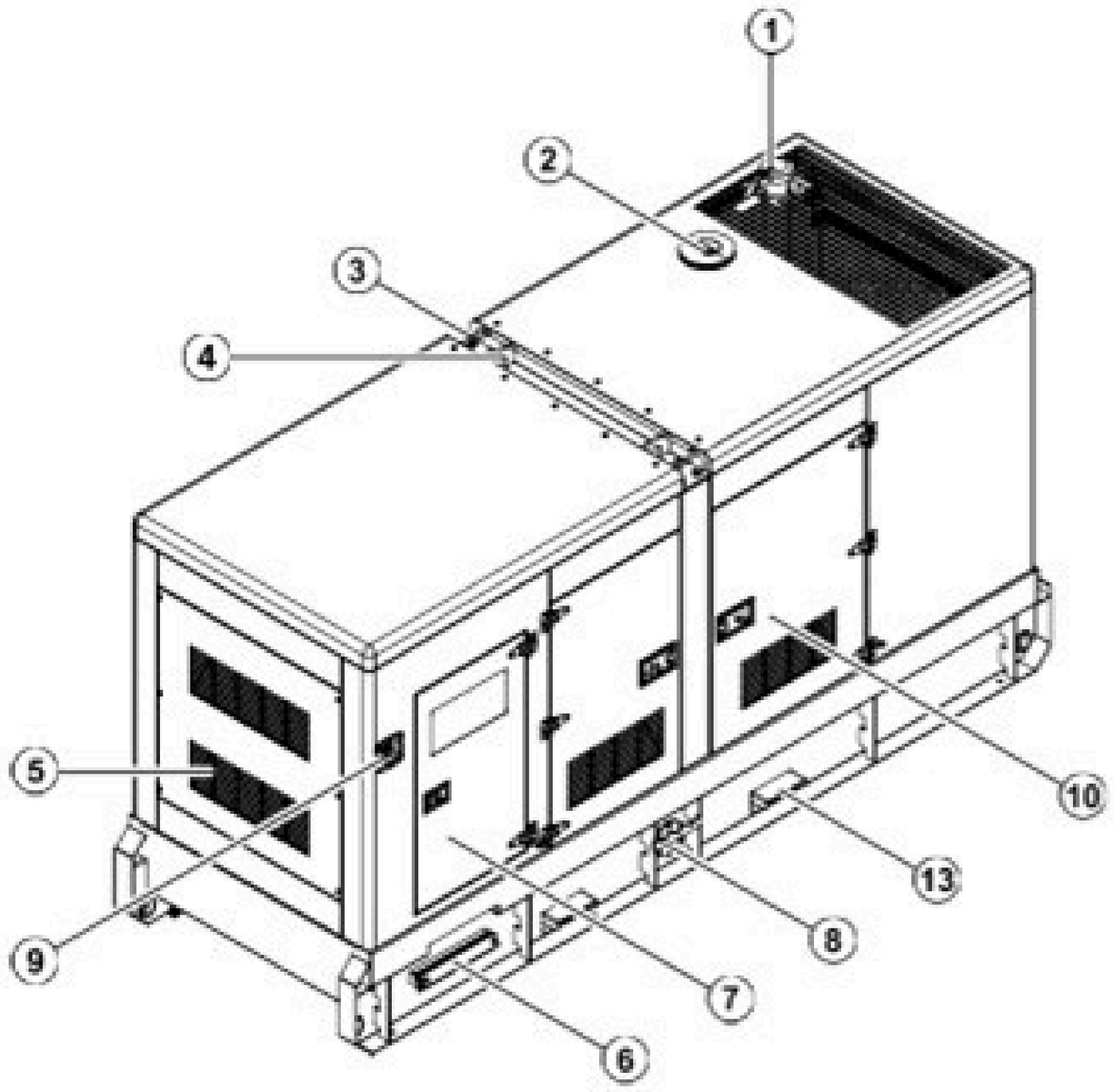
PLC920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

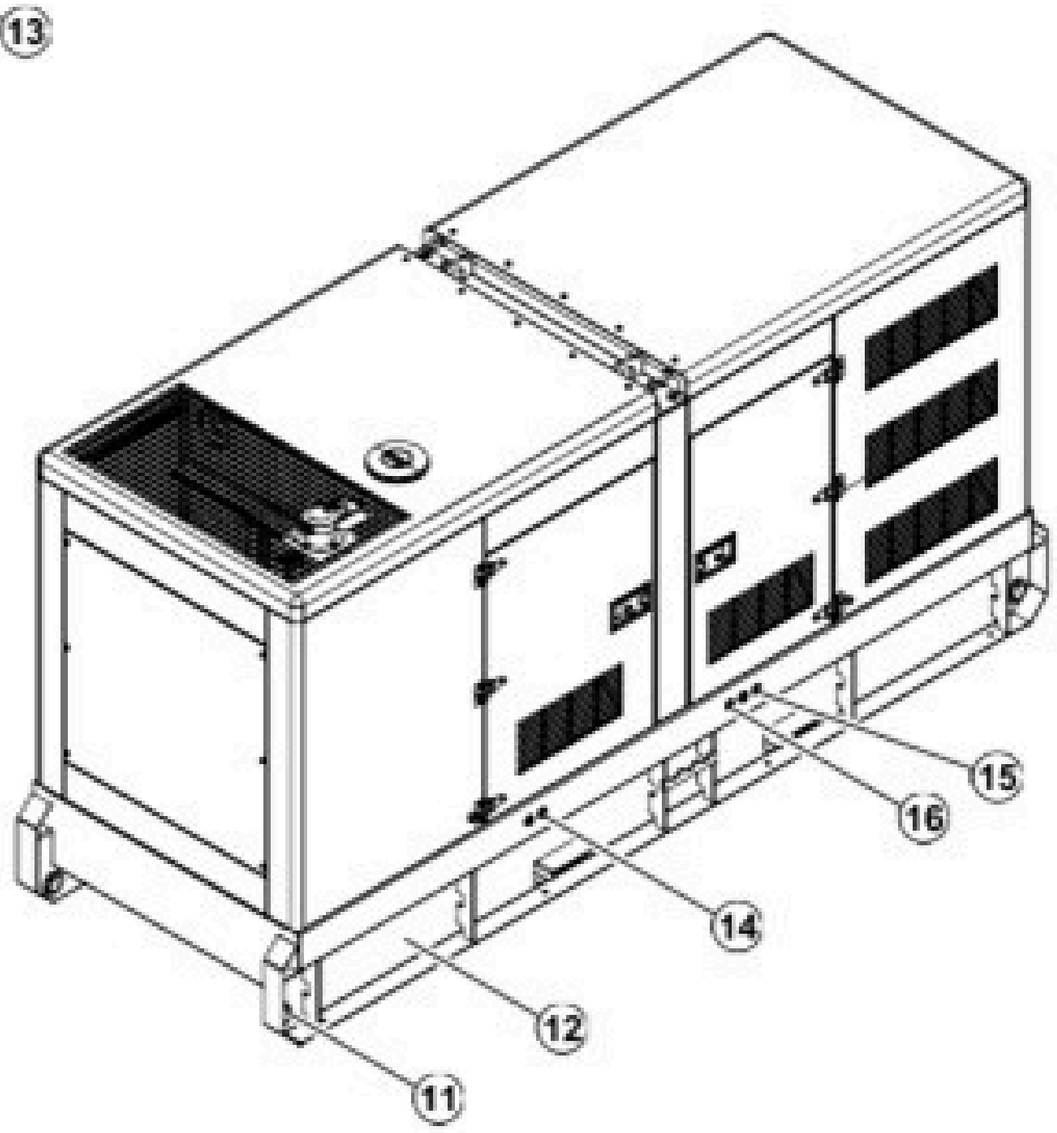
Standard Control Function

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

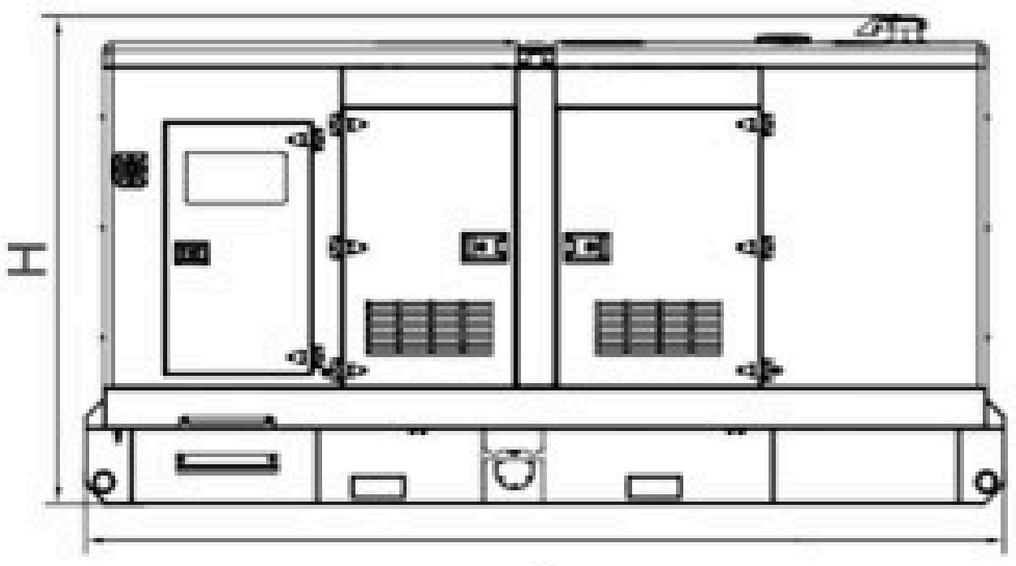


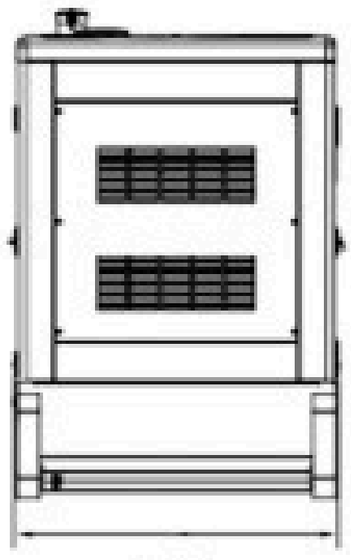
Overall Dimensions



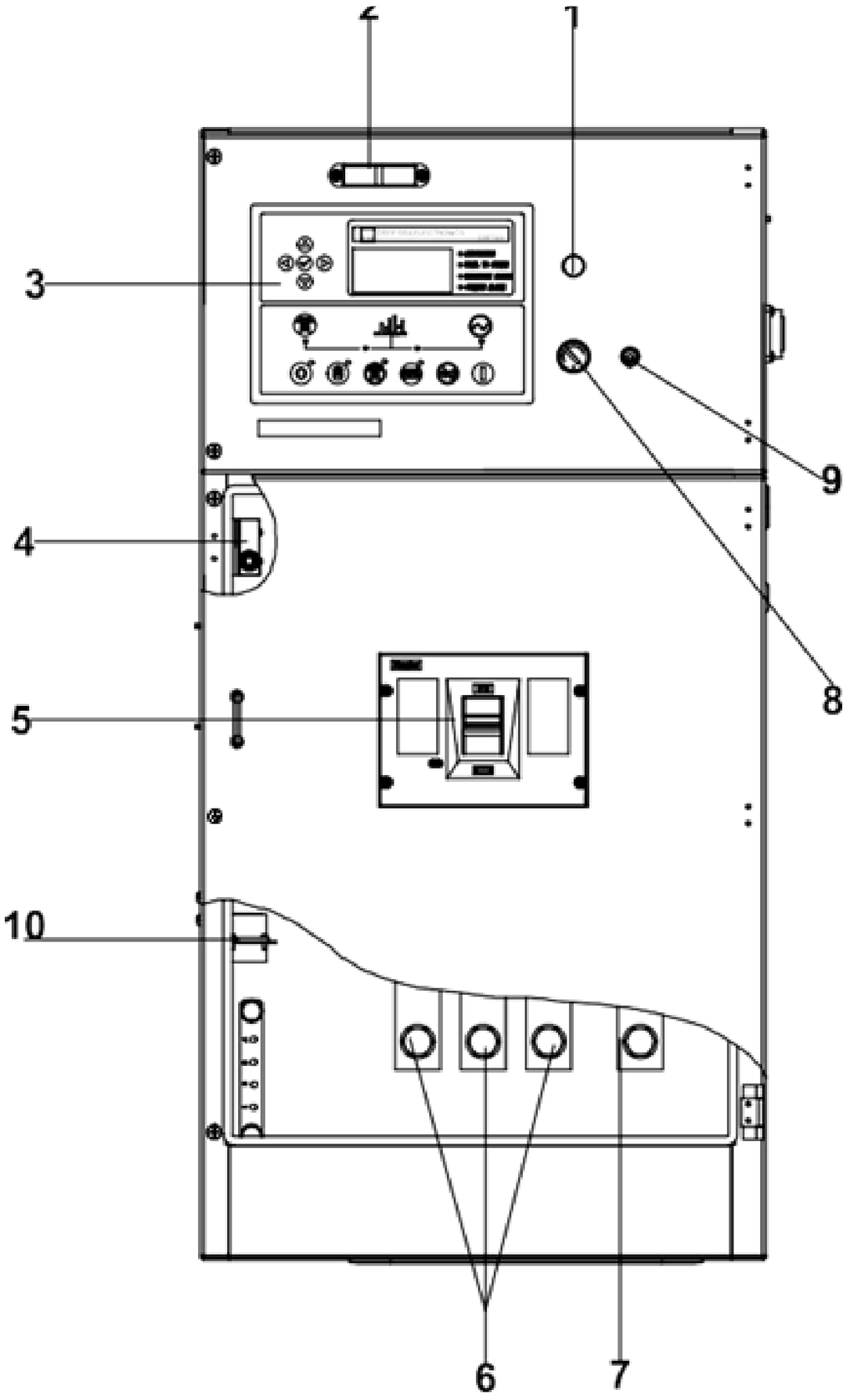


(8) Fuel drain
(7) Control cabinet
(6) Cable trench
(5) Air inlet
(4) Lifting lug
(3) Roping lug
(2) Coolant inlet
(1) Exhaust gas outlet
(16) Oil drain hose fitting
(15) External fuel inlet/return hose fitting
(14) Coolant drain hose fitting
(13) Fork lift channel
(12) Base frame
(11) Tie down
(10)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



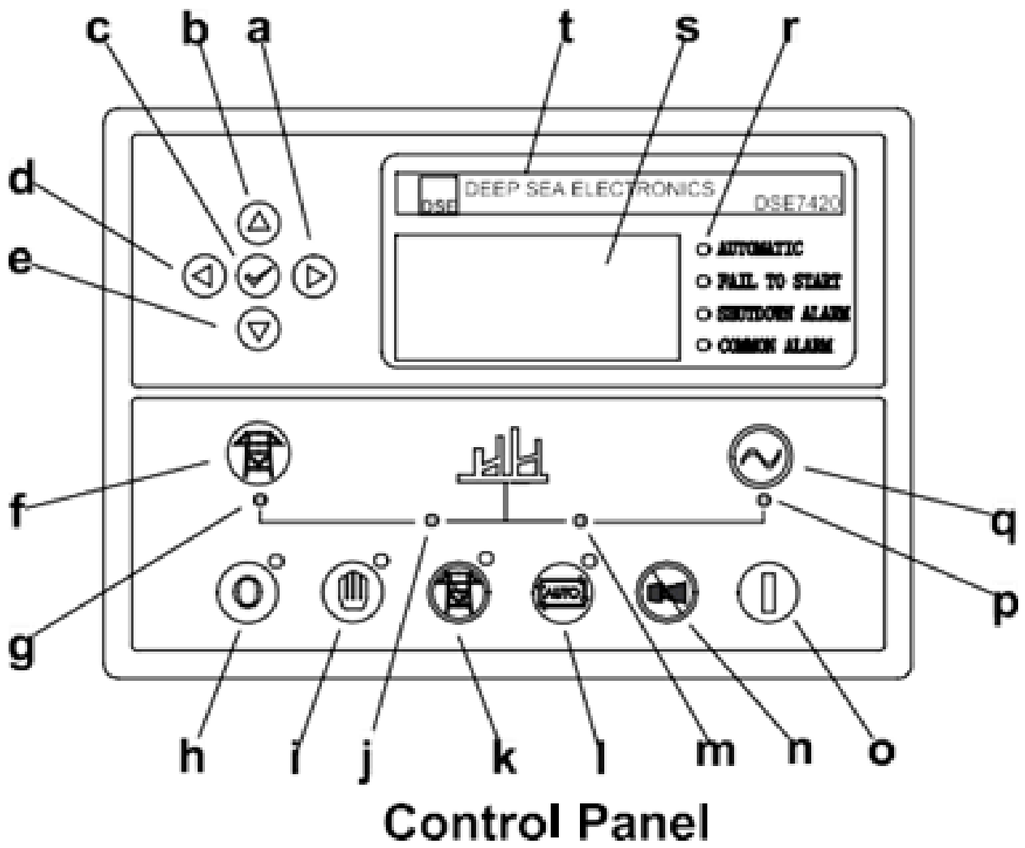


Control System



Control & field wiring cabinet

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



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