



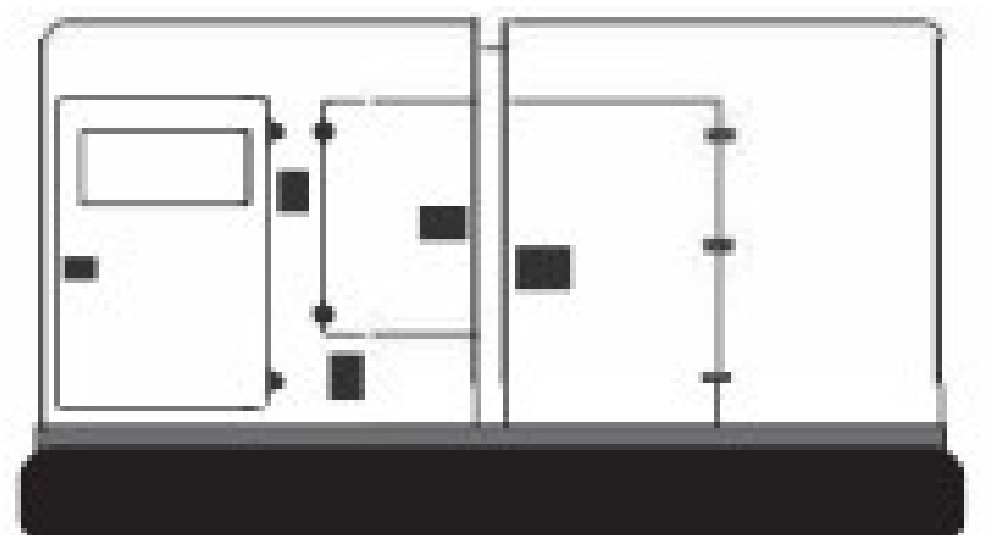
# ZENITH

THE PINNACLE OF POWER

## ZPDG330S

# SPECIFICATIONS

[www.zenithpowerltd.com](http://www.zenithpowerltd.com)



# ZPDG330S

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

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## Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (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.

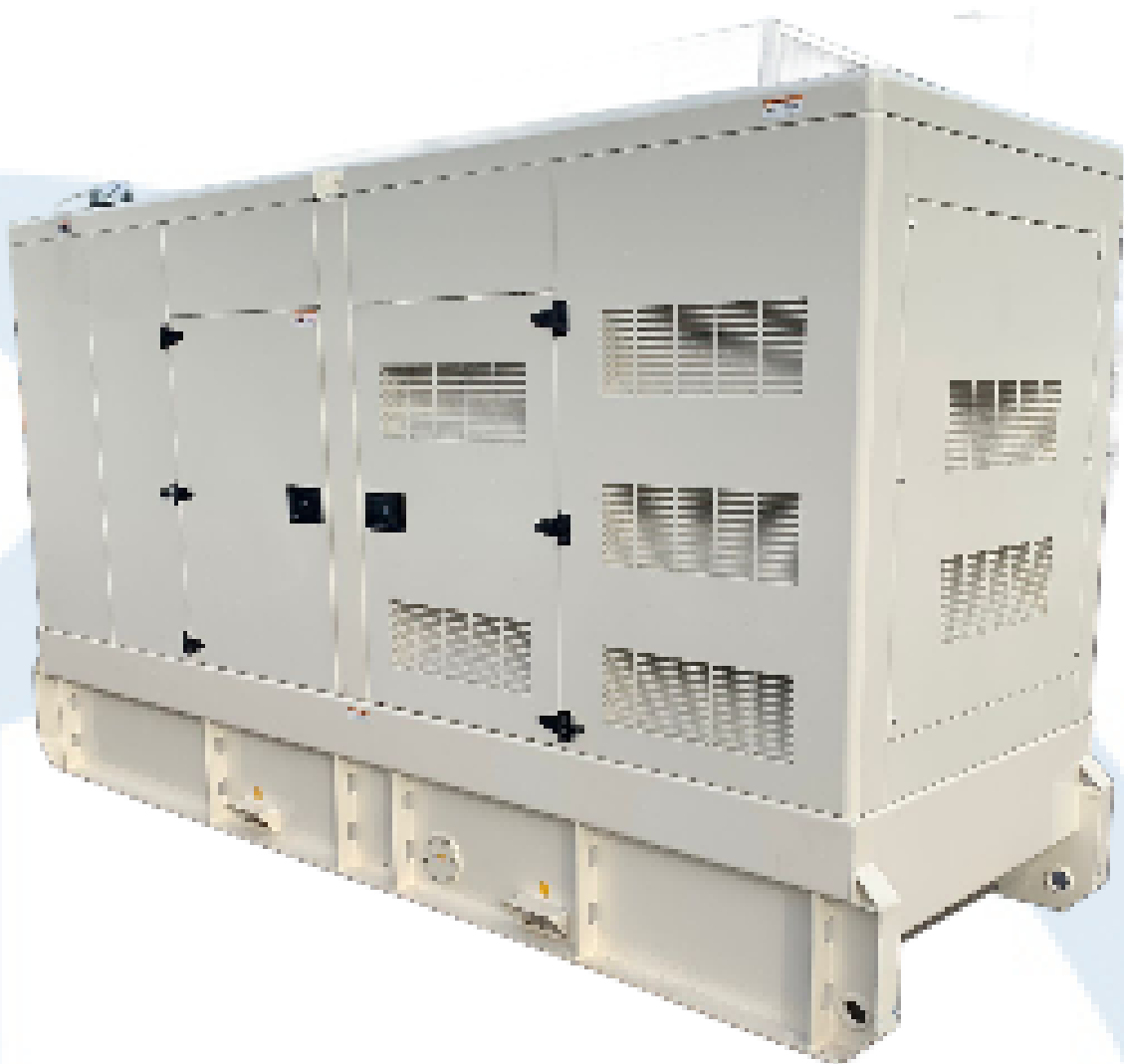
## General Features

- Perkins engine 1506A-E88TAG5
- Close coupled to a Leroy Somer alternator TAL046F
- Microprocessor control module DSE-7420
- Main circuit breaker: 500A
- 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 : ZPDG330S  
Tank capacity: 700L  
Dry weight: 2979kg  
Noise Level: @ 7m: 75.5dBA  
Dimensions LxWxH: 3970\*1392\*2107mm  
Standby Power: 330kVA/264kW  
Prime Power: 300kVA/240kW

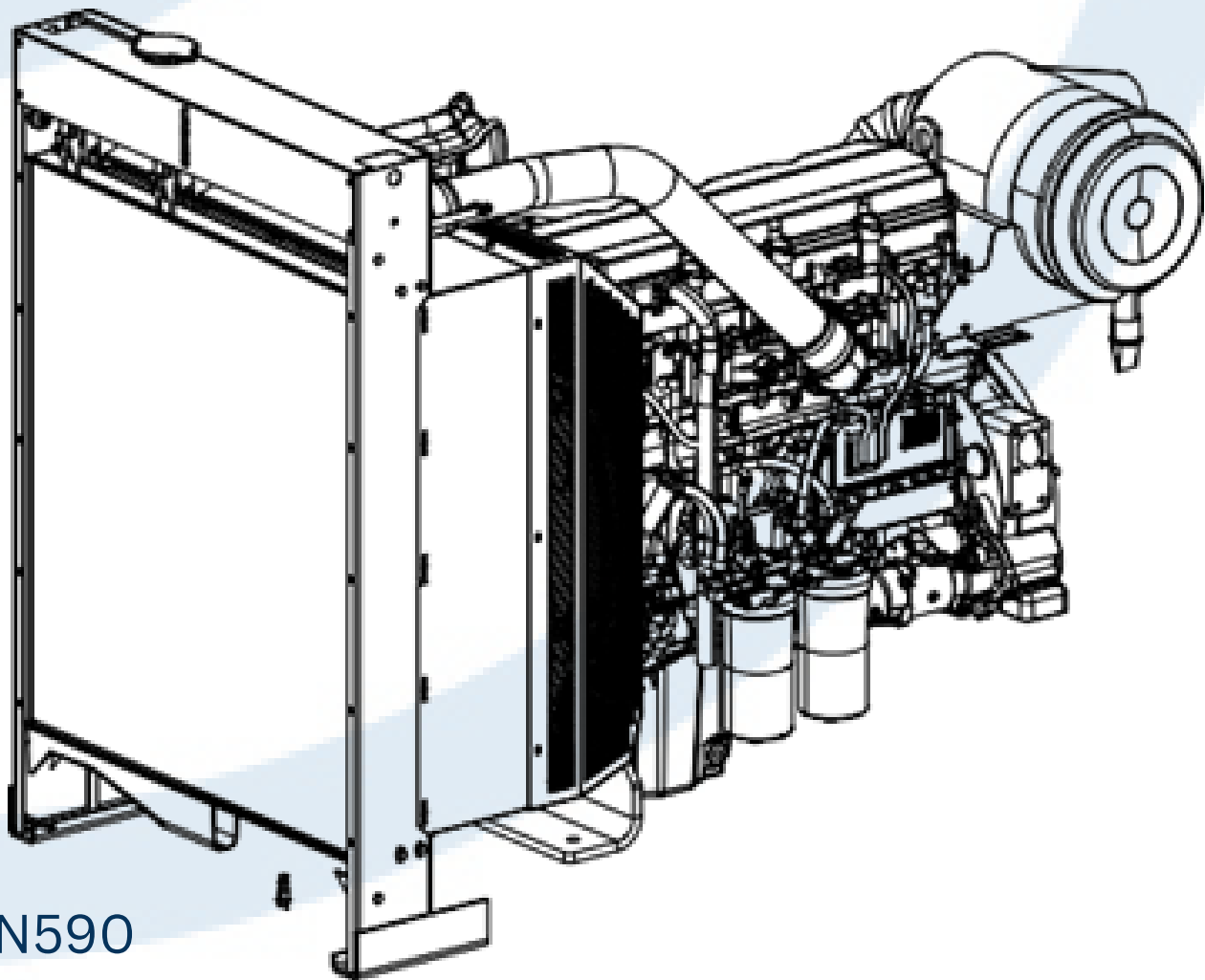


Voltage	380V	400V	415V	440V
Ampere	455.8A	433A	417.3A	417.4A

## Power System

### Engine

Engine Manufacturer/Brand: Perkins  
Engine Model: 1506A-E88TAG5  
Dimensions: 2032×1091×1320mm  
Dry Weigh (approx.) : 1183kg  
Number of Cylinders: 6  
Bore: 112mm  
Stroke: 149mm  
Displacement: 9.3L  
Compression Ratio: 16.1  
Type of injection: Direct injection  
Intake System: Turbocharged, air-to-air charge cooled  
Intake Resistance: 6.22kPa  
Cooling System: Water cooled  
Fan: Pusher  
Battery Voltage: 24V  
Type of Fuel: BS 2869 1998 CLASS A1, CLASS A2 or BSEN590  
Type of Oil: API-CH-4, API-CG-4 or ACEA E3  
Oil Capacity: 41L  
Coolant capacity: 33.2L  
Type of Coolant: Glycol mixture  
Back Pressure: 10.7kPa  
Standby Power: 307kW  
Prime Power: 281kW  
Fuel Consumption(100%load): .65L/h



## Alternator

Alternator Manufacturer/Brand: Leroy Somer

Alternator Model : TAL046F

Exciter: Brushless

Cooling Fan: Cast alloy aluminium

Windings: 100% copper

Insulation Class: H

Winding Pitch: 2/3

Terminals: 12

Drip Proof: IP23

Altitude:  $\leq 1000\text{m}$

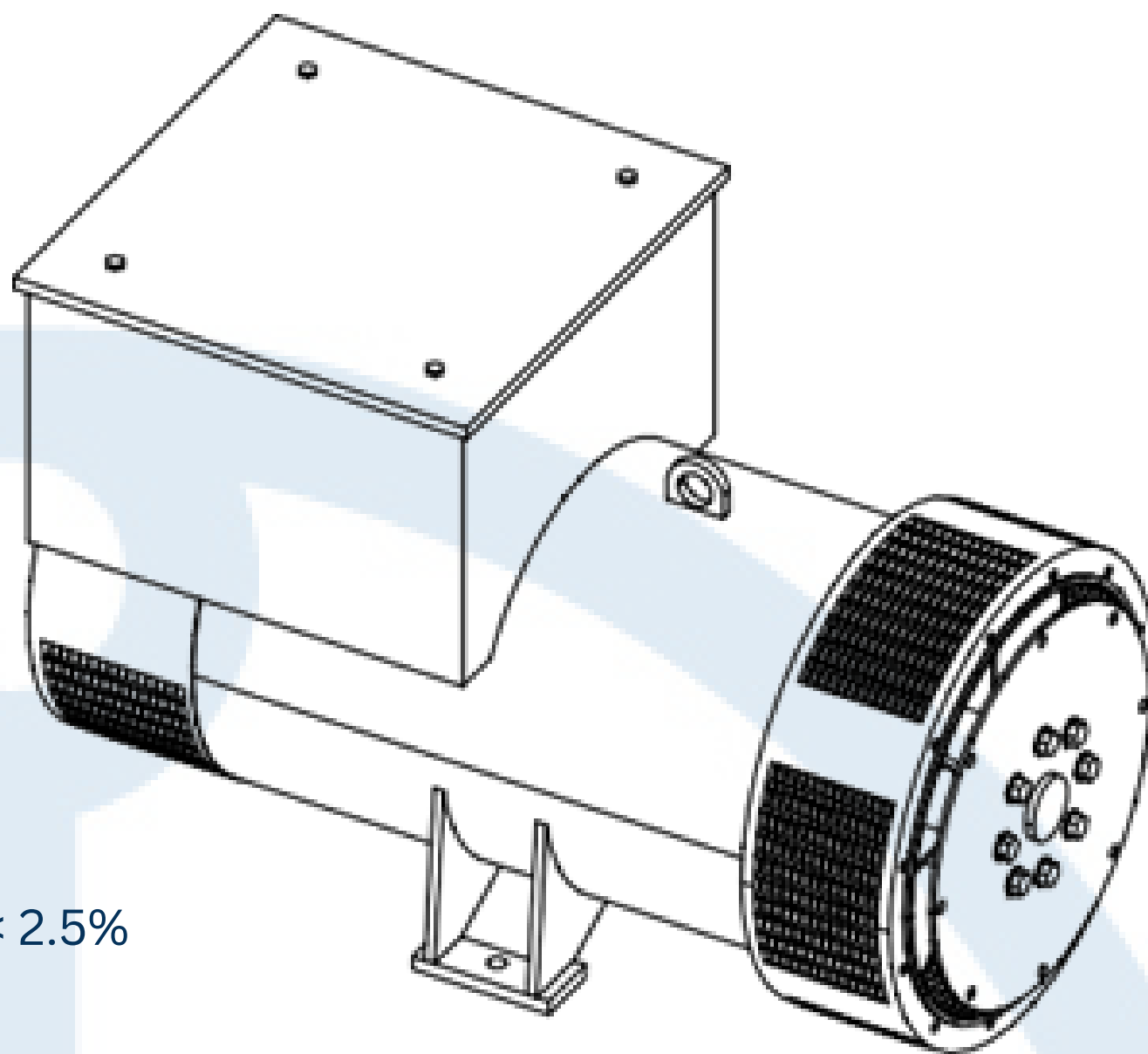
Overspeed: 2250rpm

Air Flow:  $0.43\text{m}^3/\text{s}(50\text{Hz}), 0.51\text{m}^3/\text{s}(60\text{Hz})$

Voltage Regulation:  $\pm 0.5\%$

Total harmonic TGH / THC no load  $< 2.5\%$  - on load  $< 2.5\%$

Telephone Interference: THF $<2\%$ ; TIF $<50$



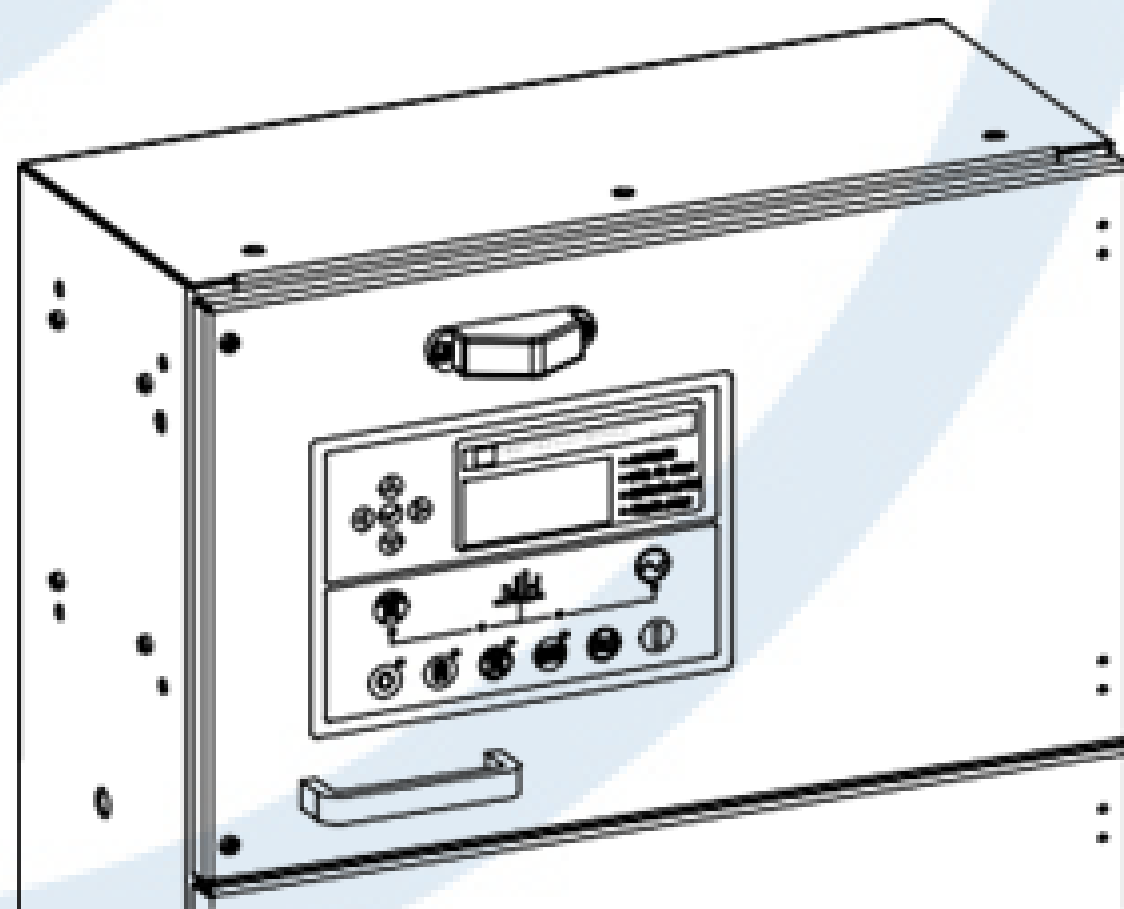
## DSE-7420 Control System

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.

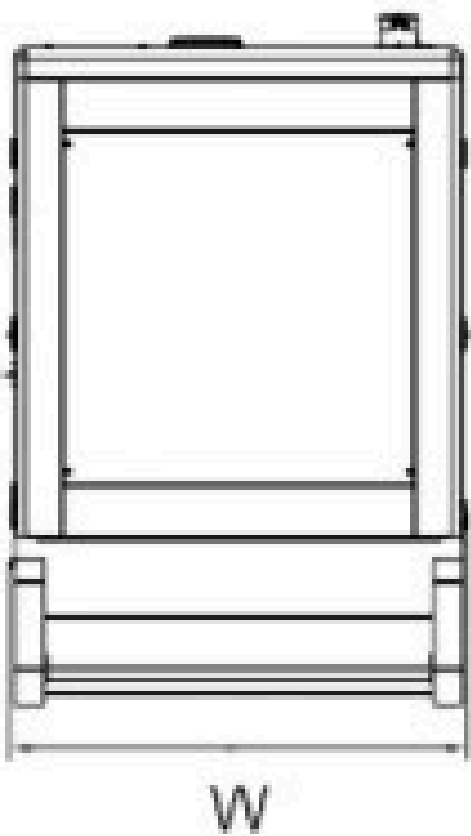
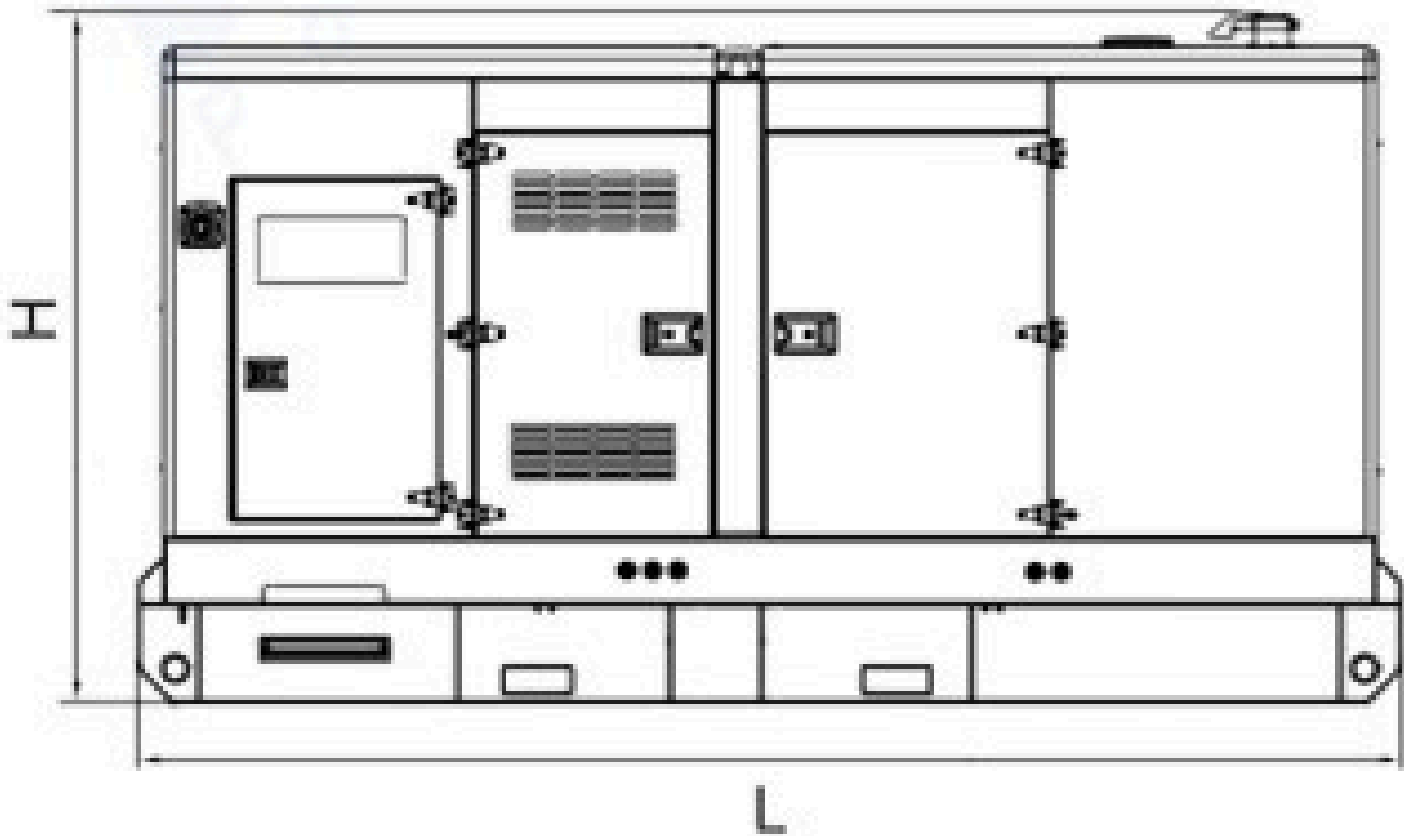
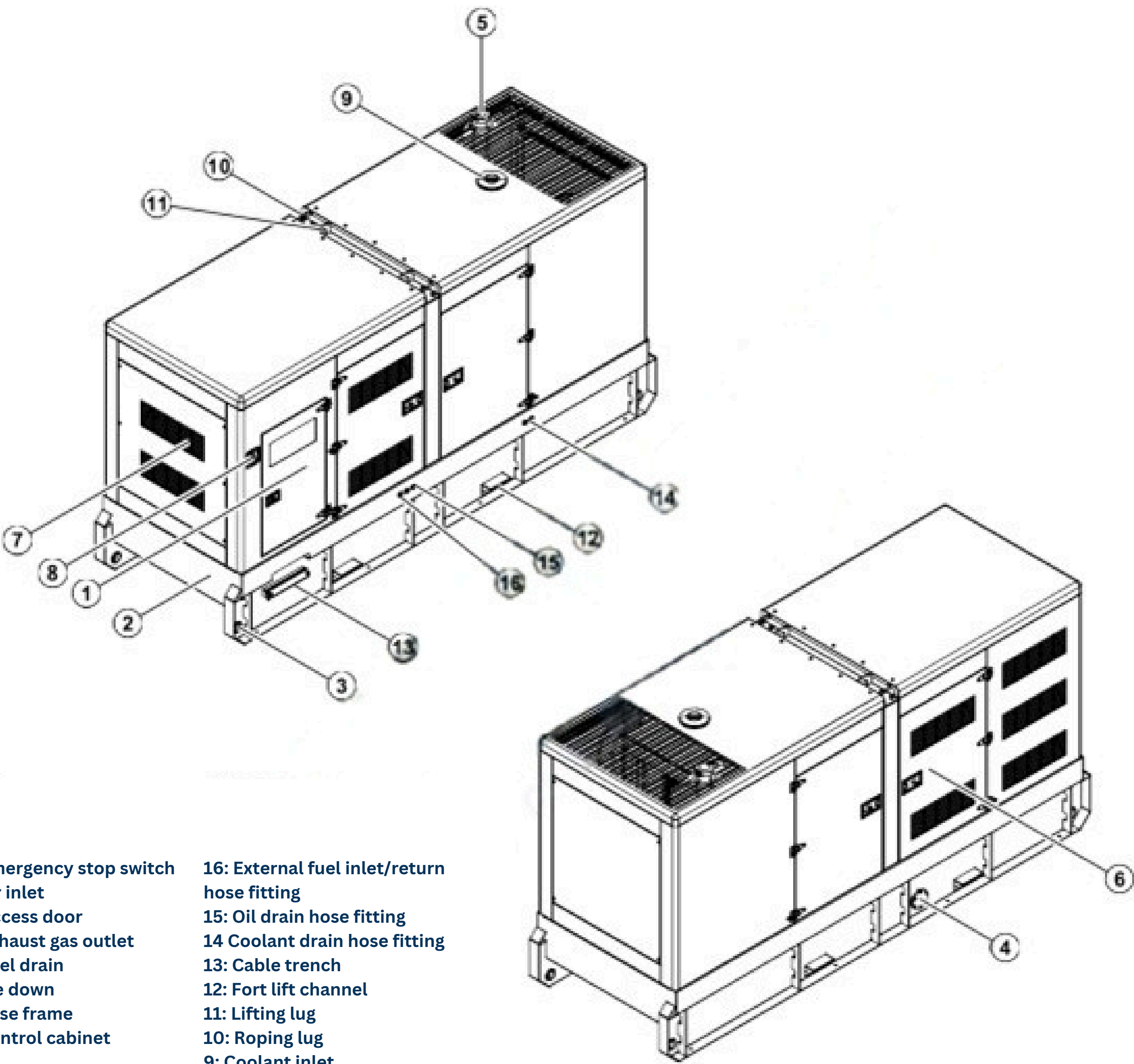
### Standard Control Function

- 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

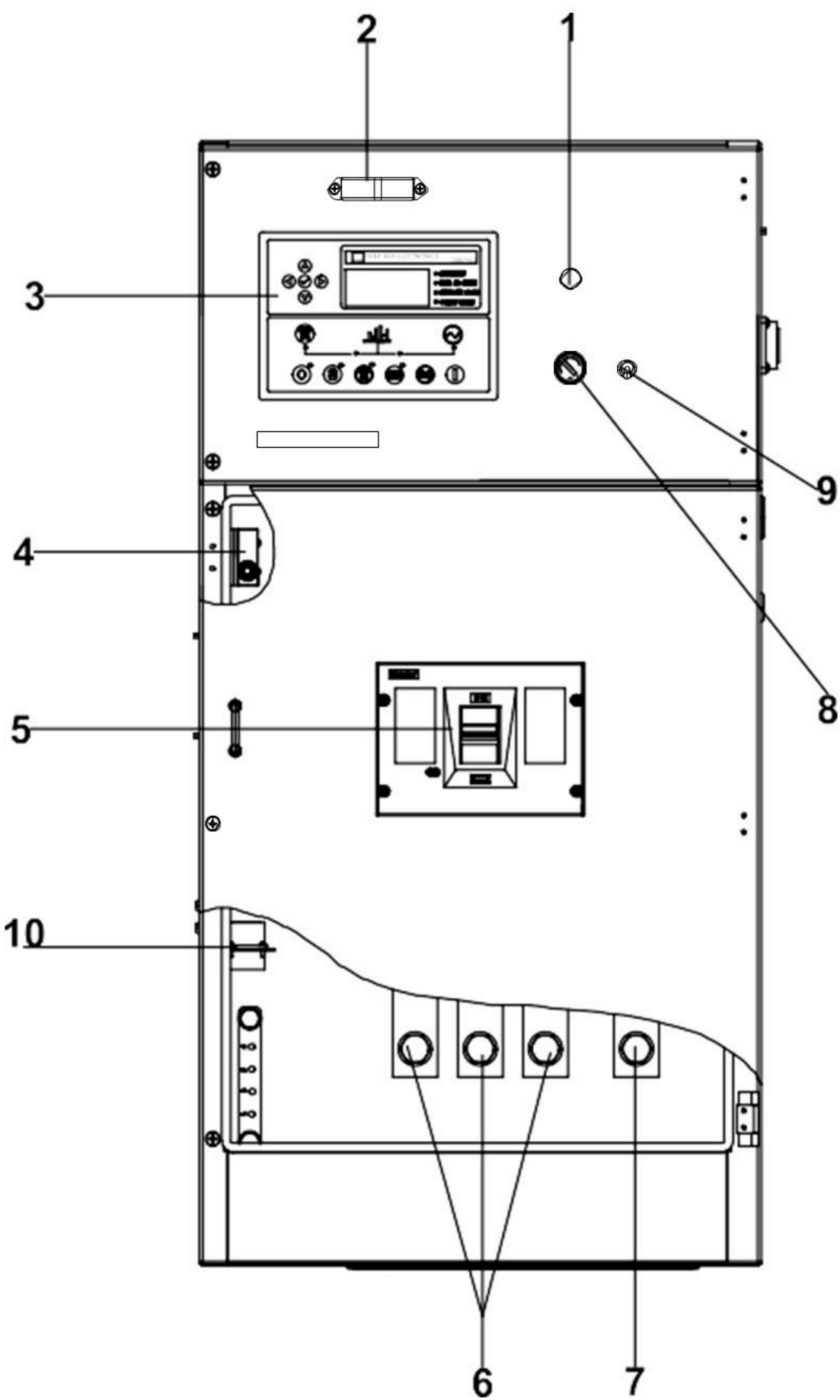




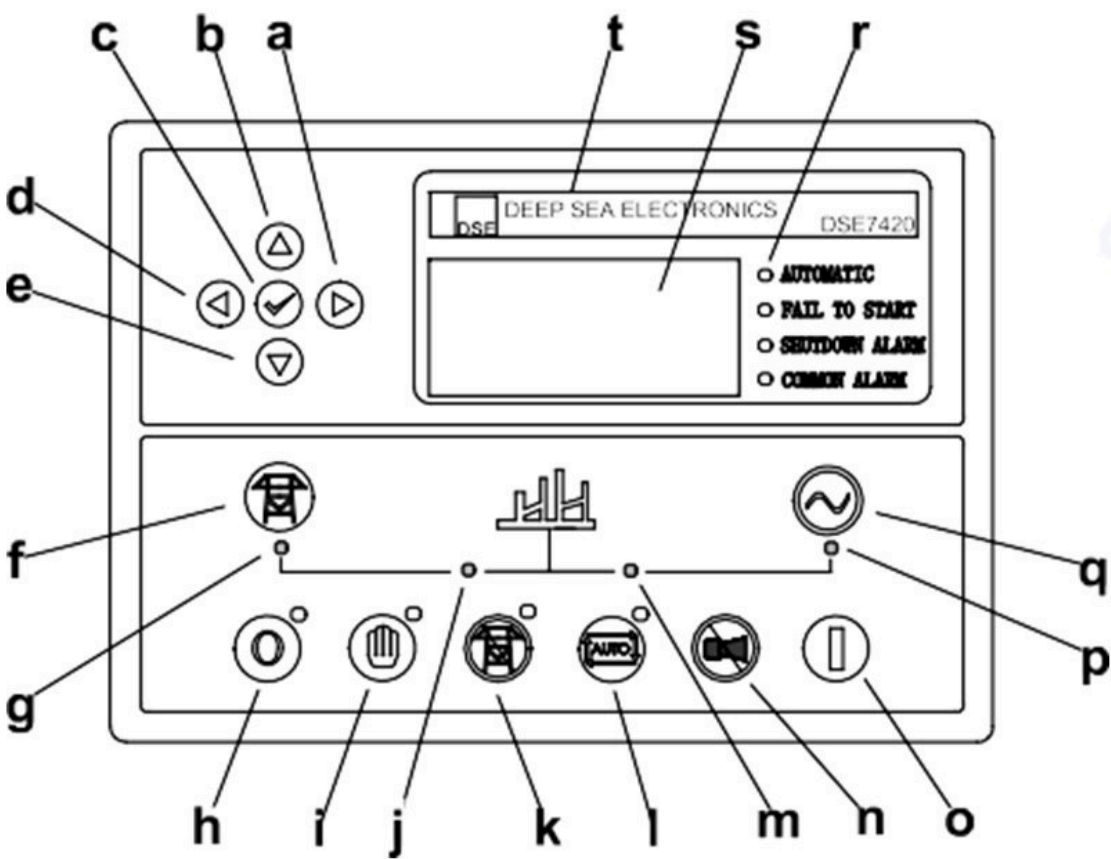
# Overall Dimensions



# Control System



Control & field wiring cabinet



Control module

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	ATS connector

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

