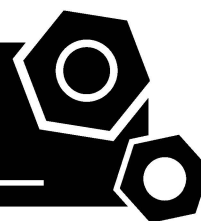


Generator set
Sound-proof type
WCS825S

SPECIFICATIONS



WCS series

WCS825S



50 Hz @ 1500rpm, 3-Phase/5-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

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 80%.
- 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.

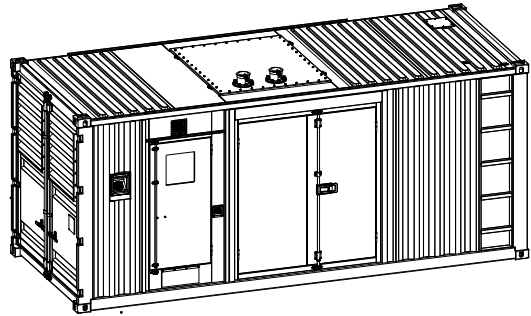
2 General Features

- Cummins engine VTA28-G6
- Close coupled to Stamford alternator S5L1D-H4
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 1250A
- Rotate speed governor: ECM
- Excitation system: Self excited
- A.V.R model: AS440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- 2x12V/150AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank with 5 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

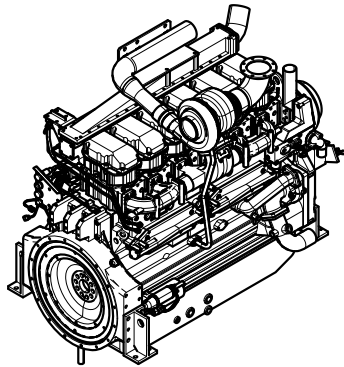
General technical data



Model..... WCS825S
 Structure typeR
 Tank capacity.....1100L
 Dry weight..... 9500kg
 Noise level @7m77dBA
 Dimensions L×W×H.....6058x2438x2795mm
 Standby Power 825kVA/660kW
 Prime Power..... 750kVA/600kW

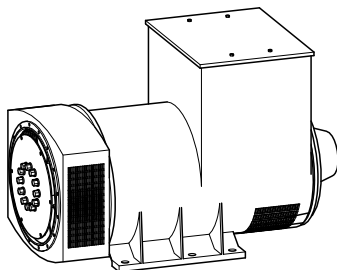
Voltage	380V	400V	415V	440V	
Ampere	1101A	1047A	1009A	951A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	91.0	140.0	195.0	214.5

Diesel engine



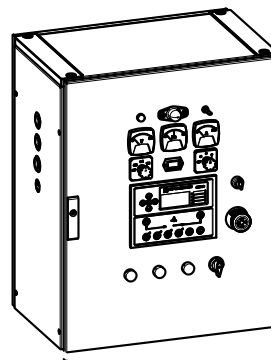
Engine Manufacturer/Brand.....	Cummins
Engine Model.....	VTA28-G6
Dimensions L×W×H.....	1960×1283×1685mm
Dry Weigh (approx.).....	6395kg
Number of Cylinders.....	12
Bore.....	140mm
Stroke.....	152mm
Displacement.....	23.1L
Compression Ratio.....	28
Type of injection.....	Direct Injection Cummins PT
Intake System.....	Turbocharged and Aftercooled
Intake Resistance.....	≤6.3kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	24V
Type of Fuel.....	No.2 or ASTM D975
Type of Oil.....	API CD/SE or CCMCD4
Oil Capacity.....	83L
Type of Coolant.....	Glycol mixture
Coolant Capacity(Engine Only).....	80L
Back Pressure.....	≤10.1kPa
Standby Power.....	733kW
Prime Power.....	666kW
Fuel Consumption(100%load).....	195L/h

Alternator



Alternator Manufacturer/Brand.....	Stamford
Alternator Model.....	S5L1D-H4
Exciter.....	Brushless
Cooling Fan.....	Cast alloy aluminum
Windings.....	100% copper
Insulation Class.....	H
Winding Pitch.....	2/3
Terminals.....	6
Drip Proof.....	IP23
Altitude.....	≤1000m
Overspeed.....	2250 rpm
Air Flow.....	1.614m³/s(50HZ), 1.961m³/s(60HZ)
Voltage Regulation.....	±0.5%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

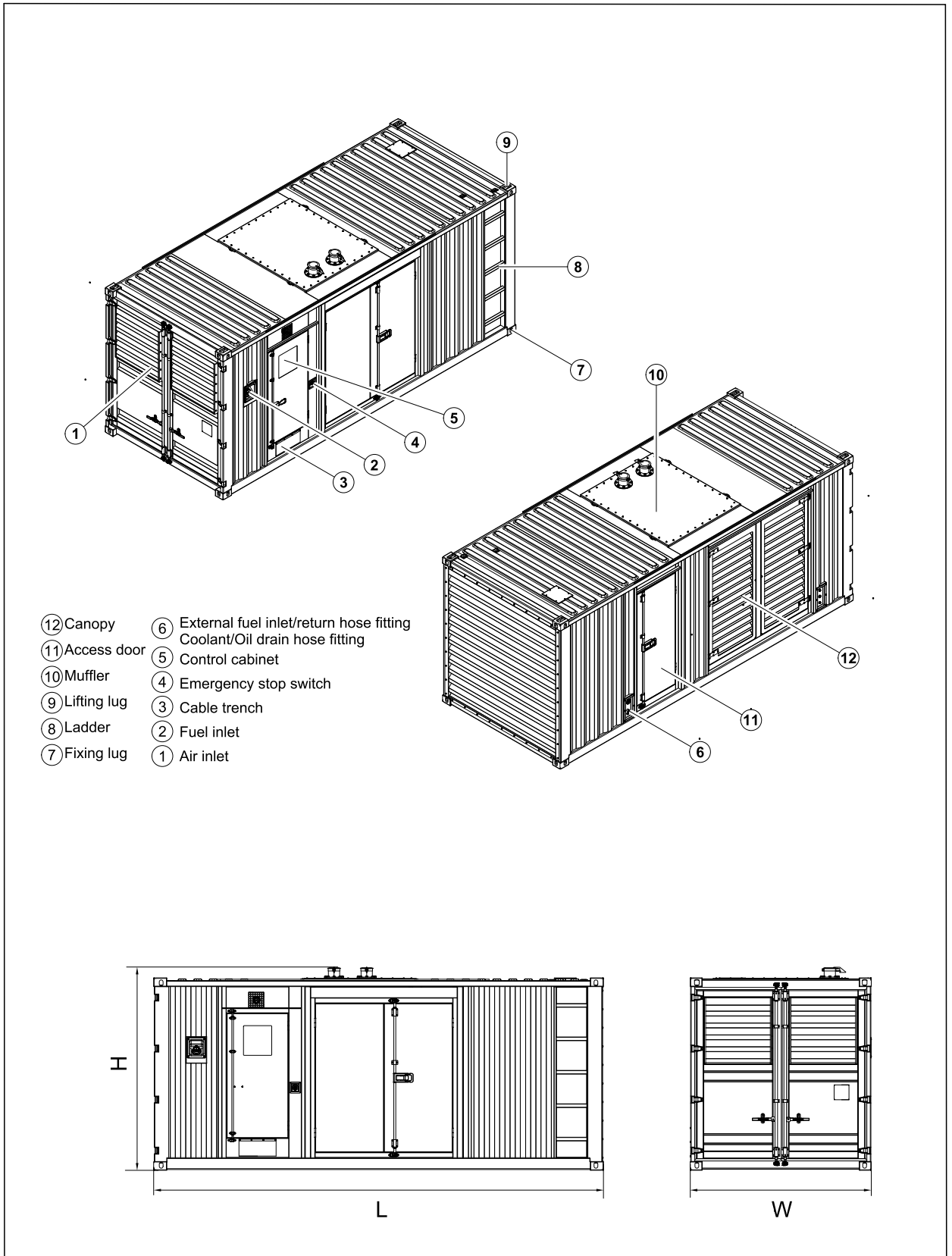
PLC-7420 Control System



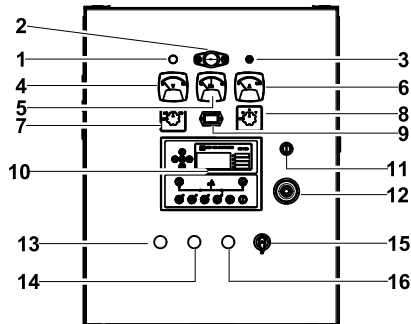
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

- 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

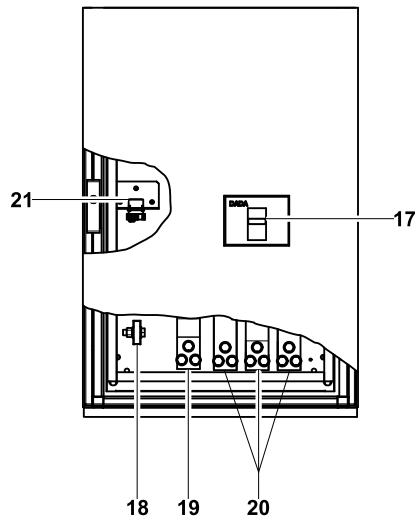
4 Overall Dimensions



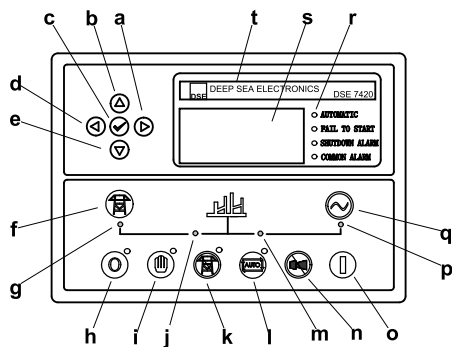
5 Control system



Control cabinet



Field wiring cabinet



Control module

Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control cabinet lamp switch
4	Voltage meter
5	Frequency meter
6	Current meter
7	Changerover switch-Voltage
8	Changerover switch-Current
9	Time counter
10	Control module
11	Key switch
12	Emergency stop switch
13	Fuel leak indicator
14	Running button with indicator
15	Oil drain switch
16	Stop button with indicator
17	Main circuit breaker
18	Ground wire terminal
19	Neutral wire terminal
20	Live wire terminals
21	Mains input/Remote control/ ATS communication 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

100025164-A2-E

03.2023

<http://www.powerlinkworld.com>

*Specification may change without prior notice. For more info.,
contact Power Link or your local distributors please.*