

Generator set
Sound-proof type
DPX-20007

SPECIFICATIONS



1 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°C to 45°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters.

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

- Perkins engine 1104C-44TAG2
- Close coupled to a Leroy Somer alternator LSA44.3S5
- Microprocessor control module PLC-7420
- Main circuit breaker: 160A
- Rotate speed governor: Electronic fuel injection governor
- Excitation system: Self excited shunt
- A.V.R model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- 1x12V/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 forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 11 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment

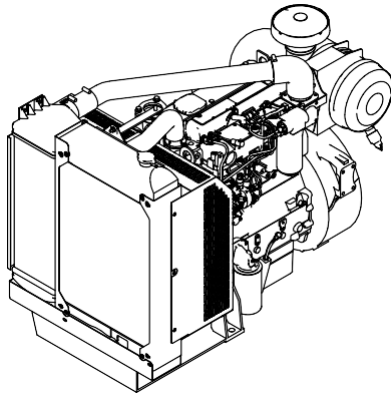
General technical data



Model..... DPX-20007
 Structure typeR
 Tank capacity240L
 Dry weigh1852kg
 Noise level @7m 68.9dBA
 Dimensions LxWxH..... 2888x1130x1681mm
 Standby Power..... 110kVA/88kW
 Prime Power..... 100kVA/80kW

Voltage	380V	400V	415V	440V	
Ampere	151.9A	144.3A	139.1A	131.2A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	11.2	17.1	22.6	24.9

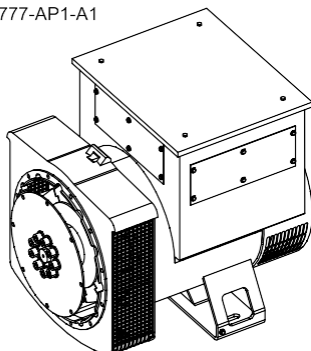
Diesel Engine



Engine Manufacturer/Brand	Perkins
Engine Model.....	1104C-44TAG2
Dimensions LxWxH.....	1259x721x966mm
Dry Weigh (approx.).....	401kg
Number of Cylinders	4
Bore	105mm
Stroke.....	127mm
Displacement.....	4.4L
Compression Ratio.....	18.23
Type of Injection	Direct
Intake System.....	Turbocharged, air-to-air charge cooled
Intake Resistance.....	8.0kPa
Cooling System	Water cooled
Fan.....	Pusher
Battery Voltage.....	V
Type of Fuel.....	EPA2D 89.330-96
Type of Oil	API-CC/SE or CCMC-D1
Oil Capacity.....	8.0L
Type of Coolant	Glycol mixture
Coolant Capacity.....	17.0L
Back Pressure	18kPa
Standby Power.....	103kW
Prime Power.....	93.6kW
Fuel Consumption(100%load)	22.6L/h

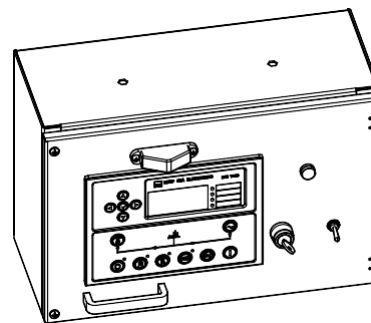
Alternator

1000069777-AP1-A1



Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA44.3S5
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class.....	H
Winding Pitch	2/3
Terminals	12
Drip Proof.....	P23
Altitude	≤1000m
Overspeed	2250rpm
Air Flow.....	0.37m³/s(50Hz), 0.44m³/s(60Hz)
Voltage Regulation.....	±0.5%
Total harmonic TGH / THC at no load < 2 % - on load < 2%	
Telephone Interference	THF<2%; TIF<50

PLC-7420 Control System

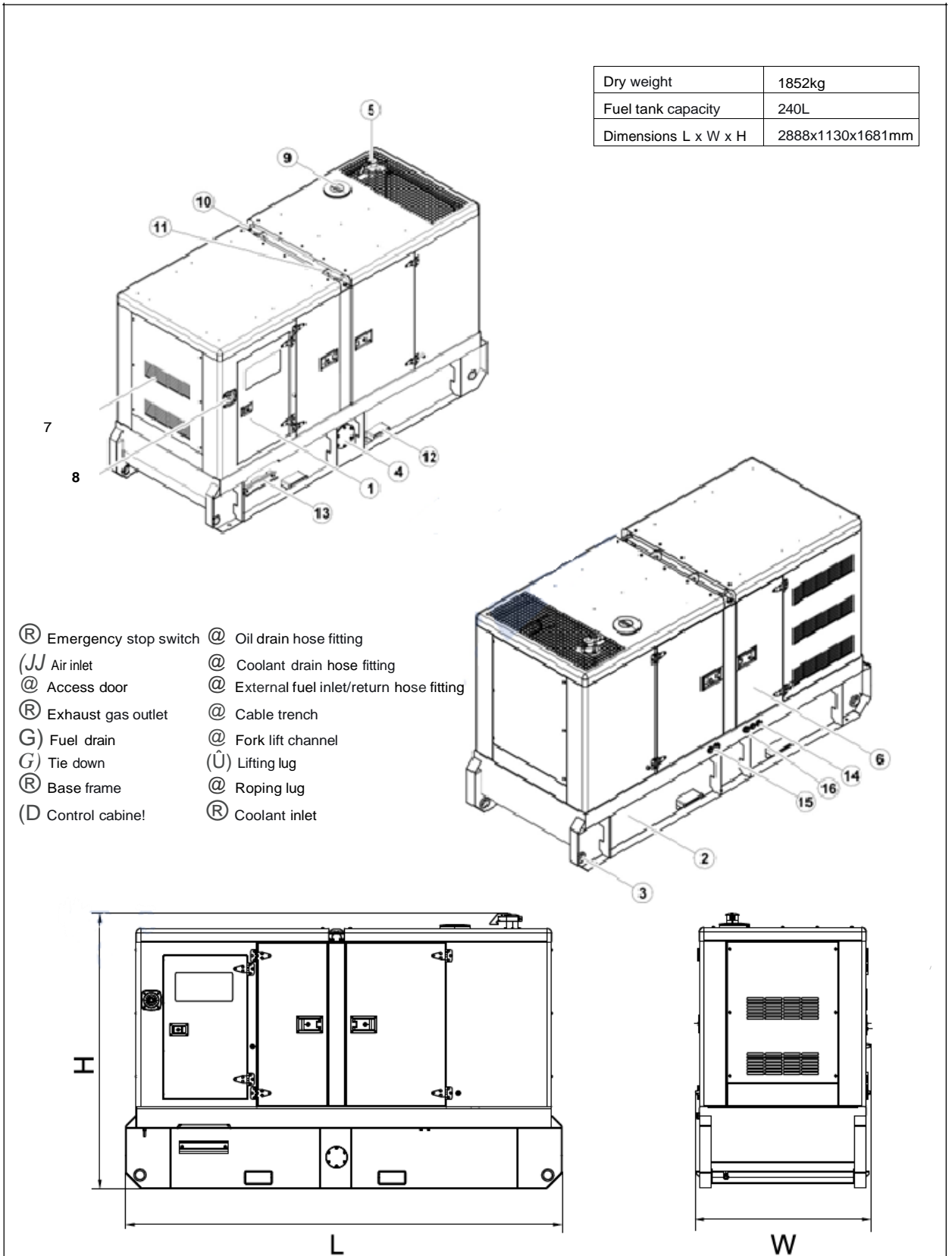


PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

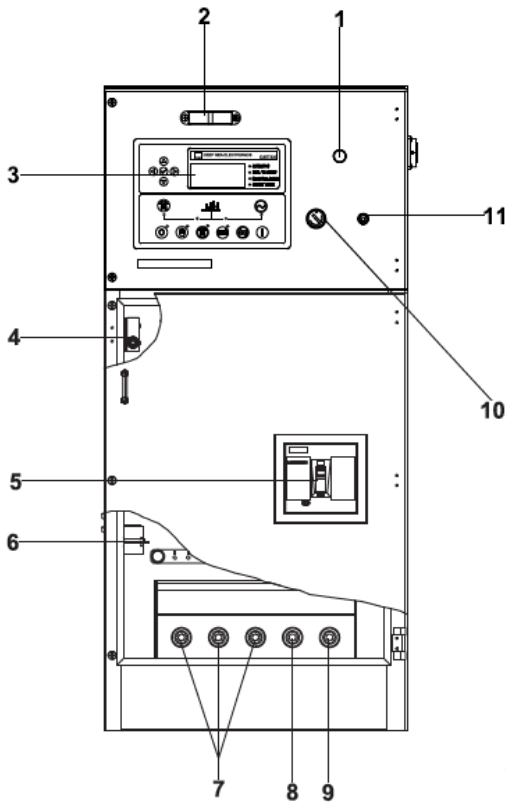
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual,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

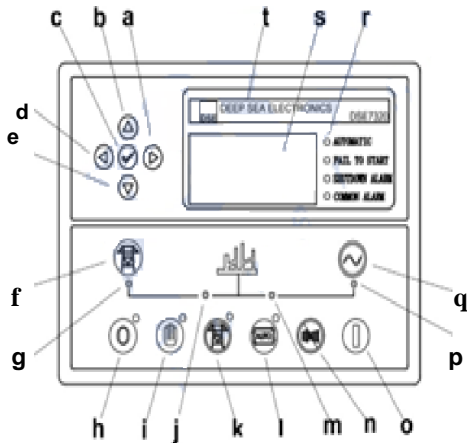
Dry weight	1852kg
Fuel tank capacity	240L
Dimensions L x W x H	2888x1130x1681mm



6 Control System



Control & field wiring cabinet



Control module

Ref.	Description
1	Charge indicator
2	Control panel lamp
3	PLC-7320 Control module
4	Limit switch
5	Main circuit breaker
6	Mains input/ remote/ AMF communication connector
7	Live wire terminals
8	Neutral wire terminal
9	Ground wire terminal
10	Key switch
11	Control panel lamp switch

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