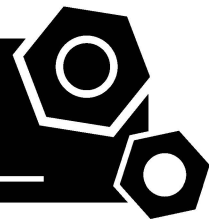


Generator set

Sound-proof type

PL880PL

SPECIFICATIONS



EP series

PL880PL

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



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

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.

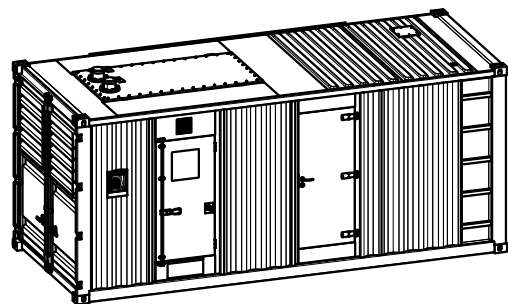
2 General Features

- Perkins engine 4006-23TAG3A
- Close coupled to LSA alternator LSA49.3M8
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 1250A
- Rotate speed governor: Electronic governor
- Excitation system: AREP
- A.V.R.Model: D350
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V/150AH sealed for life maintenance free battery
- Lockable battery isolator switch

- Lockable battery isolator switch
- Powder coated canopy
- Standard container
- 50 °C remote radiator
- Fire extinguisher
- Oil pump on the engine
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Fuel tank with 8 hours running
- Drain points for fuel tank
- Fuel-water separator for fuel tank
- Operation Manual / Specification

3 Equipment Specification

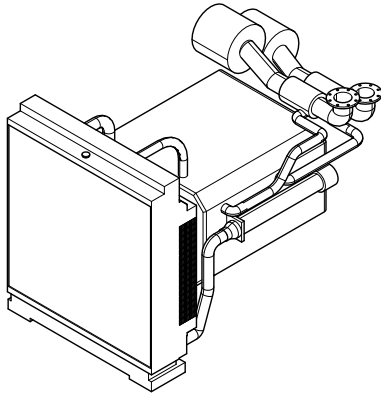
General technical data



Model.....PL880PL
 Structure typeC
 Tank capacity.....1450L
 Dry weight.....11797kg
 Noise level @7m78.8dBA
 Dimensions L×W×H..... 6058x2438x2591mm
 Standby Power 880kVA/704kW
 Prime Power..... 800kVA/640kW

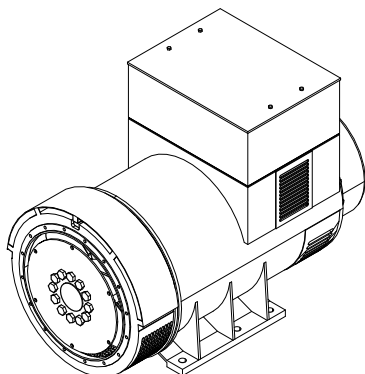
Voltage	380V	400V	415V	440V	
Ampere	1216A	1155A	1113A	1026A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	93	137	172	190

Diesel Engine



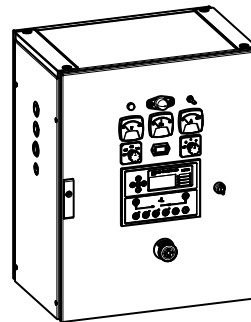
Engine Manufacturer/Brand.....	Perkins
Engine Model.....	4006-23TAG3A
Dimensions L×W×H.....	3027×1706×1964mm
Dry Weigh (approx.)	2524kg
Number of Cylinders.....	6
Bore.....	160mm
Stroke	190mm
Displacement.....	22.92L
Compression Ratio.....	13.6
Type of Injection	Direct injection
Intake System.....	Turbocharged air-to-air charge cooled
Intake Resistance.....	≤3.7kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel.....	BS2869 1998 Class A1, A2
Type of Oil	API CG4 15W/40
Oil Capacity	113.4L
Type of Coolant	Glycol Mixture
Coolant capacity.....	105L
Back Pressure	≤6.0kPa
Standby Power	786kW
Prime Power	705kW

Alternator



Alternator Manufacturer/Brand	LSA
Alternator Model	LSA49.3M8
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

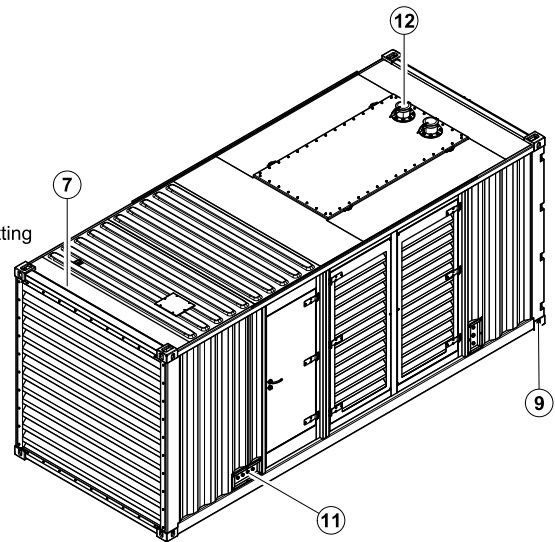
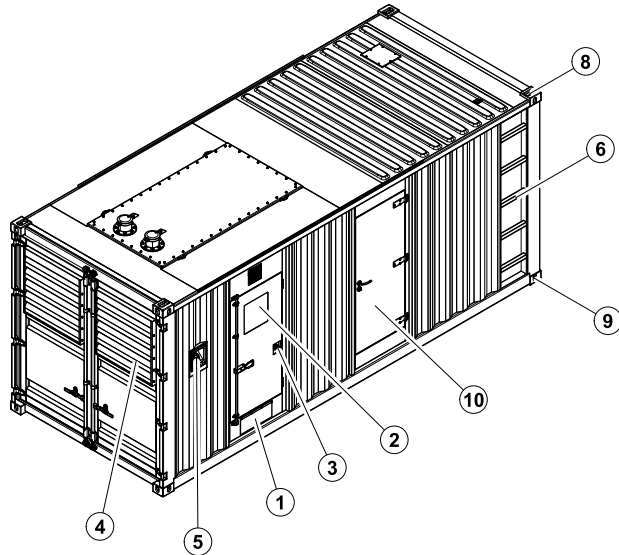
ComAp MRS16 IL4 Control System



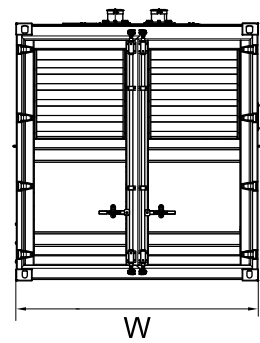
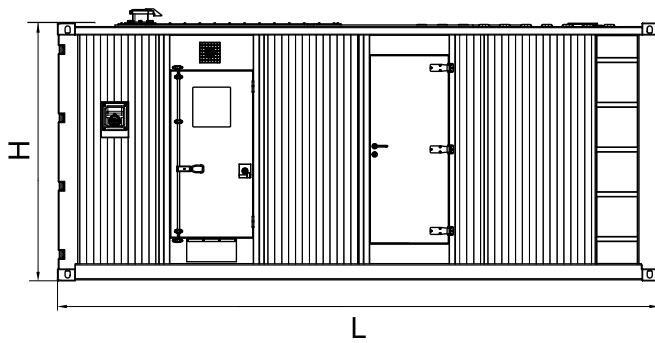
ComAp MRS16 IL4 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters 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

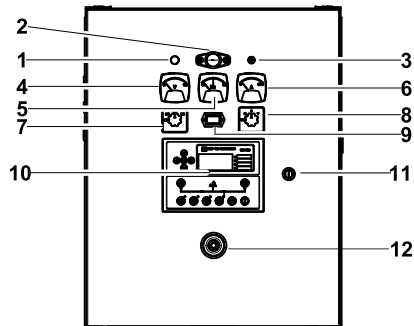
4 Overall Dimensions



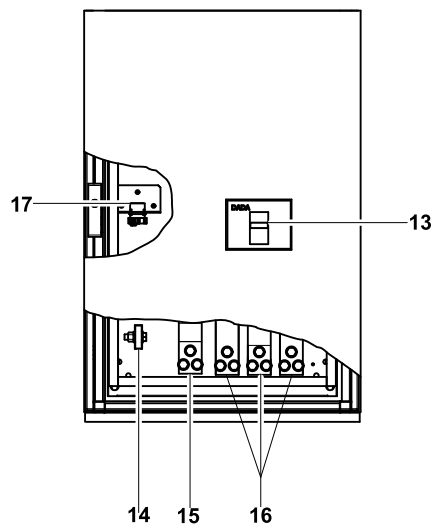
- | | |
|-------------------------|---|
| ⑥ Ladder | ⑫ Exhaust gas outlet |
| ⑤ Fuel inlet | ⑪ External fuel inlet/Return hose fitting
Coolant/Oil drain hose fitting |
| ④ Air inlet | ⑩ Access door |
| ③ Emergency stop switch | ⑨ Fixing lug |
| ② Control cabinet | ⑧ Lifting lug |
| ① Cable trench | ⑦ Canopy |



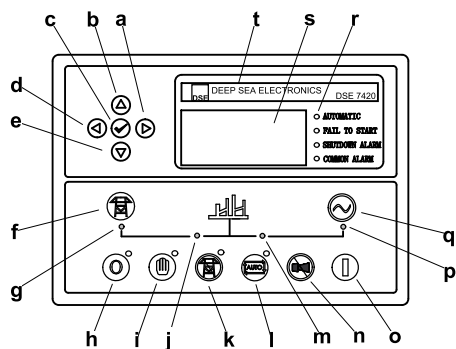
5 Control System



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	Main circuit breaker
14	Ground wire terminal
15	Neutral wire terminal
16	Live wire terminals
17	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