Perkins series
P725D5
50 Hz @ 1500rpm,3-phase/5-wiring

1 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℃ to 50℃. The coolant heater is needed when the temperature is below 5℃
- 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

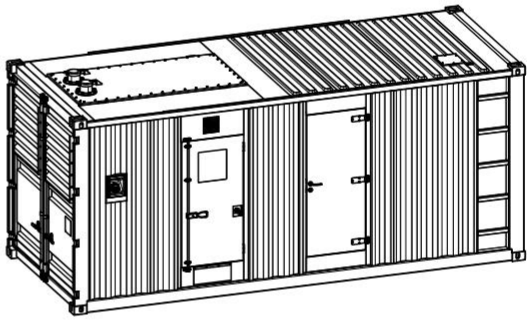
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Perkins engine 4006-23TAG3A
- Close coupled to a Leroy Somer alternator LSA49.1M6
- Microprocessor control module PLC-7420
- DMA main circuit breaker: 1250A
- Rotate speed governor: Electronic governor
- Excitation System: AREP
- A.V.R.Model: R448
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 4x12V/150AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50℃ radiator
- Oil pump on the engine
- Steel base frame with lifting lugs
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 8 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data



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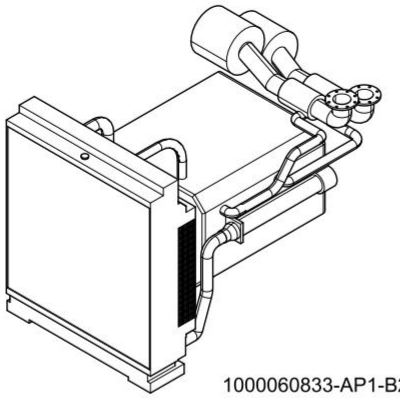
Model.....P725D5
Structure type C
Tank capacity.....1450L
Dry weight..... 10911kg
Noise level @7m .....N/A
Sound power level acc. 2000/14/EC .....N/A
Dimensions L×W×H.....6058×2438×2730mm
Standby Power 798kVA/638kW
Prime Power..... 725kVA/580kW

Voltage	380V	400V	415V	440V
Ampere	1102A	1046A	1009A	951A

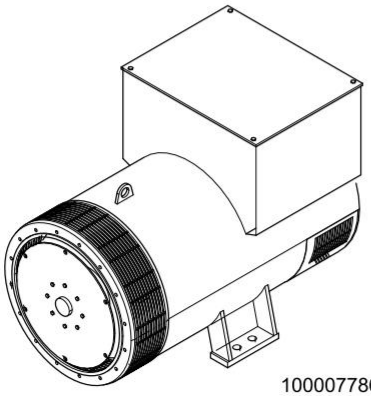
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	85.5	123.5	163.4	184.3

Power System



1000060833-AP1-B2

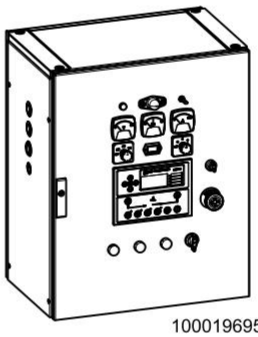
Engine Manufacturer/Brand	Perkins
Engine Model	4006-23TAG3A
Dimensions L×W×H	3027×1706×1964mm
Dry Weigh (approx.)	2524kg
Number of Cylinders	6
Bore	160mm
Stroke	190mm
Displacement	22.92L
Compression Ratio	13.6
Type of Injection	Direct injection
Intake System	Turbocharged air-to-air charge cooled
Intake 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
Fuel Consumption(100%load)	210g/kW.h



1000077860-AP1-A1

Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA49.1M6
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	2250rpm
Air Flow	1m³/s(50Hz),1.2m³/s(60Hz)
Voltage Regulation	±0.5%
Total harmonic	TGH / THC at no load < 4 % - on load < 4%
Telephone Interference	THF<2%;TIF<50

PLC-7420 Control System



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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

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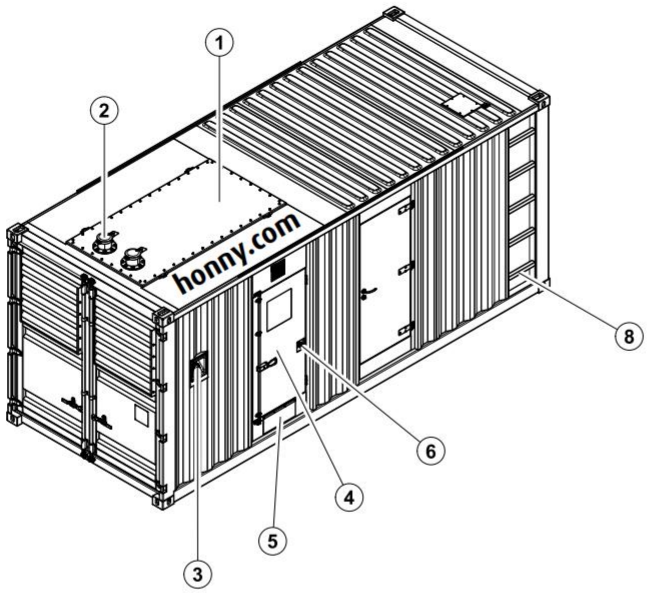
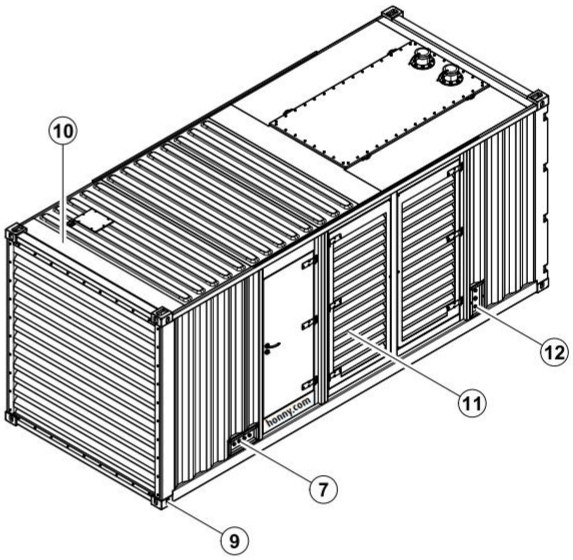


Dry weight	10911kg
Fuel tank capacity	1450L
Dimensions L x W x H	6058x2438x2730mm



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