

Power Definition

Standby Power(ESP): The standby power rating is applicable for supply emergency power in variable load applications in accordance with ISO8528-1, overload is not allowed.

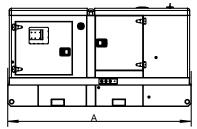
Prime Power(PRP): The prime power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO8528-1.

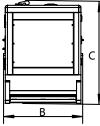
Terms of use

According to the standard, the nominal power assigned by the genset is given for 25 °C air inlet temperature, of a barometric pressure of 100 kPA (100m A.S.L) and 30%.

Dimensions & Weights & FuelTank

6





Note: General configuration not to be used for installation. See general dimension drawings for detail.

Model	Constructure	Dim"A″mm	Dim"B"mm	Dim"C"mm	Dry Weight kg	Fuel Tank Capacity L
PCL880-O	Open set	4170	1800	2250	7250	/
PCL880-C	Silent set	5812	2090	2550	9250	/



General Characteristics



Engine Data

General Engine Data			
Engine brand	Cummins		
Engine model	KTA38G2B		
Engine type	4-stroke diesel		
Governor type	Electronic		
Injection type	Direct		
Aspiration type	Turbocharged and Charge Air Aftercooled		
Number of cylinders and arrangement	12-V		
Bore and stroke (mm*mm)	159X159		
Displacement (L)	37.8		
Cooling system	Water-cooled		
Lube oil consumption with full load	0.5%-1% of fuel consumption		
Compression Ratio	14.5:1		
Air Filter	Dry		
Fuel Consumption			
Fuel Consumption @100% load ESP (L/H)	187		
Fuel Consumption @100% load PRP (L/H)	170		
Fuel Consumption @75% load PRP (L/H)	130.5		
Fuel Consumption @50% load PRP (L/H)	92		
Air System			
Intake air flow (L/s)	920		
Cooling air flow (L/s)	1		
Exhaust System			
Maximum exhaust temperature (°C)	552		
Exhaust gas flow (L/s)	2634		
Maximum allowed back pressure (kPa)	10		
Starting System			
Starting power(kW)	8.5		
Recommended battery (Ah)	120		
Number of Batteries	2		
Auxiliary voltage (Vdc)	24		
Oil System			
Engine oil capacity (L)	1		
Cooling System			
Total coolant capacity (L)	/		





Alternator Data

Alternator Data				
Number of phase	3			
Power factor (Cos Phi)	0.8			
Poles	4			
Winding Connections (standard)	Star-serie			
Insulation	H class			
Enclosure(according IEC-34-5)	IP23			
Excitation system	Self-excited, brushless			
Voltage regulator	AVR (Electronic)			
No. of bearings	Single bearing			
Coupling system	Flexible disc			
Coating type	Standard (Vacuum impregnation)			

Control Module



Protections with alarm

- Engine protections: low fuel level, low oil pressure, high engine temperature.
- Genset protections: under/over voltage, overload, under/over frequency, starting failure, under/over battery voltage

Other Protections

- Emergency stop button.
- Panel protected through door with lockable handle

Digital Instrumentation

- Generating set voltage.
- Mains voltage.
- Generating set frequency.
- Generating set current.
- Battery voltage.
- Power (kVA-kW-kVAr)
- Power factor $\cos \varphi$.
- Hours-counter
- Engine speed r.p.m
- Fuel level (%)

Commands and other

- Four operation modes: OFF Manual starting -Automatic starting - Automatic test
- Pushbutton for forcing Mains contactor or Genset contactor.
- Push-buttons: start/stop, fault reset, up/down/page/enter selection.
- Remote starting availability.
- DC system disconnection switch.
- Acoustic alarm.
- Automatic battery charger.

Protections with shutdown

- Engine protections: low fuel level, low oil pressure, high engine temperature,
- Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.
- Circuit breaker protection: III poles.
- Earth Fault included in the control unit.

