





# ■ General Characteristics

ltem	Data		
Standby Power (kVA)	1000		
Standby Power (kW)	800		
Prime Power (kVA)	900		
Prime Power (kW)	720		
Power Factor (Cos Phi)	0.8		
Diesel Engine	KTA38G2A		
Frequency (Hz)	50		
Rated Speed (rpm)	1500		
Phase	3		
Standard Voltage (V)	400/230		
Available Voltages (V)	380/220 · 415/240		

#### Power Definition

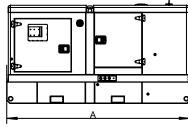
**Standby Power(ESP):** The standby power rating is applicable for supply emergency power in variable load applications in accordance with ISO8528-1, overload is not allowed.

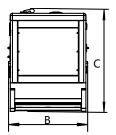
**Prime Power(PRP):** The prime power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO8528-1.

### • 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





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
PCL1000-O	Open set	4170	1800	2250	7250	1
PCL1000-C	Silent set	5812	2090	2550	10870	/





# **■** Engine Data

General Engine Data			
Engine brand	Cummins		
Engine model	KTA38G2A		
Engine type	4-stroke diesel		
Governor type	Electronic		
Injection type	Direct		
Aspiration type	Turbocharged and 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)	219		
Fuel Consumption @100% load PRP (L/H)	197.6		
Fuel Consumption @75% load PRP (L/H)	153.3		
Fuel Consumption @50% load PRP (L/H)	109		
Air System			
Intake air flow (L/s)	1126		
Cooling air flow (L/s)	1		
Exhaust System			
Maximum exhaust temperature (°C)	536		
Exhaust gas flow (L/s)	3225		
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 φ.
- 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.

