PGDLS744KW

60Hz/1800 r.p.m-P.F.0.8					*Prime Power*	*Standby Power*	*Rated Current*
Genset	**Engine**	**Alternator**	**Voltage（V）**	**PH**	**kW/kVA**	**kW/kVA**	**Amps**
FC842X-K	DP222LC	LSA49.1M7 HCI 634G FPA40-6402	**380/220**	3	674/842	744/930	1280.1
		LSA49.1M7 HCI 634G FPA35-5609	**208/120**	3	674/842	744/930	2338.6
		LSA49.1M7 HCI 634G FPA35-5609	**220/127**	3	674/842	744/930	2211.1
		LSA49.1M7 HCI 634G FPA35-5609	**230/132**	3	674/842	744/930	2114.9
		LSA49.1M7 LVI634B FPA35-5609	**480/277**	3	674/842	744/930	1013.4

Ratings: All three Phase generator sets are rated at 0.8 power factor. All single-phase generator sets are rated at 0.8 or 1.0 power factor. POWERGEN reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

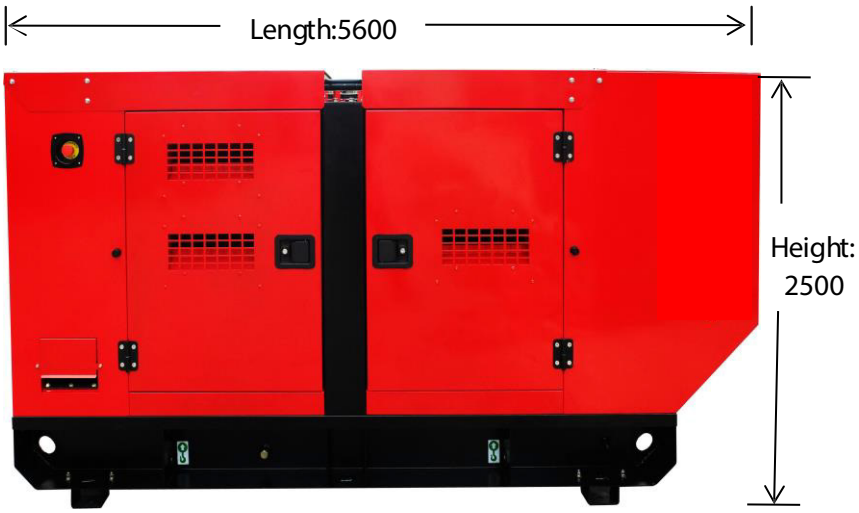
Prime Power:

Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year in accordance with ISO8528-1, and an overload of 10% permitted for one hour in every twelve hours of operation in accordance with ISO 3046-1.

Standby Power:

Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure. No overload available for this service as relevant alternators are peak continuous rated at 27℃.

Overall Dimensions (mm) & Weight (kg)



Weight (kg)：6350

Standard and optional accessories

System	Standard ●	Optional ○
Air Intake System	● Standard air filter ● Air filter overload alarm	○ Air prefilter ○ Heavy air filter
Cooling System	● 50℃ radiator ● Low water level alarm ● Fan and belt guard ● Discharge valve	○ Antifreeze ○ Water jacket heater
Exhaust System	● Stainless steel bellow ● Residential silencer ● Complete exhaust pipe ● Rain cap	○ Stainless steel silencer ○ Stainless steel exhaust pipe
Fuel System	● 8 Hours integrated base fuel tank ● Standard fuel filter ● Fuel level gauge ● Fuel filling cap ● Fuel hose	○ 6 Hours double wall base fuel tank ○ Fuel-water separator ○ Oil level sensor ① ② ○ Automatic fuel top up system ①
Lubrication System	● Standard oil filter ● Manual oil pump and drain	○ Oil heater ○ Lube oil level indicator ○ Oil temperature indicator ①
Alternator and Electric Switch	● Shunt or self excited ● Class H insulation ● H class temperature rise ● DELIXI MCCB ● Terminal connection lugs (L1, L2, L3, LN)	○ PMG or AREP（Leroy-Somer only） ○ Alternator space heaters ○ PT100 winding temperature sensors ○ Weaver AVR ○ Weaver prolapse transformer ○ F class temperature rise ○ 4 Pole circuit breaker with leakage protection ○ Circuit breaker - 4 pole ○ ABB MCCB ○ MCCB auxiliary contact and shunt tripping device
Control System	● Comap Nano Plus for 4 cylinders engine ● Comap InteliLite AMF20 for 6 cylinders or ECU engine	○ Panel lighting
Silent / Base	● 67-72 db(A) @ 3 meters ● 4mm -6mm Steel base ● Transportation support leg ● Single hook ● Power coating enclosure ● Anti-vibration mounting between engine /alternator and base frame ● Emergency stop mounted outside the canopy ● Standard color: Ral 3020	○ Forklift holes ○ Enclosure color: ○ Trailer for off road or on road
Start / Charge	● Battery with bracket and cables ● Engine battery charger ● 3A Mains charger	○ Low temperature starting batteries ○ Battery swtich ○ High current charger（10A，20A）

Remark:

① When you need the automatic oil top up system, you have to use the electrical oil level sensor.

② You can choose either electrical oil level sensor or oil temperature sensor.

Engine

Engine specifications	
Manufacture	DOOSAN DAEWOO
Engine Model	DP222LC
Engine Type	4-Cycle, V-type
Engine Speed	1800 r.p.m
Prime Power	753 kW
Standby Power	828 kW
Governor Type	Electronic
Aspiration	Turbo charged & intercooled (air to air)
Displacement	21.927 L
Bore * Stroke	128mm × 142mm
NO. of Cylinders	12
Compression Ratio	15.0 : 1
Intake Air Flow	52.1 m3/min
Rotation	Counter clockwise viewed from flywheel
Mean Piston Speed	8.5 m/s
Noise Level @3m	78 dBA

Exhaust System	
Exhaust Gas Flow	152 m3/min
Exhaust Gas Temperature	477℃
Maximum Back Pressure	5.9 kPa
Exhaust Pipe Size	N/A

Air Intake System	
Max. static pressure after Radiator	0.125 kPa
Maximum Intake Air Restriction	
. With Clean Filter Element	2.16 kPa
. With Dirty Filter Element	6.23 kPa
Intake Air Flow	55.2 m3/min

Lubrication System	
Oil Capacity (Max.- Min.)	40-27 Litres
Lubrication Method	Fully forced pressure feed type
Oil Pump	Gear Type Driven by Crank-shaft Gea
Maximum oil temperature	120℃

Fuel System	
Type Injection System	Direct Injection
Fuel Feed Pump Capacity	630 liters / h
Fuel Consumption at 100% Standby Power	201.5 Litres/hou
Fuel Consumption at 100% Prime Power	183.2 Litres/hou
Fuel Consumption at 75% Prime Power	134.4 Litres/hou
Fuel Consumption at 50% Prime Power	91.3 Litres/hou
Fuel Consumption at 25% Prime Power	49.1 Litres/hour
Fuel Tank Capacity	6 hours

Cooling System	
Coolant Capacity- Engine Only	23 Litres
Coolant Capacity - with Radiator	114 Litres
Standard Thermostat (Modulating) Range	71-85℃
Maximum for Standby and Prime	103℃
Coolant Flow Rate	660 liters / min

Electric System	
Electrical System Voltage	24V
Battery	Maintenance-free
Connecting Cables	Auailable

Thermal Data	
Radiated Heat to Ambient	69-77 kW
Heat Rejection to Coolant	324-361 kW
Heat Rejection to Exhaust	678-754 kW

Alternator

60Hz/1800R.P.M

General Data	
Power Factor	Cos ∅ = 0.8
Excitation	Shunt / Brushless

Insulation Class	H
Bearing	Single
Altitude	⩽ 1000 m

Ratings

Brand	Alternator	Number of wires	AVR Model	PH	Voltage（V）	***Prime Power*** kW/kVA	***Standby Power*** kW/kVA
Leroy-Somer	LSA49.1M7	6	R449/R450	3	380/220	724/905	800/1000
Stamford	HCI 634G	12	AS440			700/875	760/950
Tide	FPA40-6402	6	MX341B			700/875	770/963
Leroy-Somer	LSA49.1M7	12	R449/R450	3	208/120	712/890	784/980
Stamford	HCI 634G		AS440			700/875	760/950
Tide	FPA35-5609		SX440			672/840	740/925
Leroy-Somer	LSA49.1M7	12	R449/R450	3	220/127	672/840	740/925
Stamford	HCI 634G		AS440			740/925	800/1000
Tide	FPA35-5609		SX440			672/840	740/925
Leroy-Somer	LSA49.1M7	12	R449/R450	3	230/132	702/878	772/965
Stamford	HCI 634G		AS440			770/963	835/1044
Tide	FPA35-5609		SX440			672/840	740/925
Leroy-Somer	LSA49.1M7	6	R449/R450	3	480/277	732/915	804/1005
Stamford	LVI634B	12	MX321			750/938	784/980
Tide	FPA35-5609	6	KR440			672/840	740/925

Control System



		Comap Nano Plus	Comap InteliLite AMF20	Comap InteliLite AMF25
Viewable parameters	Phase voltage	3	3	3
	Wire voltage	3	3	3
	Current	Instrument	3	3
	Frequency	●	●	●
	Active power	×	●	●
	Reactive power	×	●	●
	Apparent power	×	●	●
	Power factor	×	●	●
	Electric energy metering	×	×	●
Generator protection	Abnormal voltage	●	●	●
	Over-current warning	×	●	●
	Over current protection	×	●	●
	Over Frequency protection	●	●	●
	Short circuit protection	MCCB	MCCB+○	MCCB+○
Engine figure	Oil pressure	●	●	●
	Water temperature	●	●	●
	Fuel level	○	○	○
	Speed	●	●	●
	Battery voltage	●	●	●
	Elapsed time	●	●	●
Engine protection	Low oil pressure warning	●	●	●
	Low oil pressure protection	●	●	●
	High temperature warning	●	●	●
	High temperature protection	●	●	●
	Overspeed warning	●	●	●
	Overspeed protection	●	●	●
	Charge fault	●	●	●
Function	Remote start-stop	●	●	●
	AMF	●	●	●
	Programmable input	3	7	7
	Programmable output	6	7	7
	Port extension	USB	○	○
	Remote monitoring	×	○	○
	Communication port	×	○	○
	CAN	●	○	●
	Start/Stop time control	×	×	●
	Maintenance tips	×	×	●
	Fault record	×	×	●
	Multi-language function	×	●	●

Remark: ● Standard ○ Optional × NA

Automatic Transfer Switch *A.T.S - 4 Poles*

(Safety Installation: Detect - Control – Switch System)

POWERGEN offers not only a changeover switch but also an integrated mains detection and switch system for your 24 Hour Power Protection. The system enables automatic start-up and operation of the generating set in the event of a mains power failure, overvoltage or loss of phase; and also mains automatic re-transfer once it come back.
The system has a wide application such as hospital, bank, telecom, air port, broadcasting station and hotels.

System Advantages

- Automatically transfer and re-transfer load from main power to gen-power without operator intervention.operation.（Both automatic and manual)
- ATS Controller (AMF function), seamless integration with Intelligent 5.0
- Available from 32 – 3200A, better protection for 4 pole switch.
- Available in standard, bypass isolation and service-entrance configurations.
- Configurable in open, closed and programmed transition operating modes.
- Designed to interface seamlessly with POWERGEN generators and switchgear.
- Drip Proof IP23 Enclosure.
- Easy Installation: Wall-mounted & Floor standing
- Comes fully loaded with the technology to do the job.

Rated Current	Breakey Type		
A	Chinese	ABB	Socomec
32	×	B	×
63	A	B	B
80	×	×	B
100	A	B	B
125	×	B	B
160	B	B	B
200	×	B	×
250	C	B	B
300	×	×	×
315	×	C	×
400	C	C	C
630	C	D	D
800	D	D	D
1000	D	D	D
1250	D	D	D
1600	D	D	E
2000	E	E	E
2500	E	E	E
3200	E	×	E

Dimensions : mm

A：400×200×500　　B：500×300×650
C：600×400×1200　　D：800×600×1400
E：1000×800×1600

Controller

Standard Parameters

- Gen phase voltage
- Generator frequency
- Engine speed
- Battery voltage
- Engine running hours counter
- Engine temperature
- Oil pressure

Warning and Shutdown Alarms

- Low oil pressure
- High engine temperature
- Over speed
- Under speed
- Start failure
- Stop failure
- Emergency stop
- High/low battery voltage
- Aux. shutdown alarm
- Aux. Warning