

**Ashok Leyland**  
Model : LP 600  
Frequency : 50Hz  
Diesel Generator



Model	Engine	Alternator	Voltage	PH	Frequency	Prime Rating		Power factor
						KVA/kW	Amps	
LP600	2806C-E18TAG1A	HCI544F	415V	3	50 Hz	600/475	834	0.8

Engine Specification	Prime Power Rating
Engine Manufacturer	Perkins UK
Engine Model	2806C- E18TAG1A
Configuration	6, Vertical In-line
Aspiration	Turbo Charged and Air to Air Charge Cooled
Gross Engine Power output, kWm / BHP	532 / 713
Net Engine power output, kWm / BHP	514 / 689
BMEP @ rated load, kPa	2347
Displacement, L	18.1
Bore , mm	145
Stoke, mm	183
Rated Speed, rpm	1500
Piston Speed, m/s	9.0
Compression Ratio	14.5 : 1
Lub oil capacity Max,	53
Lub oil capacity Min, L	45
Governor Type	Electronic
Starting Voltage, V- DC	24

Power Solutions Business Group : In the recent past the Engines division of Ashok Leyland , which caters to the supply of diesel engines for applications such as Diesel Generators (DG Sets) , Earthmoving Equipments, Compressors, Harvester Combines, Cranes, Marine Applications, Road Sweepers and other special applications has now been rechristened as the Power Solutions Business (PSB).

Power Solutions Business Group has ventured into providing complete power solutions in the segment of DG sets, Special applications and Marine.

Over 30,000 LEYPOWER diesel generators , manufactured at various units of Ashok Leyland have already rolled out within a span of 30 months.

LEYPower is the fastest growing DG Set Brand in India. With state-of-the-art technology in engine, alternators and controllers, LEYPower provides a fully integrated power system at par with global standards at a very competitive overall cost of ownership.

LEYPower ready-to-use (RTU) diesel generators which comply with the latest CPCB norms in India, are also comfortably meeting the international norms as well. These sets are powered by compact multi-cylinder , technologically advance diesel engines. Aesthetically designed, these DG sets are silent , environment friendly, require minimum maintenance , and are having very low operating costs as compared to the competitors.

Fuel System	
Recommended fuel to conform to	BS2869 Class A2 or BSEN 590
Type of injection system	Direct injection
Fuel injection pump	Combined unit injector
Fuel injector	Combined unit injector
Delivery/hour at 1500 rev/min, L	413
Fuel lift pump pressure, kPa	600
Fuel lift pump maximum suction head, m	3.0
Fuel filter spacing, microns	10

Air System	
Maximum air intake restriction of engine clean filter	3.7 kPa
Maximum air intake restriction of engine , dirty filter	6.35 kPa
Air filter type	Dry - paper
Combustion air flow, m <sup>3</sup> /min	40

Exhaust System	
Maximum back pressure for total system	610 mm H2O
Exhaust gas temperature, after turbo, °C	430
Exhaust gas flow maximum after turbo , m <sup>3</sup> /min	180

Standard set with radiator (Liquid Cool)	
Ambient Clearance , °C	49
Fan Load , KW	9
Coolant Capacity with radiator , L	61
Engine Coolant Flow, L/s	6.1
Cooling system air flow, m <sup>3</sup> /sec	11.7

Weights*	
Unit dry weight kgs	4908
Unit wet weight kgs	5162
* Weight represent a set with standard feature	

Dimension	Length	Width	Height
Standard open set dimension	4000	1800	2400

Alternator Specification	
Rating	600 / 625 / 650kVA - 3ph
Model	CGT/Leroy Somer/C.G/Trident
Rated Voltage	415V
Type	4 pole
Exciter type	Brushless
Insulation	Class - H
Temperature rise	125 °C
Enclosure Protection	IP23
Bearing	Single
Voltage regulation	± 0.5%
Efficiency	95.1

Prime power is available for an unlimited number of annual operating hours in variable load applications, in accordance with IS 8528-1.

A 10% overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO3046-1.

Standby Power Rating is applicable for supplying emergency power for the duration of utility power interruption. No Overload, utility parallel or negotiated outage operation capability is available at this rating.

In installations served by unreliable utility sources (where outage last longer or occur more frequently), where operation is likely to exceed 2000 hours per year, the prime power should be applied.

Power rating as per Standard reference condition as per BS 5514/ ISO 3046 / ISO 8528

Reference condition 27 °C ambient Temp, 100KPA (750mm of Hg) Atmospheric Condition and 60% humidity – as per IS10002, ISO 3046

Fuel consumption of DG set is considering specific gravity of fuel as 0.8355 at NTP condition, Tolerance will be +5%

The above specification are liable to change due to continuous improvement and are for reference only, Ashok Leyland Limited reserve the right to revise the specification or dimension without notice.

**Advanced Integrated Digital Woodward Controller ( EasYgen-3000 ) Optional**



- Operation mode : Manual, auto and synchronization
- Breaker Control : Slip Frequency/ phase matching synchronization, open-close control, breaker monitoring
- Load transfer feature: open / closed transition, interchange, soft loading / soft unloading mains parallel
- Real and reactive load sharing with up to 32 units
- Counter for operating hours/ engine starts / maintenance / active / reactive energy
- Configurable trip levels / delay timers / alarm classes for monitoring and protective functions
- Clear text display and evaluation of up to 100 J1939 analog values
- Discrete and analog I/O expansion board connectivity
- Front panel and PC configurable (ToolKit software)
- Multi-level password protection for access via HMI or interface
- Event recorder (300 events, FIFO) with real time clock
- Measuring
  - o Generator voltage 3 phase/4wire, Current ( 3x true rms)
  - o Mains Voltage 3 phase/4wire, current (1x true rms)
  - o Bus bar voltage 1 phase / 2 wire