

# EZ-POWER

## EQUIPMENT

ez-power.co



# EZ-687

## GENERATING SET (TECHNICAL DATA SHEET)

### Standard Specifications:

#### 1- Prime Rating:

Unlimited hours usage, with an average load factor of 80% over each 24 hour period. 10% overload is available for 1 hour in every 12 hours operation. 0 overload is permitted on standby power.

#### 2- Standby Rating:

Limited to 500 hours annual usage, with an average load factor of 80% of the published standby power rating over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on standby power.

#### 3- Engine:

Perkins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.

#### 4- Alternator Type:

brushless AC alternator

#### 5- Radiator:

50°C, fan protective shroud

### Output Rating:

#### PRIME:

#### STANDBY:

60 Hz—1800 Rpm 480 V, 3ph

625 kVA

500 kW

687 kVA

549.6 kW

### ENGINE SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Engine Make                 | PERKINS                                  |
| Engine Model                | 2806A-E18TAG1A                           |
| No. of Cylinders            | 6 vertical in-line                       |
| Cycle                       | 4 Stroke                                 |
| Aspiration                  | Turbocharged & air to air charged cooled |
| Cooling Method              | Water cooled                             |
| Governing Type              | Electronic                               |
| Governing Class             | G2 - ISO 8528 Part 1                     |
| Compression Ratio           | 14.1:1                                   |
| Displacement                | 18.1 L                                   |
| Bore/Stroke                 | 145 x 183 mm                             |
| Dynamic Charging Alternator | 70AMP, 24V                               |

### ALTERNATOR SPECIFICATIONS

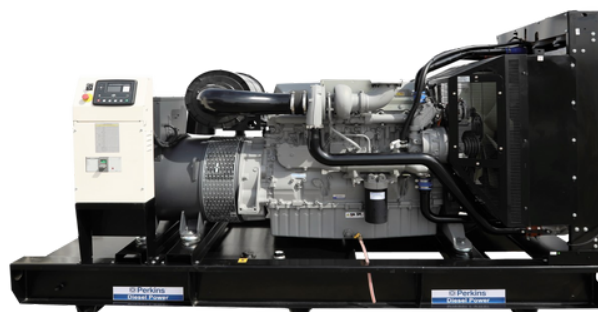
|                              |                                    |
|------------------------------|------------------------------------|
| Alternator Make              | EZ   Leroy Somer   STAMFORD        |
| Alternator Model             | EZ   TAL-A47-E   HCI544E/SSL1D-E41 |
| Number of Poles              | 4                                  |
| Number of Winding Leads      | 6                                  |
| Type of Bearing              | Single Bearing                     |
| Insulation Class - Temp Rise | Cont. H - 125/40 °C                |
| Ingress Protection Rating    | IP 23                              |
| Excitation System            | Self Excited                       |
| AVR Model                    | R150                               |

### Comply with Standards

ISO 3046, BS 5514, DIN 6271, NEMA-MGI, DIN EN, BS 5000, IEC 60034, IEC 60947-2

### Alternator Operating data

|                          |             |
|--------------------------|-------------|
| Over speed               | 2250 rpm    |
| Voltage Regulation       | + 1%        |
| Harmonic Coefficient THF | < 2%        |
| Tel. influence TIF       | < 50        |
| Cooling air flow         | 0.9 m3/ Sec |



### Powered By:



Diesel Generator



LEROY-SOMER



## Standard Specifications:

### 6- Fuel Tank:

Capacity of fuel tank is for 8 –10 hours running  
Built in fuel tank up to 800 kVA

### 7- Circuit Breaker:

3 pole LS MCCB

### 8- Control system alarms:

- Over and Under Speed
- Low and High Battery Volt.
- Start and Stop Failure
- Over Current
- Under / Over Generator Voltage
- Low Oil Pressure
- Emergency stop
- High engine temperature

### 9- Warranty policy:

- EZ POWER products has a warranty for 12 Months or 1000 hours whichever occurs first against any manufacturing defects
- Wearing parts (filters), incorrect man made operation, mainte-

## Control System:

Large back-lit text display

Multiple display languages

DSENET expansion compatible

Data logging facility

Fully configurable via PC using USB communication

Front panel configuration

Efficient power save mode

3 phase generator sensing

Accumulated power monitoring (kWh, kVA h, kVAh)

Generator/load current monitoring and protection (kW)

Breaker control via fascia buttons

Fuel and start outputs, configurable using can

4 configurable DC outputs

4 configurable analogue/digital inputs

Automatically transfers between mains (utility) and generator

Increased input and output expansion capability via dsenet

IP65 rating (with optional gasket) offers increased resistance to water ingress

Digital inputs; Analogue Inputs



### DSE6110 MKII

AUTO START & AUTO MAINS  
FAILURE CONTROL

## Dimensions:

| Type   | Length (mm) | Width (mm) | Height (mm) | Fuel Tank ( L ) | Weight (KG) |
|--------|-------------|------------|-------------|-----------------|-------------|
| OPEN   | 3650        | 2295       | 2690        | 1450            | 5875        |
| CLOSED | 5873        | 2224       | 2817        | 1835            | 8197        |

**Note:** The following dimensions are for preliminary guidance. For more detailed and accurate dimensions, please refer to the General Arrangement Drawing (GAD).

## Acoustic Enclosure Specifications:

| Enclosure Type            | Acoustic & Weather Proof                                |
|---------------------------|---|
| Drainage Provision        | Fuel and Water Drainage                                 |
| Transportation            | Tested Single Point Lifting Facility & Forklift Pockets |
| Ingress Protection Rating | IP 23   |
| Lifting                   | ISO Standard Lifting                                    |
| Canopy RAL Color          | TAL 9010  |
| Base frame RAL Color      | RAL 9011  |
| Noise Pressure level @ 7m | 84 dB(A)±3dB(A)   |



## Engine:



Perkins heavy duty high performance industrial type diesel engine.

### COOLING SYSTEM

|                              |                          |
|------------------------------|--------------------------|
| Total Coolant Capacity (L)   | 61 L                     |
| Cooling Fan Air Flow         | 702 m <sup>3</sup> / min |
| Radiator Fan Load            | 9.0 kW                   |
| Heat Radiation to Room (PRP) | 38 kW                    |
| Heat Radiation to Room (ESP) | 42 kW                    |

### LUBRICATION SYSTEM

|                    |                     |
|--------------------|---------------------|
| Oil Filter Type    | Spin-On Full Flow   |
| Total Oil Capacity | 62 L                |
| Oil Type           | API-CH-4 or ACEA E5 |

### EXHAUST SYSTEM

|                            |                               |
|----------------------------|-------------------------------|
| Muffler Type               | Industrial Grade              |
| Max. Back Pressure         | 6.9 kPa                       |
| Exhaust Gas Flow (PRP/ESP) | 110 /115 m <sup>3</sup> / min |
| Exhaust Gas Temperature    | < 565 °C                      |

### FUEL SYSTEM

|                           |                 |
|---------------------------|-----------------|
| Recommended Fuel          | Class A2 Diesel |
| Fuel Consumption Standby  | 134 L/hr        |
| Fuel Consumption 100% PRP | 129 L/hr        |
| Fuel Consumption 75% PRP  | 97 L/hr         |
| Fuel Consumption 50% PRP  | 96 L/hr         |

### AIR SYSTEM

|                                   |                        |
|-----------------------------------|------------------------|
| Air Filter Type                   | Paper Element          |
| Combustion Air Flow (PRP)         | 40 m <sup>3</sup> /min |
| Combustion Air Flow (ESP)         | 41 m <sup>3</sup> /min |
| Max Air Filter Intake Restriction | 6.35 kPa               |

## Optional configurations:

### Engine accessories:

- ☐ Heavy-duty air filter
- ☐ Coolant heater
- ☐ Lubricant oil heater
- ☐ Fuel and Water Separator
- ☐ Lube oil rotary pump

### Alternator And Accessories:

- ☐ Leroy somer/stamford
- ☐ Anti condensation heater
- ☐ PMG + AVR ◇ Double bearing
- ☐ Alternator High voltage \_\_\_\_\_kV
- ☐ RTDs for Bearing and winding

### Cooling System:

- ☐ 55 degree Radiator
- ☐ Remote Radiator

### Control System:

- ☐ AMF
- ☐ Parallel
- ☐ Practical type in low temperature environment
- ☐ Control Screen Heater
- ☐ Remote Annunciators
- ☐ Other (Comp, DEIF)

### Circuit Breaker:

- ☐ 3/4 poles
- ☐ Fixed/handcart type
- ☐ Electric mechanism

### Automatic Transfer Switch (ATS):

- ☐ ATS cabinet
- ☐ Contractor type ATS
- ☐ Motorized changeover type ATS

### Start Battery:

- ☐ Nickel-cadmium battery
- ☐ Maintenance-free battery
- ☐ Battery charger and selector switch
- ☐ Charging current meter

### External Fuel Tank:

- ☐ Single /double wall fuel tank (500-5000 L)
- ☐ Fuel Transfer pump

### Exhaust Muffler:

- ☐ Residential grade
- ☐ Critical grade
- ☐ Hospital grade

### Available for voltages :

- ☐ 400/230V, 480/277V, 380/220V, 440/254V, 416/240V, 220/127V, 208/120V

De-rating may apply.