

## GBW15P (ALT. LI)



### Main Features

Frequency	Hz	50
Voltage	V	400
Power factor	cos $\phi$	0.8
Phase		3

### Power Rating

Standby power LTP	kVA	14.10
Standby power LTP	kW	11.28
Prime power PRP	kVA	12.72
Prime power PRP	kW	10.18

#### Ratings definition (According to standard ISO8528 1:2005)

##### PRP - Prime Power:

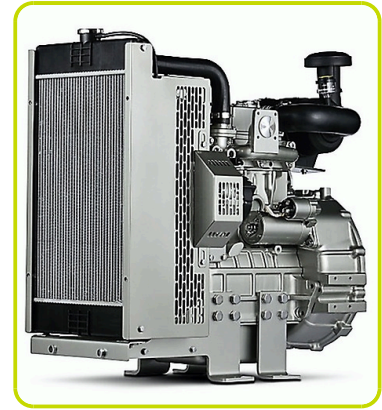
It is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output over 24 h of operation shall not exceed 70 % of the prime power.

##### LTP - Limited-Time running Power:

It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 h of operation per year (whose no more than 300 for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

## Engine specifications

Engine manufacturer	Perkins	
Model	403D-15G	
[50Hz] Exhaust emission level	Unregulated	
Engine cooling system	Water	
Nr. of cylinder and disposition	3 in line	
Displacement	cm <sup>3</sup>	1496
Aspiration	Natural	
Speed governor	Mechanical	
Prime gross power PRP	kW	12.2
Maximum gross power LTP	kW	13.5
Oil capacity	l	6
Coolant capacity	l	6
Fuel	Diesel	
Specific fuel consumption @ 75% PRP	g/kWh	252
Specific fuel consumption @ PRP	g/kWh	248
Starting system	Electric	
Starting engine capability	kW	2
Electric circuit	V	12



## Engine Equipment

### Standards

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1

### Fuel system

Rotary type pump

### Lube oil system

Wet steel sump with filler and dipstick

### Filter

- Fuel filter
- Air filter
- Oil filter

### Cooling system

- Mounted radiator
- Thermostatically-controlled system with belt driven coolant pump and pusher fan

## Alternator Specifications

Alternator		Linz
Model		E1S13MD
Voltage	V	400
Frequency	Hz	50
Power factor	cos $\phi$	0.8
Poles		4
Type		Brushes
Voltage tolerance	%	4
Efficiency @ 75% load	%	85.4
Class		H
IP protection		21



The E1S/4 series includes three-phase 4 poles alternators with brushes and compound regulation.

### Mechanical structure

Robust mechanical structure which permits easy access to the connections and components during routine maintenance check-ups.

### Voltage accuracy:

$\pm 4\%$  from no load to full load,  $\cos\phi = 0.8$  at constant rotation speed.

### Output voltage wave form:

The low harmonic content (<5%) allows supplying any type of load, including distorting loads.

### Short circuit current:

In case of short circuit the permanent current exceeds rated current by three times, ensuring the correct operation of protections.

### Overload:

10% overload for one hour every 6 hours is normally accepted. Short overloads can be very high (three times the rated current).

## Genset equipment

### BASE FRAME MADE OF WELDER STEEL PROFILE, COMPLETE WITH:

- Anti-vibration mountings properly sized
- Visual fuel level indicator
- Integrated support legs.

### PLASTIC FUEL TANK, COMPLETE WITH:

- Filler neck
- Air breather (ventilation pipe)
- External fuel refilling

### OIL DRAININ PIPE WITH CAP:

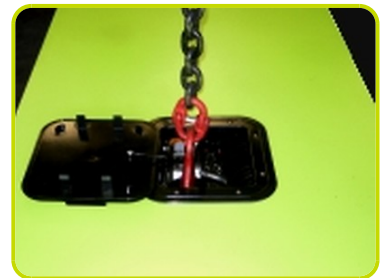
- Oil draining facilities

### CANOPY:

- Single piece hinged soundproof canopy equipped with pneumatic arms and handles to lift up the canopy allowing easy access to the genset for maintenance purposes.
- Simple handling operations with central lifting eye

### SOUNDPROOF:

- Noise attenuation thanks to soundproofing material (polyurethane foam) and efficient residential silencer placed inside the canopy.



### Dimensional data

Length	(L) mm	1645
Width	(W) mm	870
Height	(H) mm	1072
Dry weight	Kg	550
Fuel tank capacity	l	51
Fuel tank material		Plastic



### Autonomy

Fuel consumption @ 75% PRP	l/h	2.74
Fuel consumption @ 100% PRP	l/h	3.60
Running time @ 75% PRP	h	18.61
Running time @ 100% PRP	h	14.17

### Noise level

Guaranteed noise level (LWA)	dB(A)	95
Noise pressure level @ 7 m	dB(A)	66



### Installation data

Total air flow	m <sup>3</sup> /min	42.50
Exhaust gas flow @ PRP	m <sup>3</sup> /min	2.7
Exhaust gas temperature @ LTP	°C	445

### Electrical Data

Battery capacity	Ah	70
MAX current	A	20.35
Circuit breaker	A	20

## ACP - Automatic control panel

Automatic control panel mounted on the genset, complete with digital control unit for monitoring, control and protection of the generating set.

### INSTRUMENTATION DIGITAL

- Mains voltage.
- Generating set voltage (3 phases).
- Generating set frequency
- Generator set current (1 phase).
- Battery voltage
- Hours-counter.

### COMMANDS AND OTHERS

- 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
- Emergency stop button.
- Remote starting availability.
- DC system disconnection switch
- Automatic battery charger
- Settable PASSWORD for protection level

### PROTECTIONS WITH ALARM

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

### PROTECTIONS WITH SHUTDOWN

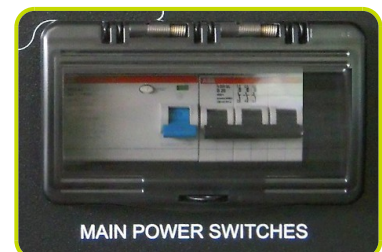
- Engine protections: low oil pressure, high engine temperature
- Genset protection: under/over voltage, overload, under/over battery voltage
- Circuit breaker protection: III poles
- Differential protection

### OTHERS

- Cover protection Power switch

### OUT PUT PANEL ACP

Plinth row for connection from ACP to LTS panel.		√
3P+N+T CEE 400V 32A	n	1



**Supplements:**

To be ordered with the equipment

:

**ENGINE SUPPLEMENTS**

PHS - Coolant Pre-Heating System - available for models:

ACP

## Accessories

Items available as accessory equipment

- |                    |   |
|--------------------|---|
| STR - Site trailer | • |
| RTR - Road Trailer | • |



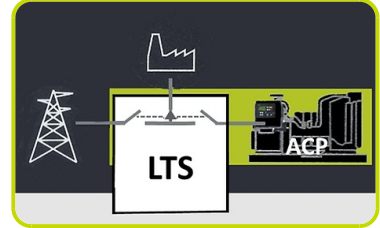
### LTS - Load Transfer Switch [Accessories for ACP Automatic Control Panel]

The Load Transfer Switch (LTS) panel operates the power supply changeover between the generator and the Mains in backup applications, guarantying the feeding to the load within a short period of time.

It consists of a standalone cabinet which can be installed separate from the generating set. The logic control of the power supply changeover is operated by means of the Automatic Control Panel (ACP) mounted on the generating set, so therefore none logic device is required on the LTS panel.

#### LTS Type ATyS\_dm:

- Box type: steel enclosures
- Installation mode: Wall mounted
- Door: Hinged door closed with double barb locking.
- Ingress Protection: IP54
- Gland Plates: Removable on the top & bottom side
- Connections: Bottom/Bottom
- Motor unit
- Switch position indicator
- Auto/Manual cover selector
- Housing for manual handle
- Padlocking mechanism
- Two side by side mounted load break switches
- Poles 4
- Double coils self-powered
- Voltage (coils): 230/240VAC (Tolerance+/-20% 176/288VAC)
- Frequency 50 & 60HZ
- Compliant with IEC 60947-3, EN 61439-6-1 and GB 14048-11



SUPPLEMENTS AVAILABLE ON REQUEST (Only for LTS Version ATyS\_dm):

- **ESB** - Emergency Stop Button (installed on the panel front)
- **APP** - Additional IPXXB Protection (internal plexiglass)

The information is aligned with the Data file at the time of download. Printed on 22/04/2020 (ID 10637)

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