

## PME30S



### Main Features

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

### Power Rating

Standby power LTP	kVA	33.66
Standby power LTP	kW	26.93
Prime power PRP	kVA	30.57
Prime power PRP	kW	24.46

### 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	1103A-33G	
[50Hz] Exhaust emission level	Non Emission Certified	
Engine cooling system	Water	
Nr. of cylinder and disposition	3 in line	
Displacement	cm <sup>3</sup>	3300
Aspiration	Natural	
Speed governor	Mechanical	
Prime gross power PRP	kW	28.2
Maximum gross power LTP	kW	31
Oil capacity	l	8.3
Lube oil consumption @ PRP (max)	%	0.15
Coolant capacity	l	10.2
Fuel	Diesel	
Specific fuel consumption @ 75% PRP	g/kWh	214.5
Specific fuel consumption @ PRP	g/kWh	211.5
Starting system	Electric	
Starting engine capability	kW	3
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	Leroy Somer	
Model	LSA42.3VS3	
Voltage	V	400
Frequency	Hz	50
Power factor	cos $\phi$	0.8
Type	Brushless	
Poles	4	
Voltage regulation system	Electronic	
Standard AVR	R438	
Voltage tolerance	%	0.5
Efficiency @ 75% load	%	89.4
Class	H	
IP protection	23	



### SPECIALLY ADAPTED TO APPLICATIONS

The LSA 42.3 alternator is designed to be suitable for typical generator applications, such as: backup, marine applications, rental, telecommunications, etc.

### TOP OF THE RANGE ELECTRICAL PERFORMANCE

- Class H insulation.
- Standard 12 wire re-connectable winding, 2/3 pitch, type no. 6.
- High efficiency and motor starting capacity.
- R 791 interference suppression conforming to standard EN 55011 group 1 class B standard for European zone (CE marking).

### EXCITATION AND REGULATION SYSTEM

- Excitation system: AREP
- Voltage A.V.R.: R 438

### REINFORCED MECHANICAL STRUCTURE

- Compact rigid assembly to better withstand generator vibrations.
- Steel frame.
- Aluminium flanges and shields.
- single-bearing designed to be suitable for heat engines.
- Half-key balancing bearing.
- Permanently greased bearing (20 000h).

### PROTECTION SYSTEM SUITED TO THE ENVIRONMENT

- The LSA 42.3 is IP 23.
- Winding Protection for clean environments with relative humidity  $\leq 95\%$ , including indoor marine environments.

### COMPLIANT WITH INTERNATIONAL STANDARDS

The LSA 42.3 alternator conforms to the main international standards and regulations: - IEC 60034, NEMA MG 1.32-33, ISO 8528-3, CSA C22.2 n°100-14, UL 1146 (UL 1004 on request), marine regulations, etc.

It can be integrated into a CE marked generator.

The LSA 42.3 is designed, manufactured and marketed in an ISO 9001 environment and ISO 14001.



## Genset equipment

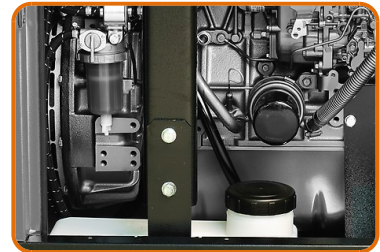
### BASE FRAME MADE OF WELDED STEEL PROFILE, COMPLETE WITH:

- Anti-vibration mountings properly sized
- Welded support legs



### PLASTIC FUEL TANK WITH THE FOLLOWING COMPONENT:

- Filler neck
- Air breather (ventilation pipe)
- Minimum fuel level sensor



### OIL DRAINING PIPE WITH CAP:

- Oil draining facilities



### ENGINE COMPLETE WITH:

- Battery
- Liquids (no fuel)

### CANOPY:

- Soundproof canopy made up of modular panels, realized with zinc-coated steel as treatment against corrosion and aggressive conditions, properly fixed and sealed allowing a full weatherproof enclosure.
- Easy access to the genset for maintenance purposes thanks to: Wide lateral access doors fixed by stainless steel hinges and provided with plastic lockable handles and internal perforated galvanized steel-sheet; Detachable panels, with screws holes protected by rubber tap.
- Control panel protection door provided with suitable window and lockable handle.
- Lateral air inlet opening properly protected and soundproofed. Exhaust air outlet from the roof, through wet section protected by proper grid.
- Single detachable lifting eye placed on the roof.



### SOUNDPROOF:

- Noise attenuation thanks to soundproofing material
- Efficient residential silencer placed inside the canopy



### Dimensional data

Length	(L) mm	2000
Width	(W) mm	920
Height	(H) mm	1310
Dry weight	Kg	845
Fuel tank capacity	l	68



### Autonomy

Fuel consumption @ 75% PRP	l/h	5.37
Fuel consumption @ 100% PRP	l/h	7.10
Running time @ 75% PRP	h	12.66
Running time @ 100% PRP	h	9.58

### Noise level

Guaranteed noise level (LWA)	dB(A)	93
Noise pressure level @ 7 mt	dB(A)	64

### Installation data

Exhaust gas flow @ PRP	m <sup>3</sup> /min	5.7
Exhaust gas temperature @ LTP	°C	500

### Data Current

Battery capacity	Ah	70
MAX current	A	48.59
Circuit breaker	A	50

### Control panel availability

AUTOMATIC CONTROL PANEL	ACP
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## ACP - Automatic control panel

Mounted on the genset, complete with digital control unit for monitoring, control and protection of the generating set, protected through door with lockable handle.

### DIGITAL INSTRUMENTATION

- Generating set voltage (3 phases).
- Mains voltage.
- Generating set frequency.
- Generating set current (3 phases).
- Battery voltage.
- Power (kVA - kW - kVA<sub>r</sub>).
- Power factor Cos φ.
- Hours-counter.
- Engine speed r.p.m.
- Fuel level (%).
- Engine temperature (depending on model)

### 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.
- Remote starting availability.
- DC system disconnection switch.
- Acoustic alarm.
- Automatic battery charger.
- RS232 Communication port.
- Settable PASSWORD for protection level.

### 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

### PROTECTIONS WITH SHUTDOWN

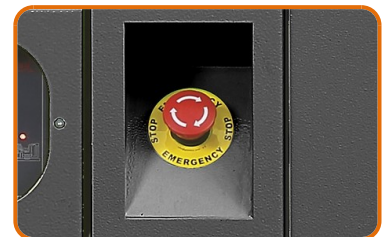
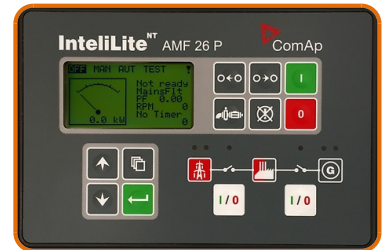
- Engine protections: low fuel level, low oil pressure, high engine temperature,
- Genset protection: under/over voltage, overload, under/over battery voltage, battery charger failure.
- Circuit breaker protection: III poles.
- Earth Fault included in the control unit.

### OTHERS PROTECTIONS

- Emergency stop button.
- Panel protected through door with lockable handle.

### OUT PUT PANEL ACP

Plinth row for connection from ACP to LTS panel.	√
Power cables connection to Circuit Breaker.	√



## Supplements:

Only Available when order :

### CONTROL PANEL SUPPLEMENT

RCG - Various supplements for remote controls - available for models:	ACP
TLP - Various supplements for remote signals - available for models:	ACP
ADI - Adjustable Differential Intensity - available only for models:	ACP
TIF - IV Poles Circuit Breaker instead of III - available for models:	ACP
ETB - External Terminal Board - available for models:	ACP

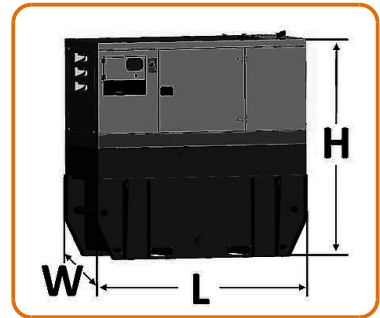


### GENSET EQUIPMENT

KPR - Premium Kit (Leak Proof Tray - Leakage detection sensor - Manual oil drain pump)	
AFP - Automatic Fuel Pump	ACP

### Extended Fuel Tank

Fuel tank capacity	l	450
Length (Genset)	(L) mm	2005
Width (Genset)	(W) mm	1066
Height (Genset)	(H) mm	1812



### ENGINE SUPPLEMENTS

PHS - Coolant Pre-Heating System - available for models:	ACP
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## Accessories

Items available as accessory equipment

### LTS - LOAD TRANSFER SWITCH - Accessories ACP

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 mounted on the generating set, so therefore none logic device is required on the LTS panel.

#### NOMINAL CURRENT & DIMENSIONS PANEL LTS (standard\*)

Nominal Current	A	60
Width	(W) mm	400
Height	(H) mm	400
Depth	(D) mm	240
Weight	Kg	14

\* = Available electrical power more

