



TECNOGEN

PERKINS GENSETS SERIES

DATA SHEET AP39

31 KW STAND BY

28 KW PRIME



TECNO GENERACION SAC

Lima - Perú

General Performance Data

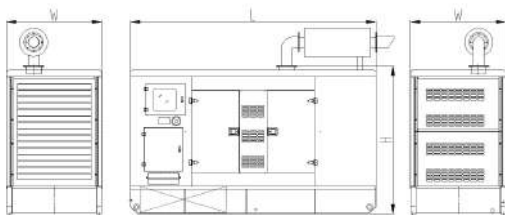
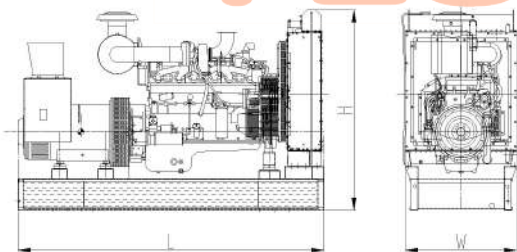
Prime Power	35KVA/28KW	Engine	Brand	Perkins
Stand by Power	38KVA/31KW		Model	1103A-33G
Frequency/Speed	60Hz/1800rpm	Control module	Deepsea 6120	
Rated Power Factor(cosφ)	0.8	Rated Current	91A	
Standard Voltage	220V	Capacity of Breaker	160A	
Phases	3	Starting Voltage	DC12V	

Fuel consumption

Rated output	Fuel consumption rate	
100%Standby	216.1g/KW.h	9.5L/h
100%Prime	211.1g/KW.h	8.6L/h
75%Prime	216g/KW.h	6.6L/h
50%Prime	235.4g/KW.h	4.9L/h
25%Prime	309g/KW.h	3.1L/h

Standards followed

ISO9001	ISO14001
ISO8528	ISO12100
ISO13849	EN12601
GB12786	GB/T2820
IEC60034	IEC60204
CE	RETIE



Dimensions and Weights

Type	Open	Silent
Length(mm)	1700	2250
Width(mm)	810	1000
Height(mm)	1260	1540
Weight(kg)	830	1230
Base fuel tank volume (L)	100	100

Engine specification

Basic parameter

Manufacturer	Perkins
Model	1103A-33G
No. of cylinder	3
Type	4 cycle, Vertical In-line
Prime Power	33.2kw /45.2HP
Standby Power	36.5kw /49.6HP
Induction system	Naturally aspirated
Governor	Mechanical/electronic
Bore x Stroke	105x127mm
Displacement	3.3L
Compression ratio	19.25:1
Oil Capacity(Total)	8.3L
Coolant Capacity(Engine only)	10.2L
Cranking Motor Voltage	DC12V

Fuel System

Type Injection system	Indirect injection
Flow/hour	120 - 150 litres/h (211 - 264 pt/m)

Lubrication system

Oil Pressure	
Relief valve opens	415 - 470 kPa
- at maximum no-load speed	276 - 414 kPa
Max. allowable oil temperature	125°C
Oil Pan capacity - Low/High	6.2L/7.8L
Total system capacity	8.3L
Angularity of oil pan-Front Down	25°

Air induction system

Maximum allowable intake air restriction	
---with clean filter element	5.0kPa
---with dirty filter element	8.0kPa
---air filter type	Dry element type

Exhaust system

Max. allowable back pressure	8.0kPa
Standard exhaust pipe diameter	56mm

Cooling system

Coolant capacity	
---Engine only	4.4L
---Total system	10.2L
---With heat exchanger	-
Standard thermostat(modulating) range	82-93 °C
Max. coolant temperature	110 °C
Max. allowable top tank temperature for stand by/prime power	110 °C

Electric system

Min. recommended battery capacity (12V)	
---10°C(50°F) & above- 0°F CCA	770A
--- 0°C(32°F) to 10°C(50°F)- 0°F CCA	770A
---18°C(0°F) to 0°C(32°F)- 0°F CCA	900A
Max. allowable resistance of Starting circuit	0.002ohm
Starter(heave,Anode)	DC12V
Battery recharge system, negative ground	65ampere

Alternator specification

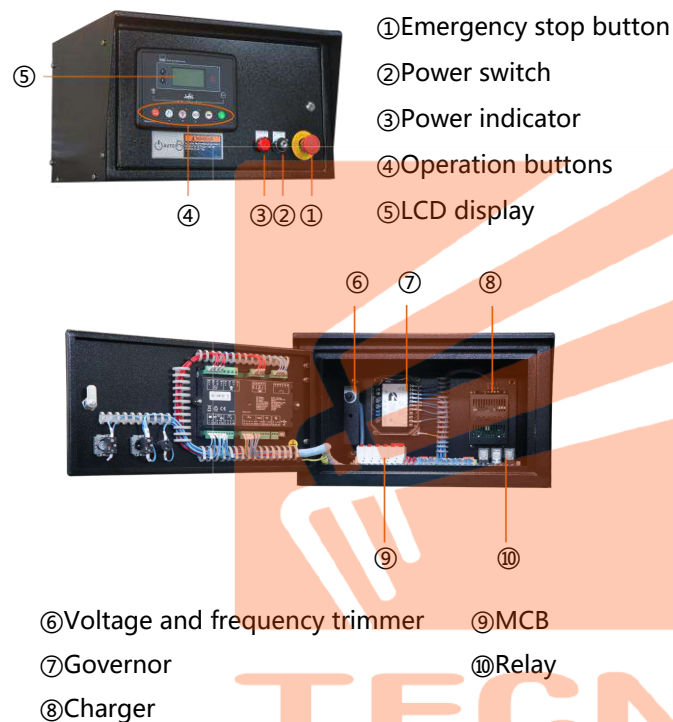
Phases	3
Poles	4
Power factor(cosφ)	0.8
Winding connection	Star
Winding pitch	2/3
Voltage regulator type	AVR

Coating	Vacuum impregnation
Insulation class	H
Protection	IP23
Excitation system	Self-excited
Bearing	Single Bearing
Coupling	Flexible disc

Control system Introduction

Deepsea 6120 Auto start & auto mains failure control panel

Deepsea 6120 is an auto mains failure controller for single generator, it can monitor and protect the generator working all the time. it has a LCD display which clearly shows the status of the engine. this controller include seven inputs and six outputs. This controller can also be programmed using the front panel or by using DSE configuration Suite PC software



Key Features:

- Auto start/stop, load transfer and alarming of generator
- Remote start on or off load
- With hierarchical loading function
- Multiple start/stop cycles can be preset
- 3 phase generator and mains voltage monitoring.
- Generator/load power detection(kW, kVA, kVA_r PF)
- Overload protection (kW)
- Load current monitoring and protection
- Engine speed protection
- Engine pre-heat
- Engine start idle & stop idle
- Battery voltage monitoring
- Start under the low battery
- 4 active outputs
- 4 digital inputs and 3 analogue inputs.
- 6 Custom digital input
- 6 outputs(4 configurable on magnetic pick-up, 6 configurable on Canbus version)
- DSE2130,DSE2157,DSE2548 expansion module can be connected
- Support 0-10V or 4-20mA oil pressure sensor

Main features:

- Multi language display
- Mains failure self starting
- The running time of the engine can be recorded to facilitate the maintenance and repair of the unit
- User-friendly set-up and button layout
- LCD display can display multiple parameters at the same time
- Support EFI engine
- IP65 rating (with optional gasket)
- PC and front panel configuration
- 100 event records
- Data recording and trend analysis

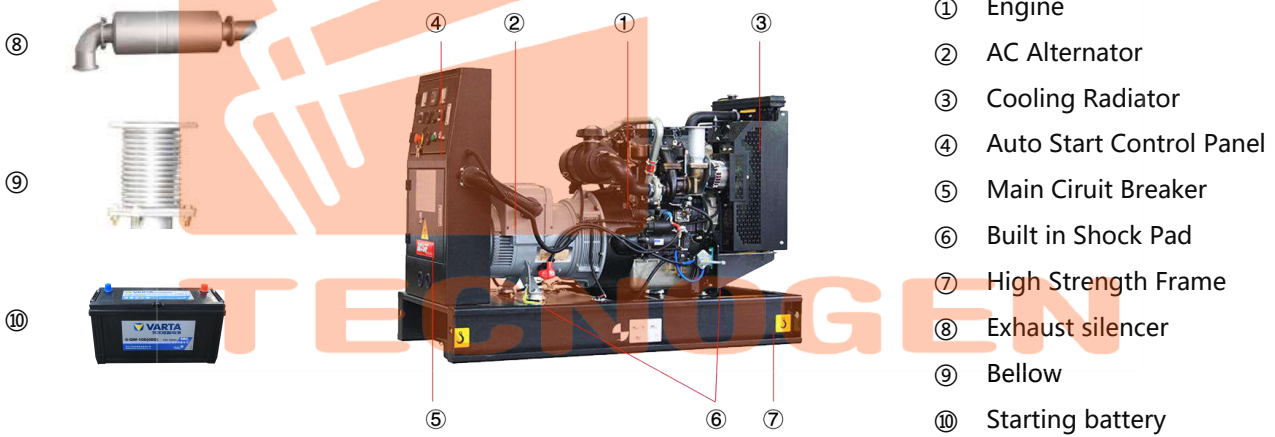
Protection:

- Two sets of protection parameters can be preset
- Normal alarm, electrical trip and shutdown alarm can be set to effectively monitor the engine speed,oil pressure, water temperature and oil level, as well as the frequency, voltage, current and power of the alternator, for complete engine/alternator protection
- Low Oil Pressure
- High water Temperature
- High voltage and low voltage
- Overspeed
- Emergency stop
- Fail to start

Decomposition diagram introduction of AOSIF Typical Canopy



Standard supply scope:



Optional supply scope:

Genset	Engine	Alternator	Control system
<ul style="list-style-type: none"> • Tool box • Base fuel tank • External daily fuel tank • Trailer 	<ul style="list-style-type: none"> • Fuel heater • Fuel and water separator 	<ul style="list-style-type: none"> • Temp. detector for winding and bearing • PMG • Antirust, mildew and salt fog treatment • Anti condensation heater 	<ul style="list-style-type: none"> • ATS • Synchronization System • Adjustable earth relay
Breaker	Fuel system	Lub-oil system	Cooling system
<ul style="list-style-type: none"> • ABB • Schneider 	<ul style="list-style-type: none"> • Low fuel level alarm • Auto Fuel Pump • T Valve 	<ul style="list-style-type: none"> • Lub oil heater • Temp.-sensor • Oil drain Pump 	<ul style="list-style-type: none"> • Elec.coolant Heater

Contact your local distributor for more information:



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