# **AOSIF Perkins Series**

**Product introduction** 









# **Model AP11 Generator set**

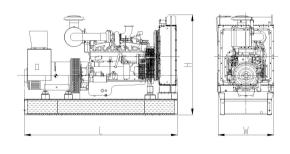


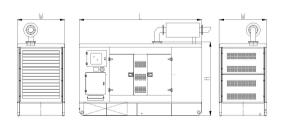


General Performance Data				
Prime Power	10KVA/10KW	Engine	Brand	Perkins
Stand by Power	11KVA/11KW		Model	403A-15G1
Frequency/Speed	50Hz/1500rpm	Control module	DeepSe	ea
Rated Power Factor(cosφ)	1.0	Rated Current	43	BA
Standard Voltage	230V	Capacity of Breaker	63	BA
Phases	1	Starting Voltage	DC	12V

Fuel consumption			
Rated output	Fuel consumption rate		
110%Standby	251g/KW.h	4.08L/h	
100%Prime	248 <b>g/KW.h</b>	3.67L/h	
75%Prime	252g/KW.h	2.79 <b>L/h</b>	
50%Prime	277 <b>g/KW.h</b>	2.04 <b>L/h</b>	
25%Prime	360g/KW.h	1.32L/h	

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





Dimensions and Weights			
Туре	Open	Silent	
Length(mm)	1400	1900	
Width(mm)	670	1000	
Height(mm)	1250	1340	
Weight(kg)	550	860	
Base fuel tank volume (L)	75	75	



## **Engine specification**

Basic parameter	
Manufacturer	Perkins
Model	403A-15G1
No. of cylinder	3
Туре	4 cycle, Vertical In-line
Prime Power	12.2kw /16.6HP
Standby Power	13.5kw /18.4HP
Induction system	Naturally aspirated
Governor	Mechanical
Bore x Stroke	84x90mm
Displacement	1.496L
Compression ratio	22.5:1
Oil Capacity(Total)	6.0L
Coolant Capacity(Engine only)	6.0L
Cranking Motor Voltage	DC12V
Fuel System	
Type Injection system	Indirect injection
Min. Allowable flow of fuel to fuel pump	63L/h
Lubrication system	
Oil Pressure	
Idle speed	-
Rated speed	Min 120kPa
Max. allowable oil temperature	125℃
Oil Pan capacity - Low/High	4.5L/6.0L
Total system capacity	-
Angularity of oil pan-Front Down	n 35°

Air induction system			
Maximum allowable intake air restriction			
with clean filter element	3.0kPa		
with dirty filter element	6.4kPa		
air filter type	Dry element type		
Exhaust system			
Max. allowable back pressure	10.2kPa		
Standard exhaust pipe diameter	42mm		

Cooling system	
Coolant capacity	
Engine only	2.6L
Total system	6.0L
With heat exchanger	-
Standard thermostat(modulating) range	82-95 ℃
Max. coolant temerature	112°C
Temperature rise across engine	5.1℃

Electric system	
Min. recommended battery capacity (12V)	
Alternato	15A
starter motor	2KW

#### **Alternator specification** Phases 3 Vacuum impregnation Coating Poles 4 Insulation class Н Power factor(cosφ) 1.0 Protection IP23 Winding connection Star **Excitation system** Self-excited Winding pitch 2/3 Bearing Single Bearing AVR Voltage regulator type Coupling Flexible disc



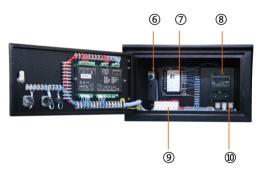
## **Control system Introduction**

# 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



- ①Emergency stop button
- ②Power switch
- ③Power indicator
- Operation buttons
- **⑤LCD** display



- **6** Voltage and frequency trimmer

**⑦Governor** 

®Charger

#### **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, kVAr 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:**





- ① Engine
- ② AC Alternator
- 3 Cooling Radiator
- 4 Auto Start Control Panel
- S Main Ciruit Breaker
- 6 Built in Shock Pad
- High Strength Frame
- Exhaust silencer
- Bellow
- Starting battery

## **Optional supply scope:**

Genset	Engine	Alternator	Control system
<ul> <li>Tool box</li> <li>Base fuel tank</li> <li>External daily fuel tank</li> <li>Trailer</li> </ul>	<ul><li>Fuel heater</li><li>Fuel and water separator</li></ul>	<ul> <li>Temp. detector for winding and bearing</li> <li>PMG</li> <li>Antirust, mildew and salt fog treatment</li> <li>Anti condensation heater</li> </ul>	<ul> <li>ATS</li> <li>Synchronization System Adjustable earth relay</li> </ul>
Breaker	Fuel system	Lub-oil system	Cooling system
<ul><li>ABB</li><li>Schneider</li></ul>	<ul><li>Low fuel level alarm</li><li>Auto Fuel Pump</li><li>T Vlave</li></ul>	<ul><li>Lub oil heater</li><li>Tempsensor</li><li>Oil drain Pump</li></ul>	• Elec.coolant Heater



# **Our Promises**

- AOSIF Engineering provides a full line of brand new and high quality products.
- Each unit passes strictly loading test in factory before shipment.
- Quality Warranty is provided strictly in accordance with warranty terms.
- Three level service guarantee: Aosif dealers, Service outlets of engine/alternator manufacturers, Aosif service team.



#### XIAMEN AOSIF ENGINEERING LTD.

Marketing Center: Unit 1001,No.1 of Cheng Yi North Street,Software Park Phase III ,Xiamen ,China;

Factory: No.1088 Tangbian, Changtai Economic Development Zone, Zhangzhou, Fujian, China.

Website: www.aosif.com









You may get more information from our official account.

Specifications are subject to change without notice.