

# HYUNDAI

POWER EQUIPMENT

Standby Power 22KVA  
1 Phase 1500 rpm  
**DHY22KSEM**  
Diesel Generator



**All Days | Safty | Reliable | Stability**



# TECHNICAL SPECIFICATION

## DHY22KSEM CANOPY TYPE

50Hz  
Standby 22KVA

### Benefits and Feature

- Use best quality vehicle, low fuel consumption, running reliable
- High quality and performance brushless alternator, with AVR
- High quality controller of Deepsea
- Block design electrical control system, easy operate and maintenance with circuit breaker protection.
- With baseframe forklift hole and generator canopy lifting hole
- Industrial waterproof canopy, ensure generator all days running
- Industrial silencer (7 meters the noise is lower than 72dB)
- Easy operation, IP23 protection industrial sockets and plugs
- Four pole circuit breaker with RCD earth protection
- Standard ATS function connector

### Technical Specification

Prime Power	KVA/KW	20/20
Standby Power	KVA/KW	22/22
Power Factor		1.0
Frequency	Hz	50
Rate Voltage	V	230
Rate Current	A	90.9
Controller	Deepsea DSE6120	
Control Voltage	DC/V	12
Phase, Wire	1 phase 2 wires	
Coolant Capacity	L	6
Fuel Tank Capacity (Base frame)	L	60
Fuel Consumption (100% load)	L/hour	6.85
Running Time	Hour	8.4

### Voltage

Steady state regulation	%	$\leq \pm 1$
Dynamic voltage renewal	%	$\leq +20 \sim -15$
Stable time	Sec	20
Wave form distortion	%	$\leq 3$
Volatility		$\leq 0.5$

### Frequency

Steady state regulation	%	$\leq \pm 1$
Dynamic frequency renewal	%	$\leq +10 \sim -7$
Stable time	Sec	20
Volatility		$\leq 0.5$

### Environment require

Temperature	°C	$\leq 50$
Humidity	%	$\leq 90$
Altitude	M	$\leq 1000$

Standard ISO 9001:2015, 14001:2015, 45001:2018

### Dimension | Weight | Sound



### DHY22KSEM CANOPY TYPE

Length (L)	mm	1800
Width (W)	mm	740
Height (H)	mm	825
Weight net	Kg	627
Loading capacity (unit/container)		
Sound @7 meter	dB	$\leq 72$

### Note

1. Generator continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period
2. Every generator strictly test on 0%, 25%, 75%, 100%, 110% load, dynamic of the responsiveness ability, and all protections



## FAWDE DIESEL ENGINE

**Powerful engine and reliable running quality**  
Durable running performance and was proofed by vehicle's application

**Compact structure**  
Compact structure and metal materials saving for low cost

**Low maintenance and repair cost**  
Air, fuel and oil tubes are silicone and stainless steel materials, which reduce leakage problems substantially and changeable.

**Excellent start performance**  
Fuel injector and pump were tested fully in various environments, which provide excellent start and running performance and air exhaust easily

Model	4DW92-35D	
Prime Power	Kw	26
Structure	4 cylinder, 4 stroke	
Fuel type	Diesel	
Fuel Injection	Direct	
Air consumption	m <sup>3</sup> /min	2.1
Governor	Electronic	
Cooling	Water cooled	
Oil capacity	L	8
Max inlet pressure	kPa	6.3
Max back pressure	kPa	6.7
Exhaust gas temperature	°C	460
Exhaust gas discharge	m <sup>3</sup> /min	5.1
Compression ratio	17:1	
Aspiration	Natural	
Bore	mm	90
Stroke	mm	100
Displacement	L	2.54
SAE	SAE4	
Dimension	mm	750x600x735
Net weight	Kg	240

## BALANTY ALTERNATOR

A brand of HYUNDAI CORPORATION

Model	AL 184F-1	
Prime power	kVA	20
Structure	1 bearing	
Excitation mode	Self-excitation	
Insulation class	H	
Protection class	IP23	
TIF	<50	
THF	<2%	
Air flow	m <sup>3</sup> /s	0.071
Voltage Regulation	AVR	



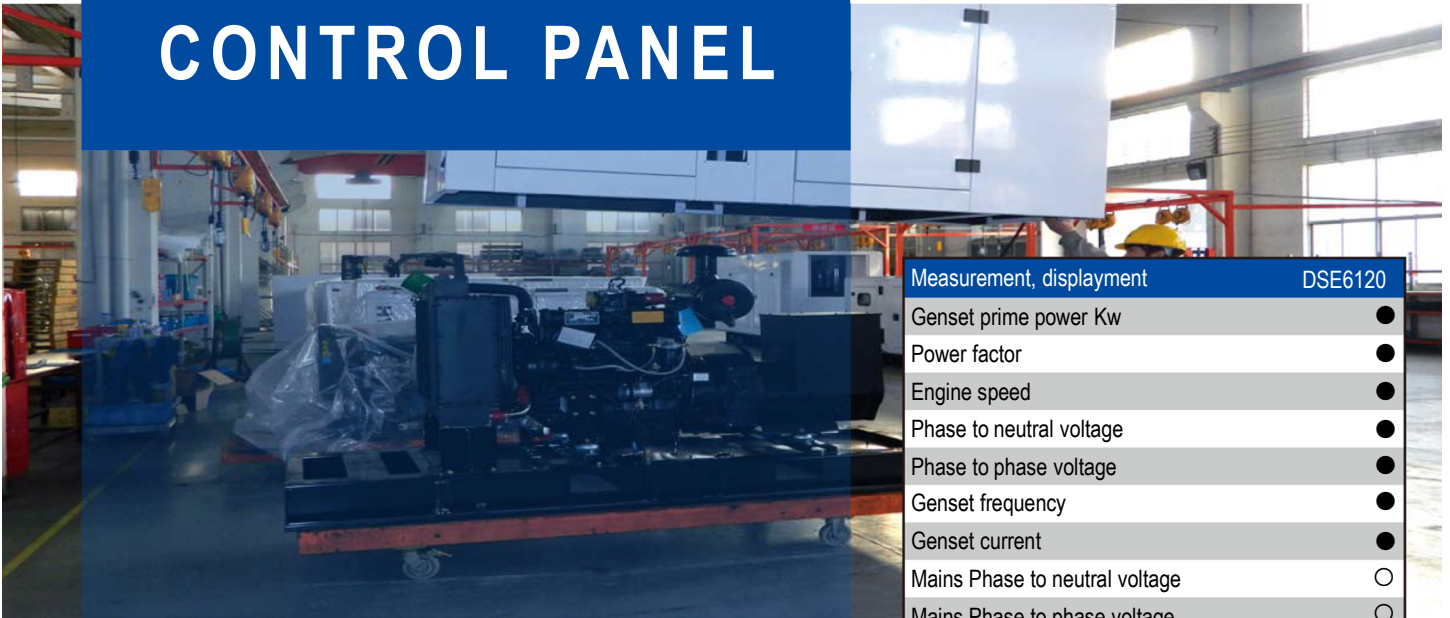
**Best structure**  
Excellent design ensures compact structure and perfect appearance

**Excellent performance**  
Excitation enhanced system improves start and short circuit's protection performance

**Economy**  
Less parts involved and the most market's demand lead to cheap price and fine quality

**Easy maintenance and repair**  
Core parts won't be involved in repair job, AVR can be replaced easily, examining diode doesn't disassemble

# CONTROL PANEL



## Controller

## Deepsea DSE6120



The digital LCD controller, support engine and alternator monitoring, measurement and protection. This is long-running and back-up unit to integrate the best way to control. Support Modbus standard, modem, RS232, RS485, USB and internet. There are operation mode: Start/stop, test, auto/manual, emergency button and indication light.

## Control panel

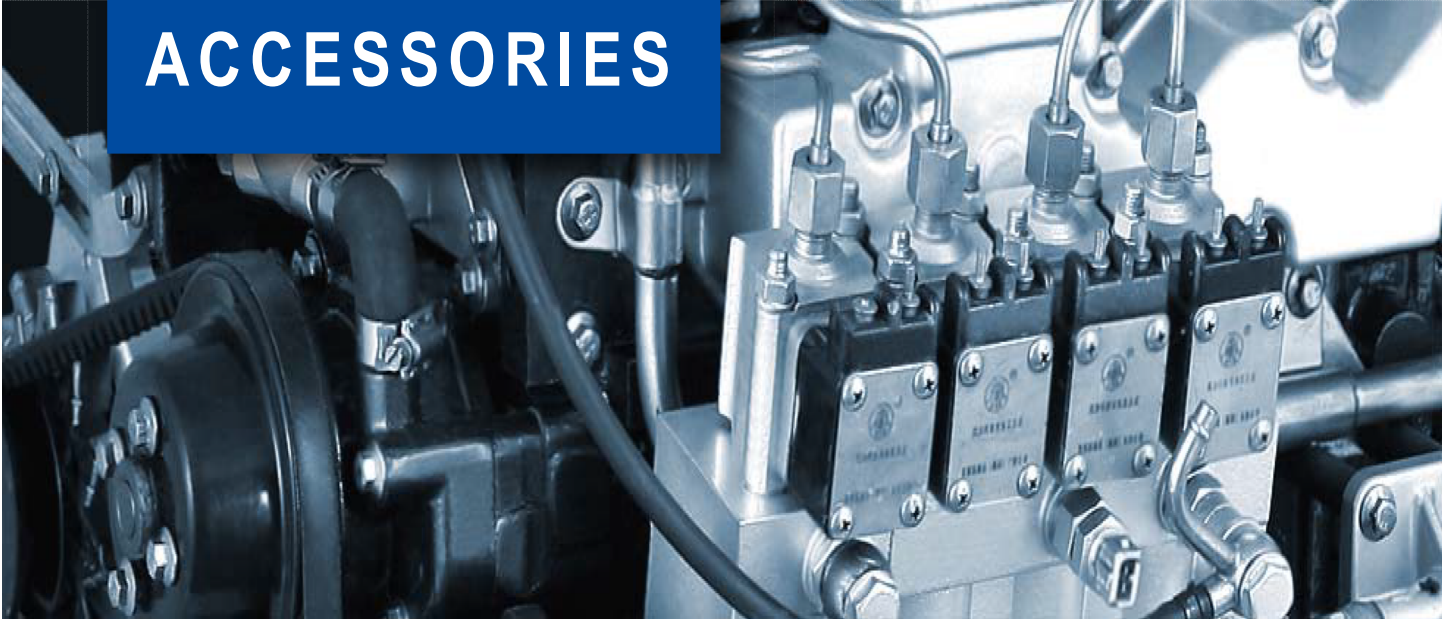


Deepsea DSE6120

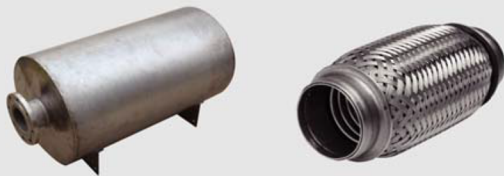
Measurement, displayment	DSE6120
Genset prime power Kw	●
Power factor	●
Engine speed	●
Phase to neutral voltage	●
Phase to phase voltage	●
Genset frequency	●
Genset current	●
Mains Phase to neutral voltage	○
Mains Phase to phase voltage	○
Mains frequency	○
Engine oil pressure	●
Engine water temperature	●
Fuel level	●
Battery voltage	●
Genset power KVA	●
Genset running time	●
Genset output KWh	●
History file	●
Alarm, shutdown function	
Low oil pressure warning, shutdown	●
High water temperature warning, shutdown	●
Engine over and under speed warning shutdown	●
Low fuel level warning, shutdown	●
Battery low and high voltage warning	●
Starting failure	●
Genset low and high voltage warning, shutdown	●
Alternator 3 phase voltage unbalance, shutdown	×
Alternator low and high frequency warning, shutdown	●
Genset over current warning shutdown	●
Alternator 3 phase current unbalance shutdown	×
Circuit breaker protection of short circuit and overload	●
Overload relay protection	●
Optional	
Remote start and stop	●
RS232 card	×
USB card	●
RS485 card	○
Multi language display	○
GPRS communication	○
GPS communication	○

● standard    ○ optional    × none

# ACCESSORIES



## Exhaust system



Residential muffler

Exhaust gas pipe

## Preheating system



Water preheater

Oil preheater

Alternator Anti-condensation heater

## Fuel system



Auto filling fuel pump

Manual filling fuel pump

500L base frame fuel tank

1000L base frame fuel tank

500L External fuel tank

1000L External fuel tank

## Electrical system



Deepsea controller

IC-NT  
synchronizing  
controller

Wireless remote starter

## Maintenance spare parts



500 hours genset spare parts

1000 hours genset spare parts