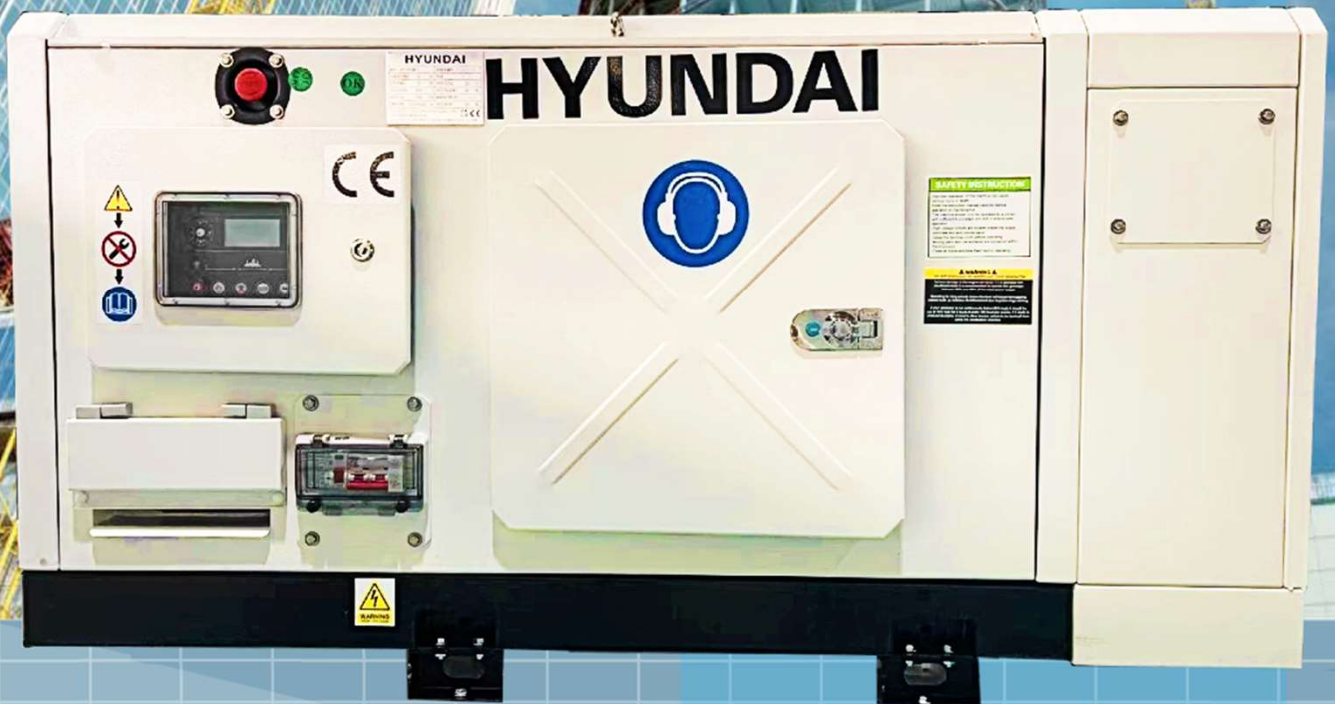


HYUNDAI

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, self-excited, with AVR
- Use Chint circuit breaker 1 phase 2 poles overload protection, short circuit protection, with RCD earth protection
- Steel fuel tank integrated in the machine frame and noise-reducing enclosure
- 12 hours of continuous power at 100% load capacity
- Silent canopy with electrostatic powder coating, suitable for outdoor installation
- The engine and alternator are connect by a coaxial coupling mechanism with a vibration damping system
- Running 24/24 at 75% continuous power with only 30 minutes break every 12 hours
- Easy operation, IP23 protection industrial sockets and plugs

Technical Specification

Prime Power	KVA/KW	20/ 20
Standby Power	KVA/KW	22/ 22
Power Factor		1.0
Frequency	Hz	50
Rate Voltage	V	220-230
Rate Current	A	90.9
Controller		Datakom
Control Voltage	DC/V	12
Phase, Wire		1 phase, 2 wires
Coolant Capacity	L	5.15
Fuel Tank Capacity (Base frame)	L	45
Fuel Consumption (100%/75%)	L/hour	9.0/6.75
Speed	Rpm	1500±1.5%

Voltage

Steady state regulation (0-100% load)	%	≤ ± 0.5
Dynamic voltage renewal	%	≤ +20 ~ -15
Stable time	Sec	2.0
Wave form distortion	%	≤ 3
Volatility	%	≤ 0.5

Frequency

Steady state regulation	%	≤ ± 1
Dynamic frequency renewal	%	≤ +10 ~ -7
Stable time	Sec	≤ 3
Volatility	%	≤ 0.5

Environment require

Temperature	°C	≤ 50
Humidity	%	≤ 90
Altitude	M	≤ 1000

Standard ISO 9001:2015, ISO 14001

Dimension | Weight | Sound



DHY22KSEM CANOPY TYPE

Length (L)	mm	1800
Width (W)	mm	740
Height (H)	mm	825
Weight net	Kg	625
Loading capacity (unit/container)		
Sound @7 meter (75% load)	dB	68

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



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

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

Model	HY4DW92 (4 strokes)	
Prime/Standby Power	Kw	26/28.6
Structure	4 cylinders, in line	
Fuel type/Injection	Diesel/Direct	
Fuel consumption	L/hour	9.0
Lubricant consumption	L/Hour	0.05
Governor	Electronic	
Cooling system	Water cooled with fan, extra tank	
Lubricant capacity	L	8
Compression ratio	18.5:1	
Air intake	Nature	
Displacement	2.545	
Starting system	12VDC starter motor inside	
Starting battery	60Ah, sealed	
Starting motor	kW	3.0
Battery charger power	A	35
Filter system	Air/Fuel/Oil filter and replaceable	
Oil system	Oil pump, oil filter, filter bowl	
Engine sensor system	Oil pressure sensor, coolant temperature sensor, fuel level sensor	

ALTERNATOR



Model	184FL	Insulation class	H
Prime power	20KVA	Protection class	IP23
Standby power	22KVA	Power factor	1.0
Voltage	220-230V	Structure	1 bearing
Phase	1 phase, 2 wires	Self-excitation, brushless	
Frequency	50Hz	Over speed	2250 rpm
AVR model	SX460	Cooling:	Direct fan
Efficiency @100% prime power			88.1%

Note: Generator continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 6 hour period.

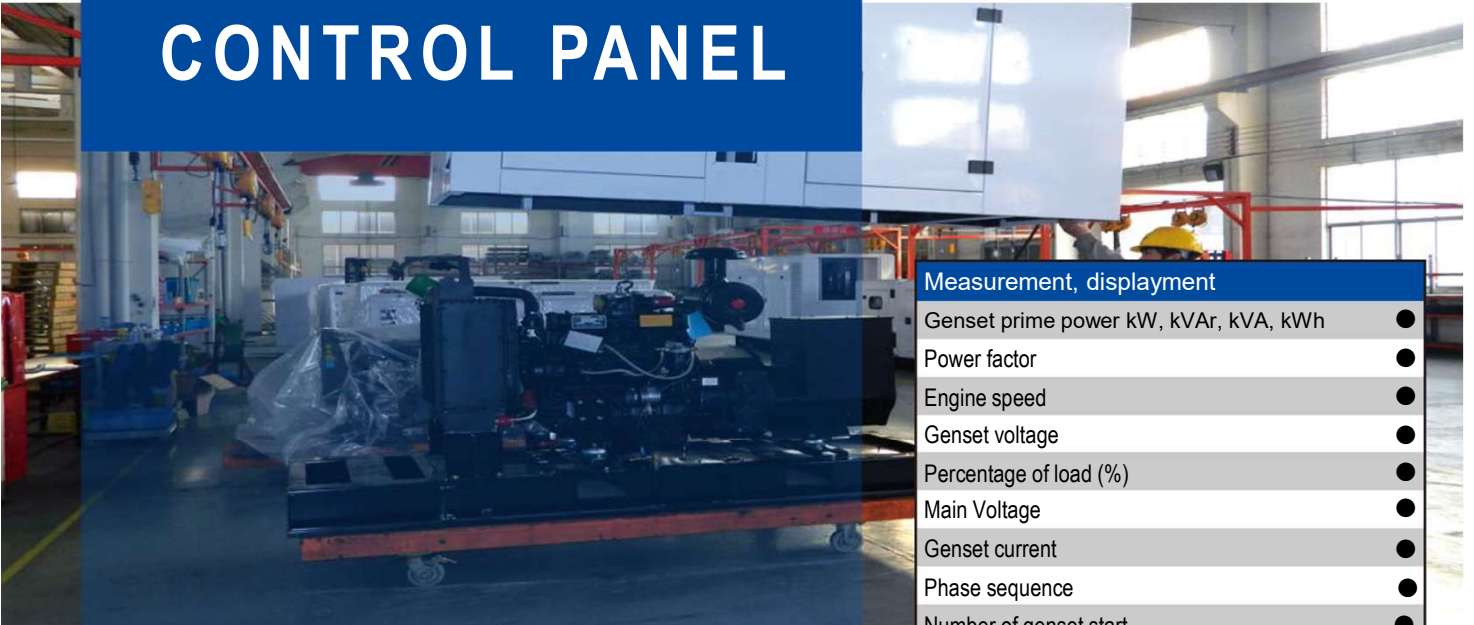
Best structure
Excellent design ensures compact structure and perfect appearance

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

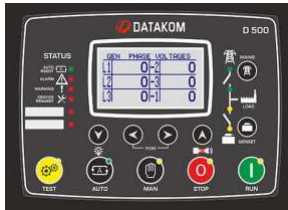
Economy
Less parts involved and the most market's demand lead to cheap price and fine quality

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



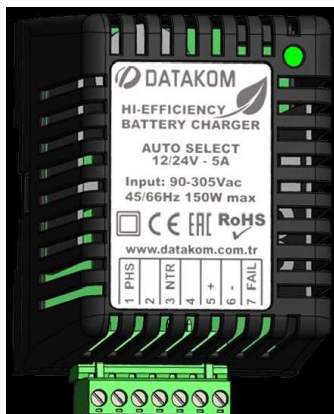
Digital Controller



- The DATAKOM D-500MK3 digital controller, made in Turkey, features a 128x64 LCD display with full display functions (accuracy $\pm 5\%$), warnings, protections, and an automatic power supply lock.
- Operates via keys on the control panel or the start-up key lock when the control panel encounters a fault.
- Automatically starts generator when the battery voltage of the BTS station falls below the allowed limit to supply power for the battery charging of the BTS station.

Datakom D-500MK3

- The controller has buttons: Stop/Start/Auto/Manual/C/O/Set/Up-Down
- LED status display: Operation/Stop/Auto/C/O/Manual/Warning
- Connect with the ATS system to control the on/off operation of the generator without grid power or for remote forced control. Control and display the switching of 2 ATS
- Support engine and alternator monitoring, measurement and protection
- Support Modbus RS485, USB and internet for remote monitoring.
- Operating temperature: $-25^{\circ}\text{C} - 70^{\circ}\text{C}$
- Continuous power voltage: 8-35V
- Protection level: $\geq \text{IP65}$



Smart Battery Charger SBC-5A 12/24V auto select 90-305 VAC

Technology: Switchmode, flyback 65 kHz
 Output current (Io): 5 ADC max.(continuous)
 Input frequency range: 45-68 Hz
 Cooling: natural convection
 Protection degree (EN60529): IP30
 Enclosure material: Flame-retardant PC, UL94-V0
 Overload protection: limits output current to 5A
 Short circuit protection: limits output current to 5A
 Short circuit duration: unlimited
 High temp. protection: limits internal temp. to 85°C

Measurement, displayment

Genset prime power kW, kVAr, kVA, kWh	●
Power factor	●
Engine speed	●
Genset voltage	●
Percentage of load (%)	●
Main Voltage	●
Genset current	●
Phase sequence	●
Number of genset start	●
Genset /Main frequency	●
Engine oil pressure	●
Engine water temperature	●
Fuel level	●
Battery voltage/ Battery charger voltage	●
Genset light	●
Emergency stop button	●
Genset running time	●
History file	●

Alarm, shutdown function

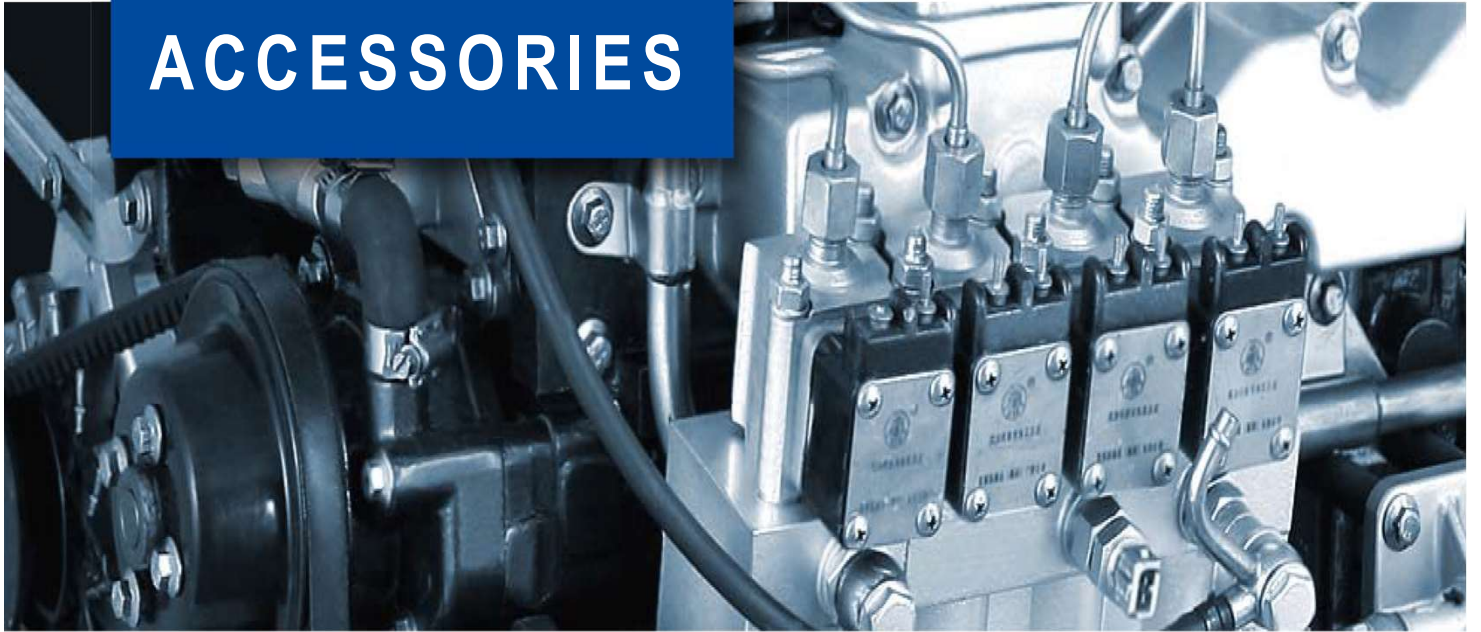
Low oil pressure warning, shutdown	●
High water temperature warning, shutdown	●
Engine over and under speed warning, shutdown	●
Low fuel level warning, shutdown	●
Battery low and high voltage warning, shutdown	●
Battery charging failure	●
Genset low and high voltage warning, shutdown	●
Genset low and high frequency warning, shutdown	●
Alternator low and high frequency warning, shutdown	●
Genset overload, overcurrent warning, shutdown	●
Emergency stop button close	●
Short circuit: warning, shutdown	●
Mains low and high frequency warning	●

Features

Remote start and stop	●
RS232 port	×
USB port	●
RS485 port	●
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



AMF20 controller

IC-NT
synchronizing
controller

Wireless remote starter

Maintenance spare parts



500 hours genset spare parts

1000 hours genset spare parts