



50Hz Standby 22KVA

# DHY22KE DHY22KSE Diesel Generator



**HYUNDAI**  
POWER PRODUCTS

*All Days | Safty | Reliable | Stability*



# TECHNICAL SPECIFICATION

DHY22KE OPEN TYPE / DHY22KSE CANOPY TYPE

50Hz  
Standby 22KVA

## Benefits and Feature

- > Use Chinese best quality vehicle engine, low fuel consumption, running reliable
- > HYUNDAI high quality and performance brushless alternator, with AVR
- > High quality controller of COMAP iL-NT MRS10
- > Block design electrical control system, easy operate and maintenance
- > Standard 8 hours generator running base frame fuel tank ( 100% load )
- > 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 70 dB)
- > Easy operation, IP66 protection industrial sockets and plugs
- > Four pole circuit breaker with RCD earth protection
- > Standard ATS function connector

## Technical Specification

Prime Power	KVA / KW	20 / 16
Standby Power	KVA / KW	22 / 18
Power Factor		0.8
Frequency	Hz	50
Rate Voltage	V	400/230
Rate Current	A	28.9
Controller		MRS10
Control Voltage	DC / V	12
Battery Capacity	Ah	60
Coolant Capacity	L	10.2
Fuel Tank Capacity(Base frame)	L	77.5
Fuel Consumption	L / hour	6.2
Running Time	Hour	12.5

## Voltage

Steady state regulation	%	$\leq \pm 0.5$
Dynamic voltage renewal	%	$\leq +20 \sim -15$
Stable time	Sec	2.0
Waveform distortion	%	$\leq 3$
Volatility	%	$\leq 0.5$

## Frequency

Steady state regulation	%	$\leq \pm 1$
Dynamic frequency renewal	%	$\leq +10 \sim -7$
Stable time	Sec	$\leq 3$
Volatility	%	$\leq 0.5$

## Environment require

Temperature	C	$\leq 40$
Humidity	%	$\leq 60$
Altitude	m	$\leq 1000$

## Standard

ISO3046、ISO8528

## Dimension | Weight | Sound



### DHY22KE OPEN TYPE

Length	mm	1510
Width ( W )	mm	900
Height ( H )	mm	980
Weight net	Kg	505
loading capacity (units/container)		
Sound @7 meter	dB	



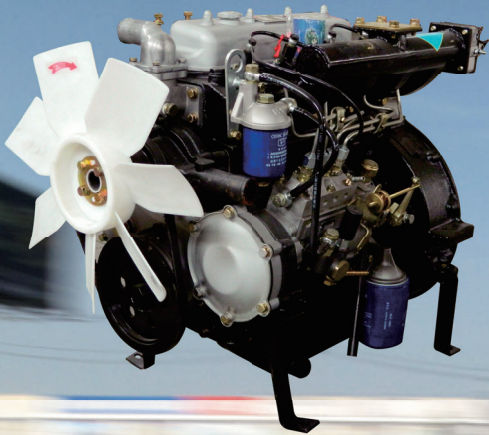
### DHY22KSE CANOPY TYPE

Length	mm	1900
Width ( W )	mm	900
Height ( H )	mm	1100
Weight net	Kg	786
loading capacity (units/container)		
Sound @7 meter	dB	

## Note

1. Generator continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hours 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	HY490	
Prime power	Kw	22
Structure	4 cylinder, inline	
Fuel type	Diesel	
Fuel consumption	L/Hour	6.2
Lubricant consumption	L/Hour	0.0315
Governor	Mechanical	
Cooling	Water	
Lubricant capacity	L	6
Air intake flow	m <sup>3</sup> /min	2.3
Exhaust gas flow	m <sup>3</sup> /min	6.5
Exhaust gas temperature	°C	400
Exhaust gas back pressure	KPa	5
Compression ratio	17.5	
Aspiration	Natural	
Bore	mm	90
Stroke	100	
Displacement	L	2.5
SAE	4/7.5	
Dimension	mm	760 × 543 × 680
Net weight	Kg	230

# ALTERNATOR

Model	184ES	
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	0.095
AVR Model	SX460	



### 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 rotor.

# CONTROL PANEL

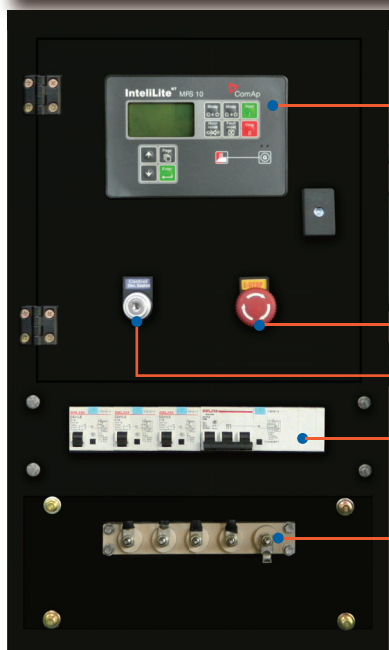
Controller

Comap MRS10



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.

## Control panel



- Comap MRS10
- ATS connector
- 24 pin Heavy duty connector
- Emergency stop button
- Power switch
- 1x3 phase circuit breaker
- 3x single phase circuit breaker
- Wire connect terminal U.V.W.N.PE

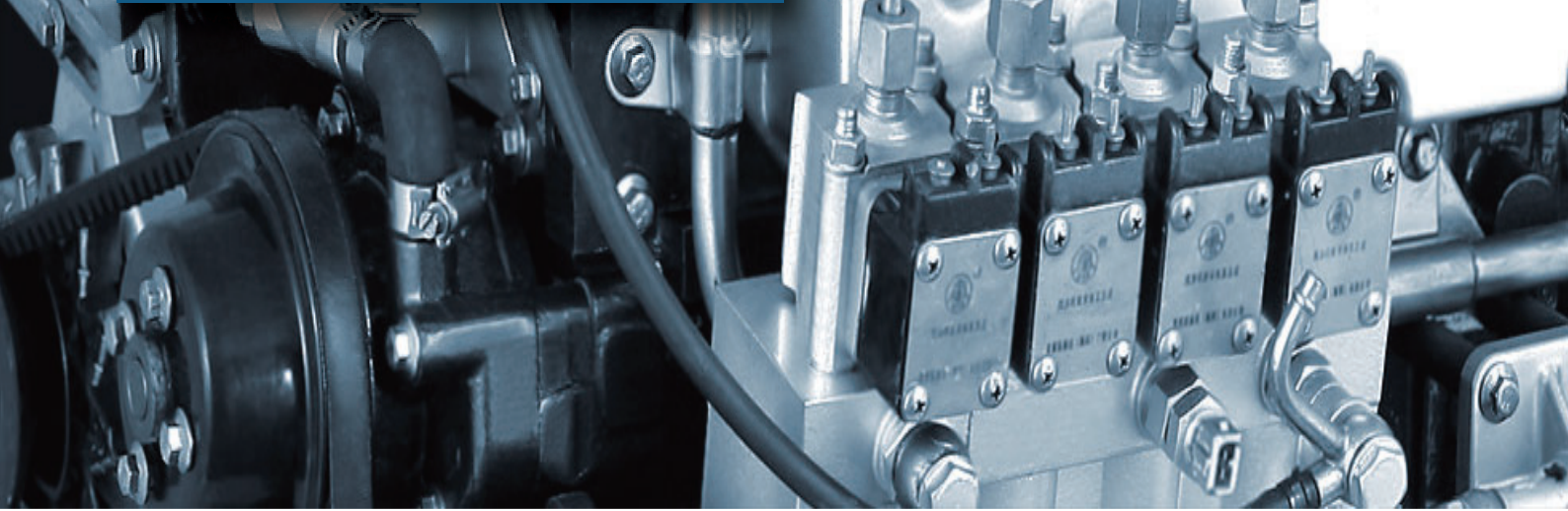


Single phase socket

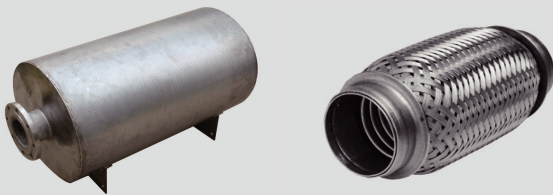
Measurement, display	MRS10
Genset prime power Kw	●
Power factor	●
engine speed	●
Phase to neutral voltage	●
Phase to phase voltage	●
Genset frequency	●
Genset current	●
Mains Phase to neutral voltage	×
Mains Phase to phase voltage	×
Mains frequency	×
engine oil pressure	●
engine water temperature	●
fuel 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 shutdown	●
Low fuel level warning, shutdown	●
battery low and high voltage warning	●
battery charging failure	●
Genset low and high voltage warning, shut down	●
Alternator 3 phase voltage unbalance shut down	●
Alternator low and high frequency warning, shut down	●
Genset over load shutdown	●
Alternator 3 phase current unbalance shutdown	●
Mains low and high voltage warning	×
Mains low and high frequency warning	×
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



AMF20 controller

IC-NT  
synchronizing  
controller

wireless remote starter

## Maintenance spare parts



500 hours genset spare parts

1000 hours genset spare parts