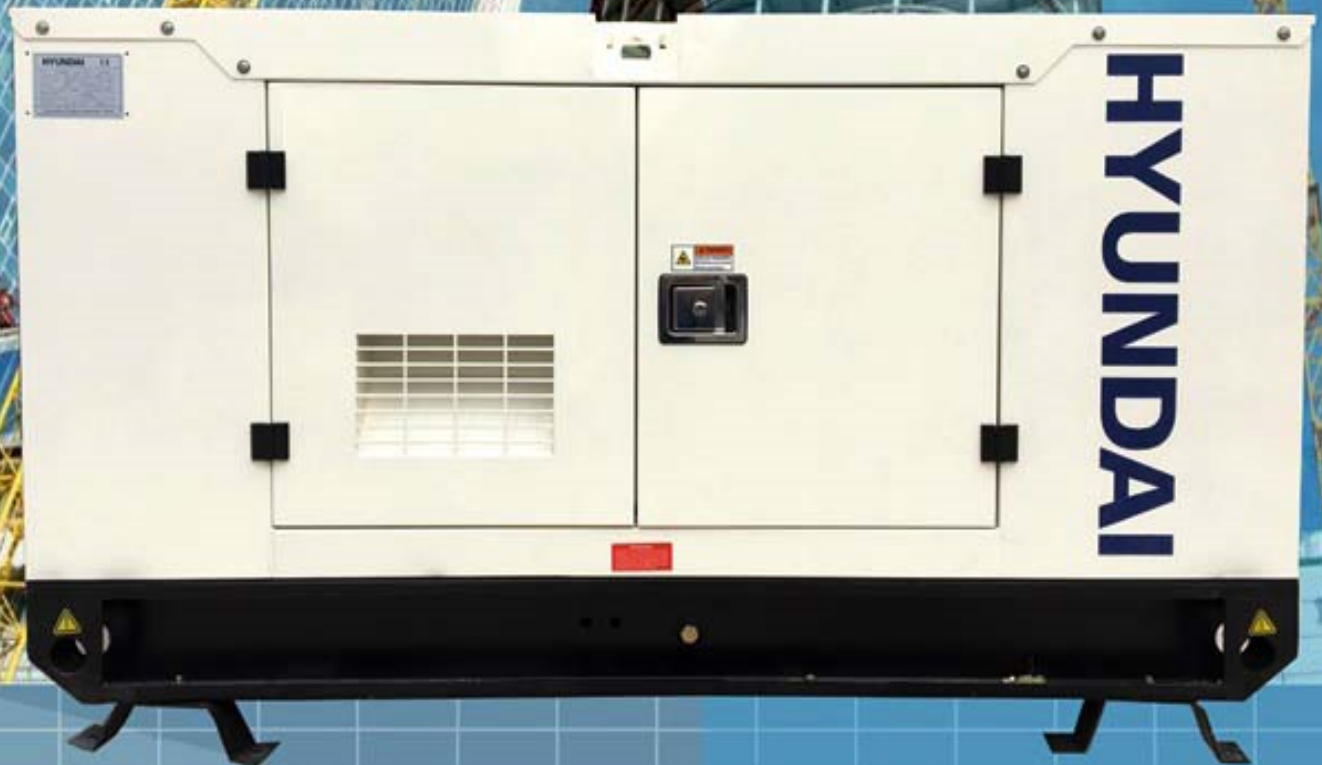


# HYUNDAI

POWER EQUIPMENT

**Diesel Generator**  
**Standby Power 22KVA**  
3 Phase 1500 rpm  
**DHY22KE**  
**DHY22KSE**



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



# TECHNICAL SPECIFICATION

DHY22KE OPEN TYPE / DHY22KSE CANOPY TYPE

50Hz  
Standby 22KVA

## Benefits and Feature

- > Use best quality vehicle engine, low fuel consumption, running reliable
- > Use high quality and performance brushless alternator, with AVR
- > High quality controller of COMAP
- > 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 68 dB)
- > 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 / 16
Standby Power	KVA/ KW	22 / 17.6
Power Factor		0.8
Frequency	Hz	50
Rate Voltage	V	400/230
Rate Current	A	31.76
Controller	COMAP AMF20	
Control Voltage	DC / V	12
Battery Capacity	Ah	60
Coolant Capacity	L	5.2
Fuel Tank Capacity(Base frame)	L	95
Fuel Consumption	L/hour	5.57
Running Time	Hour	17

## 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、ISO9001-2008

## Dimension | Weight | Sound



### DHY22KE OPEN TYPE

Length	mm	1950
Width ( W )	mm	870
Height ( H )	mm	1080
Weight net	Kg	650
loading capacity (units/container)		
Sound @7 meter	dB	92



### DHY22KSE CANOPY TYPE

Length	mm	2120
Width ( W )	mm	920
Height ( H )	mm	1300
Weight net	Kg	835
loading capacity (units/container)		
Sound @7 meter	dB	68

## 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 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	21
Structure		4 cylinder,inline
Fuel type		Diesel
Fuel consumption	L/Hour	5.57
Lubricant consumption	L/Hour	0.032
Governor		Mechanical
Cooling		Water
Lubricant capacity	L	8
Air intake flow	m <sup>3</sup> /min	1.7
Exhaust gas flow	m <sup>3</sup> /min	4.6
Exhaust gas temperature	°C	450
Exhaust gas back pressure	KPa	6.7
Compression ratio		17
Aspiration		Natural
Bore	mm	90
Stroke		100
Displacement	L	2.54
SAE		4/7.5
Dimension	mm	734 × 530 × 680
Net weight	Kg	230

# ALTERNATOR

Model		184ES
Prime power	kVA	23
Structure		1bearing
Excitation mode		Self-excitation
Insulation class		H
Protection class		IP23
TIF		<50
THF		<2%
Air flow	m <sup>3</sup> /s	0.096
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 AMF20



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, RS485, USB and internet.

## Control panel



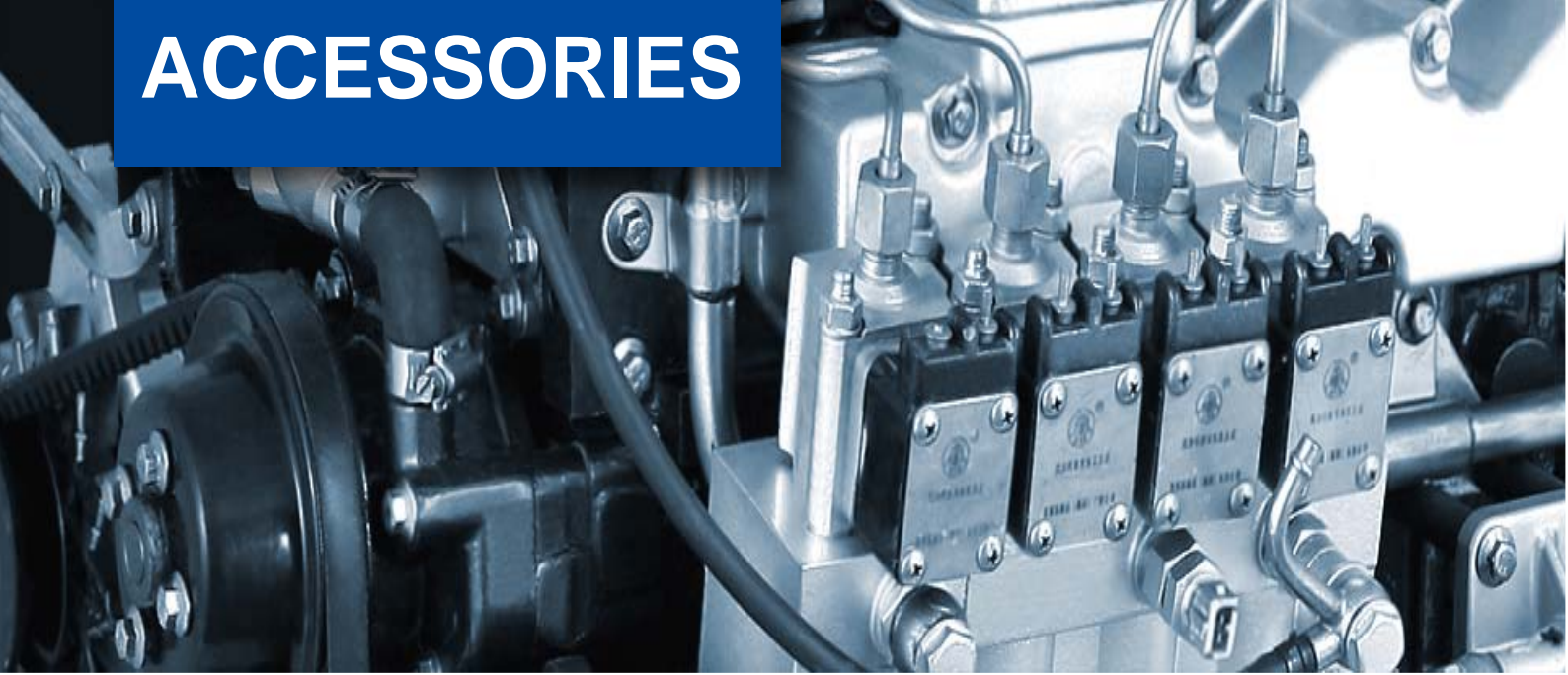
AMF 20

Power switch

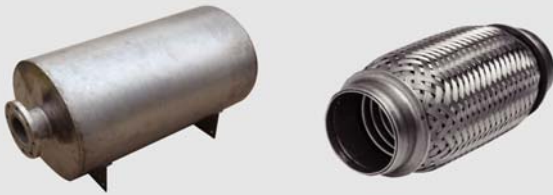
Measurement, displayment	AMF20
Genset prime power Kw	●
Power factor	●
Engine speed	●
Phase to neutral voltage	●
Phase to phase voltage	●
Genset frequency	●
Genset current	●
Mains Phase to neutral voltage	○
Mains Phase to phase voltage	○
Mains frequency	○
Engine oil pressure	●
Engine water temperature	●
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	x
USB card	●
RS485 card	○
Multi language display	○
GPRS communication	○
GPS communication	○

● standard ○ optional x 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