

# HYUNDAI

POWER EQUIPMENT

**HYUNDAI ENGINE**

**Standby Power 44KVA**

**3 Phase 1500 rpm**

**DHY45KE**

**DHY45KSE**

**Diesel Generator**



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



# TECHNICAL SPECIFICATION

DHY45KE OPEN TYPE / DHY45KSE CANOPY TYPE

50Hz  
Standby 44KVA

## Benefits and Feature

- > Use HYUNDAI best quality vehicle engine, low fuel consumption, running reliable
- > HYUNDAI high quality and performance brushless alternator, with AVR
- > High quality controller of COMAP IntelliLite 9
- > 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	40 / 32
Standby Power	KVA/ KW	44 / 35.2
Power Factor		0.8
Frequency	Hz	50
Rate Voltage	V	400/230
Rate Current	A	57.7
Controller	COMAP IntelliLite 9	
Control Voltage	DC / V	12
Battery Capacity	Ah	55
Coolant Capacity	L	10.2
Fuel Tank Capacity(Base frame)	L	93
Fuel Consumption	L/hour	10.8
Running Time	Hour	9

## 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



### DHY45KE OPEN TYPE

Length	mm	1810
Width ( W )	mm	950
Height ( H )	mm	1020
Weight net	Kg	770
loading capacity (units/ container)		
Sound @7 meter	dB	



### DHY45KSE CANOPY TYPE

Length	mm	2200
Width ( W )	mm	950
Height ( H )	mm	1320
Weight net	Kg	1045
loading capacity (units/container)		
Sound @7 meter	dB	67

## 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	HY4105	
Prime power	Kw	38
Structure	4 cylinder,inline	
Fuel type	Diesel	
Fuel consumption	L/Hour	10.8
Lubricant consumption	L/Hour	0.054
Governor	Electrical	
Cooling	Water	
Lubricant capacity	L	8.3
Air intake flow	m <sup>3</sup> /min	2.4
Exhaust gas flow	m <sup>3</sup> /min	2.5
Exhaust gas temperature	°C	451
Exhaust gas back pressure	KPa	5
Compression ratio	18	
Aspiration	Turbocharging	
Bore	mm	105
Stroke	105	
Displacement	L	4.1
SAE	3/11.5	
Dimension	mm	900 × 650 × 750
Net weight	Kg	350

# ALTERNATOR

Model	184J	
Prime power	kVA	43
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 IntelliLite 9



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 IntelliLite 9

ATS connector

24 pin Heavy duty connector



3 phase socket

### Measurement, displayment IntelliLite 9

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

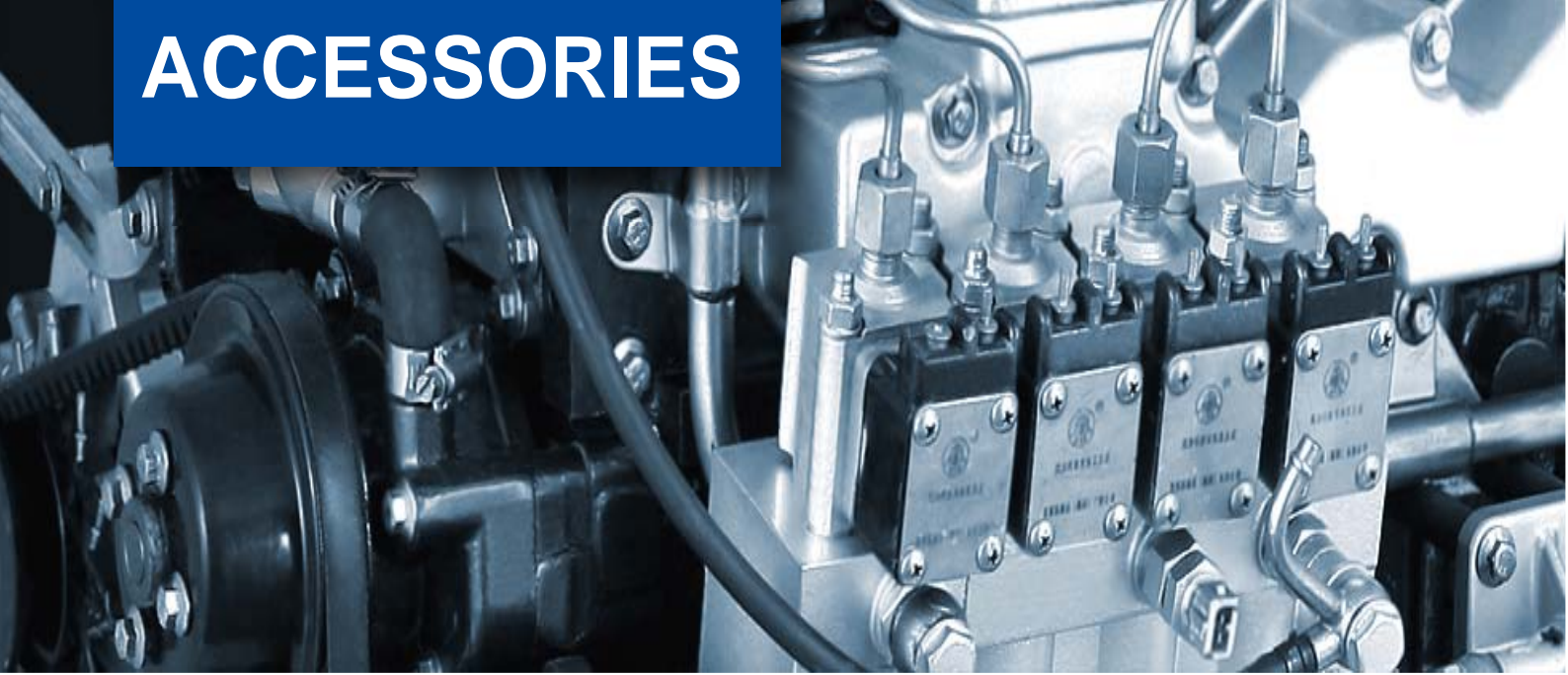
Low oil pressure warning, shutdown	●
High water temperature warning, shutdown	●
Engine over and under speed shutdown	●
Low fuel level warning, shutdown	●
Battery low and high voltage warning	●
Battery charging failure	●
Genset low and high voltage warning, shut down	●
Alternator 3 phase voltage unbalance 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