# HYUNDA POWER EQUIPMENT

Diesel Generator Standby Power 18 KVA 1 Phase 1500rpm DHY18KEm DHY18KSEm



All Days | Safty | Reliable | Stability



# **TECHNICAL SPECIFICATION**

DHY18KEm OPEN TYPE / DHY18KSEm CANOPY TYPE

## 50Hz Standby 18KVA

## **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	16/16
 Standby Power	KVA/ KW	17.6/17.6
Power Factor		1
 Frequency	Hz	50
 Rate Voltage	V	230
 Rate Current	А	71
 Controller	С	OMAP AMF20
 Control Voltage	DC / V	12
Battery Capacity	Ah	60
Coolant Capacity	L	8.6
 Fuel Tank Capacity(Base frame)	L	85
 Fuel Consumption	L/hour	6.94
 Running Time	Hour	12

## Voltage

voltage		
Steady state regulation	%	≤ ± 0.5
Dynamic voltage renewal	%	≤+20~-15
Stable time	Sec	2.0
Waveform 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	С	≤40
Humidity	%	≤60
Altitude	m	≤1000
Standard		
ISO3046、ISO8528、 ISO900	1–2008	

## Dimension | Weight | Sound



	Length	mm	1950
	Width (W)	mm	850
	Height ( H )	mm	1080
	Weight net	Kg	550
	Sound @7 meter	dB	92



## DHY18KSEm CANOPY TYPE

Length	mm	2130
Width ( W ) Height ( H ) Weight net oading capacity (units/container)	mm	930
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



Powerful engine and reliable running quality Durable running performace 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 perfomance

Fuel injector and pump were tested fully in Various environments, which provide excellent start and running preformance

# **DIESEL ENGINE**

	Model		HY490D
	Prime power	Kw	24
	Structure		4 cylinder,inline
	Fuel type		Diesel
	Fuel consumption	L/Hour	6.94
	Lubricant consumption	L/Hour	0.032
_	Governor		Mechanical
	Coolling	_	Water
	Lubricant capacity		7.5
	Air intake flow	m <sup>3</sup> /min	1.49
	Exhaust gas flow	m <sup>3</sup> /min	3.86
-	Exhaust gas temperature	°C	500
	Exhaust gas back pressure	KPa	6
9	Compression ratio	2	18
	Aspiration	1	Natural
	Bore	mm	95
	Stroke		105
	Displacement		2.67
	SAE		4/7.5
	Dimension	mm	$737 \times 530 \times 682$
	Net weight	Kg	230

# **ALTERNATOR**

Model		184G20
Prime power	kVA	18
Structure		1bearing
Excitation mode		Self-excitation
Insulation class	advised as	Н
Protection class		IP23
TIF	-	<50
THE	and a	<2%
Air flow	m³/s	0.095
AVR Model		SX460



**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**

(3)

## Controller



ntr

## Comap AMF20

Support engine and alterantor monitoring, measurement and protection. This is long-running and back-up unit to integrate the best way to control<sub>o</sub> support Modbus standard, modem, RS485<sub>\</sub> USB and internet<sub>o</sub>

Control pane	<b>Ə</b> l	
InteliLite <sup>MT</sup> AMF 20 ComAp		- AMF 20
0 0 0 0		
e	6	
•	6	- Power switch
•	6	

Measurement, displayment AM	F20
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	0
Mains Phase to phase voltage	0
Mains frequency	0
Engine oil pressure	•
Engine water temperature	•
Fuel level	•
Battery voltage	<ul> <li></li> &lt;</ul>
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 chargering 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	•
Alternator3 phase current unbalance shutdown	•
Mains low and high voltage warning	0
Mains low and high frequency warning	0
Optional	
Remote start and stop	•
RS232 card	х
USB card	•
RS485 card	0
Multi language display	0
	0
GPRS communication	$\cup$

## ●standard ○optional × None



IC-NT Synchronizing controller ank 🛛 1000L base frame fuel t

External fuel tank 🛛 🗌 1000 Ll

electrical system

## Maintenance spare parts



□500 hours genset spare parts

1000 hours genset spare parts