



### DIESEL GENERATING SET 400/230 V - 50 Hz - 3PHASE

POWER RATING		PRIME	STANDBY
POWER	kVA	53	58
	kW	42	46
Rated Speed	r.p.m	1500	
Available Voltages	V	400/230 - 380/220-415/240V-440/254 etc	
Rated at power factor	Cos Phi	0.8	

**Standard Reference Conditions:** 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity.

**Prime Power (PRP):**

According to ISO 8528-1:2018, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output over 24 hours of operation shall not exceed 70 % of the PRP.

**Emergency Standby Power (ESP):**

According to ISO 8528-1:2018, Emergency standby power is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 hours of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 hours of operation shall not exceed 70 % of the ESP

ENGINE		PRIME	STANDBY
Rated Output	kW	47	52
Manufacturer		Cummins	
Model		4BTA3.9-GM47	
Number of Cylinders and arrangement		4 Cycle, 4 Cylinder in Line	
Aspiration Type		Turbocharged	
Bore and Stroke	mm	102X120	
Compression Ratio		17.3:1	
Cooling System		Water-cooled	
Engine Speed/Frequency	rpm/Hz	1500/50HZ	
Coolant Capacity	L	N/A	
Starting System		Electric 24 volt DC	
Displacement	L	3.9	
Lubricant system Capacity	L	9	

Battery Volatge / Capacity		24VDC			
Governor	Type	Electronic			
Air Filter	Type	Dry			
Fuel Consumption	Load	100%	75%	50%	25%
	L/h	12.0	9.0	6.0	3.0

**ENGINE:**Marine 4 stroke cooled diesel engine complete with air,fuel and oil filters,electric starting and charging equipment

**COOLING:**With heat exchanger,sea water pump cooling

**ELECTRICAL SYSTEM:**12/24V upto.Axial type starter motor,battery charging alternator,high capacity lead acid battery,and battery tray mounted on the generator base frame,and heavy duty interconnecting cable with terminations.

ALTERNATOR MANUFACTURER	STAMFORD	Marathon
Model	UCM 224E	MP-H-50-4
Excitation System	Self Excited	
Number of Poles	4	
Connection Type	Star-Series	
Insulation Class	Class H	
Voltage Regulator	A.V.R. (Electronic)	
Bracker Type	Single bearing	
Steady Voltage Precision	± 0.5%	
Couping System	Flexible disc	
Coating Type	Standard ( Vacuum impregnation )	
Underspeed Protection	Standard	
Ingress Protection Rating	IP23	
Wave Form NEMA=TIF	<50	

**CONTROL PANEL: CUMMINS**



**Voltage Regulation**

- Δ Voltage regulation maintained within ±0.5%
- Δ Between 0.8 and 1.0 lagging and unity

- Δ From no load to full load
- Δ At speed droop variation upto 4.5%

**Frequency Adjustable Ratio**

Change load from 0-100%,within 1.0%( electric speed regulator),within 4.5%( mechanical speed regulator)

**Frequency Undulation**

- Δ Load from 0-100%,frequency undulation within 0.25%
- Δ No load wire volts max undulation ration\ within 1.8%
- Δ Three Phase balanced load in the order of 5%
- Δ Effect factor of Telecom
- Δ TIF better than 50
- Δ THF to IEC60034 Part 40 better than 2%

**Quality Standards**

- ISO9001:2000,ISO14000,ISO3046
- BS5514,AS1359,ICE34
- ISO8528 BS4999
- CE Compliance

**Gensets Dimensions & Weight & Fuel Tank Capacity**

Open type:LxWxH (mm),Dry Weight / Kgs, Fuel tank ( L )  
1700\*850\*1300, 800kgs

**Local Distributor:**



FUZHOU SUNSHINE MACHINERY CO.,LIMITED  
Fuzhou, Fujian, China.

Tel:86-591-88204179 FAX:86-591-87723357

Email: sales@primepowergenset.com www.primepowergenset.com



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