

**Modasa**, company leading in the manufacture of generator sets, presents its product range.

## Genset Description:

<b>Model name</b>	MH-45IT4A
<b>Engine</b>	HATZ 4H50TIC (EPA Tier 4F)
<b>Alternator</b>	STAMFORD S1L2-R1
<b>Controller</b>	Electronic
<b>Phases</b>	Three-phase/ Single-phase
<b>Voltage Selector</b>	208V-480V/ 240V



**Note:** reference image, may vary depending on accessories

## Genset Rating (≤ 3300 famsl):

Engine	Alternator	Power		Volt.	Phase	Freq.	PF	Max. Current.
		Prime power	Stand By Power					
4H50TIC	S1L2-R1	44 KVA / 35 KW	49 KVA / 39 KW	208V	3ph	60Hz	0.8	135 A
4H50TIC	S1L2-R1	44 KVA / 35 KW	49 KVA / 39 KW	480V	3ph	60Hz	0.8	59 A
4H50TIC	S1L2-R1	34 KVA / 34 KW	37 KVA / 37 KW	240V	1ph	60Hz	1.0	154 A

## Power definitions:

**Prime Power:** Power available at variable load in lieu of a main power network. Overload of 10% is permitted for 1 hour in every 12 hours of operation.

**Standby Power:** Power available at variable load in the event of main power network failure. No overload is permitted.

The above ratings represent the engine performance capabilities to conditions specified in accordance with ISO 8528.

## Codes & Standards:

The Generator set is designed and manufactured in a facility certified to ISO 9001 standards

Engine: ISO 3046, BS 5514, DIN 6271

Alternator: BS5000, VDE 0530, NEMA MG1-32, IEC34, CSAC22,2-100, ASI 1359

Genset: ISO 8528



## General Specifications:

### Engine:

<b>Model</b>	4H50TIC
<b>Cylinders</b>	4 in line
<b>Governor type</b>	ECM
<b>Cycle</b>	4 Stroke
<b>Aspiration</b>	Turbocharged
<b>Fuel</b>	Diesel
<b>Combustion system</b>	Direct injection
<b>Cooling system</b>	Water cooled
<b>Bore</b>	3.31 in
<b>Stroke</b>	3.46 in
<b>Fuel consumption (gallon per hour)</b>	
<b>Speed Engine</b>	1800 RPM
<b>Prime Power</b>	2.6 gallon per hour
<b>75% Prime Power</b>	1.9 gallon per hour

<b>System Voltage</b>	12V
<b>Frequency</b>	60Hz
<b>Displacement</b>	119.1 in3
<b>Compression ratio</b>	17.5:1
<b>Lubricating system capacity</b>	3.30 gallons
<b>Coolant system capacity</b>	1.84 gallons

<b>Aftertreatment system</b>	
<b>Aftertreatment type</b>	EGR/DOC

### Alternator:

<b>Model</b>	S1L2-R1
<b>Insulation system</b>	Class "H"
<b>Excitation system</b>	Auxiliary winding
<b>A.V.R voltage regulation</b>	AS440 $\pm$ 1.0%
<b>Protection</b>	IP 23

<b>Number of poles</b>	04
<b>Power factor</b>	0.8
<b>Frequency</b>	60Hz
<b>Winding number</b>	Winding 311
<b>Telephone interference</b>	< 75

### Features Genset:

- ◇ Enclosure heavy duty steel, Residential silencer included
- ◇ Enclosure center lifting point, External fuel filling
- ◇ Standard sound attenuation foam, Oil & Coolant Drain Ports
- ◇ Direct flexible engine-alternator coupling
- ◇ Structural steel frame with rubber anti-vibration dampers
- ◇ 93 Gallon double wall sub base fuel tank
- ◇ Capacity for 35 hours of autonomy at 100% load prime
- ◇ ABB 250A 3 pole manual circuit breaker
- ◇ Voltage Selector Krauss & Naimer position (Y-YY-Z)
- ◇ Lockable lug box and Cam-Lock distribution panels
- ◇ Convenience receptacles with individual breakers
  - (2) 120V 20 Amp GFCI duplex outlets - (Nema 5-20R type)
  - (2) 125/250V 50 Amp, 3 pole, twist lock (Non-Nema 6369)
- ◇ 12V battery, connection cables, battery holder
- ◇ 12V/3A battery charger in control panel
- ◇ Battery disconnect switch, electric fuel level meter
- ◇ Emergency stop switch located on outside of enclosure
- ◇ Manuals and electrical diagrams in digital



*Distribution panel (side)*

## Controller Data:

Equipped with the latest electronic digital control module DSE 6320, it allows the start, control, protection and stop of the generator set in manual and automatic modes. Makes automatic transfer.

### Measurements

- ◇ Current of the three phases L1, L2, L3
- ◇ Voltage of the three phases L - L and L - N
- ◇ Energy demand KWh, KVAh, KVAh
- ◇ Active Energy KVAh
- ◇ Power factor
- ◇ Frequency
- ◇ Hours of operation
- ◇ Memory of the last 250 events, description, date and time
- ◇ Active Power KW
- ◇ Reactive Power KVA
- ◇ Oil pressure
- ◇ Coolant temperature
- ◇ Generator phase sequence.
- ◇ Turning speed
- ◇ Battery voltage

### Protections

- ◇ Alarm for maintenance activated configured
- ◇ High engine temperature
- ◇ Low/High frequency
- ◇ Low oil pressure
- ◇ Low/High battery voltage
- ◇ Low/High generator voltage
- ◇ Boot failure
- ◇ Stop failure
- ◇ Negative phase sequence fault
- ◇ Over current fault
- ◇ Overload failure
- ◇ Emergency stop

## Enclosed Genset Dimensions:



Noise Level  
reference @ 23ft

Maximum  
60 + 2 dBA

Ambient  
50 dBA

Lenght 88.9 in  
Width 43.3 in  
Height 66.9 in  
Weight 3053 lbs (dry)  
Fuel tank 93 gallons (double wall)  
Ø Esc. 3 in

**Note:** reference values, request more detail with dimensional drawing

## Application images:



Connection Cam-Lock Standard



Control panel and breaker (rear side)



Lockable external fuel fill