



1450mm

1286mm

620mm

**DIESEL GENERATOR** 

**FUEL OPTIMISED** 

### **ELECTRICAL**

			Pri	me	Star	ndby			
Frequency (Hz)	Phases	Voltage (V)	kVA	kW	kVA	kW	MCB Rating (A)	Minimum ATP Rating (A)	Rated Speed (RPM)
50	3	400/230V	17	14	18	14	25	30	1500
50	1	230V	13	13	14	14	40	50	1500
60	3	380/220V	17	14	18	14	32	40	1800
60	3	220/I27V	19	15	20	16	50	63	1800
60	3	480/277V	20	16	22	17	50	50	1800

POWER FACTOR				
3 Phase	0.8			
I Phase	1			

MAXIMUM LOAD IMPACT*					
17.10					
13.70					

\*With 20% voltage and 10% frequency deviation @ 50Hz, 400V

### **ALL RATINGS ARE TO STANDARD REFERENCE CONDITIONS ISO 8528**

Prime: This rating is for the supply of continuous electrical power, at variable load, in lieu of commercially purchase power. There is no limitation on the annual hours of operation and 10% over load power can be supplied for 1 hour in 12.

Standby: This rating is for the supply of continuous electrical power, at variable load, in the event of a utility power failure. No overload is permitted.

"Stage Illa" models are only emissions compliant at 50Hz Prime Power in accordance with 97-68EC.



CANOPY/SKID	
Lockable Maintenance Access Doors	X
Control Panel Viewing Window	X
Fork Pockets	•
Single Lift Point	X
Rental Sledging Base	X
Bunding	Δ
Open Frame	•
Bund Level Indicator	X
50mm Rock Wool Sound Insulation	X
Yellow Paint	X
Red Paint	X
White Paint	X
Standard: • Not Available: x Optional: △	7

ALTERNATOR HM160A1	
Poles	4
Winding Connections	Star (3Ph) / Parallel (1Ph)
Insulation	Class H
Enclosure	IP23
Exciter System	Self-regulating brushless
Voltage Regulator	AVR
Steady State Voltage Regulation	+/- 1.0%
Bearing	Single bearing sealed
Coupling	Flexible disc
Cooling	Direct drive centrifugal blower fan
Coating	Winding Protection Standard +

STARTING SYSTEM					
Starter Motor	kW	1.40			
Battery Capacity	Ah	92			
Number of Batteries					
Auxiliary Voltage	V	12			

ENGINE						
I 500 RPM						
Output Rating (PRP)	kW	14.80				
Output Rating (Standby)	kW	15.80				
	1800 R	PM				
Output Rating (PRP)	kW	17.70				
Output Rating (Standby)	kW	19.20				
Manufacturer and Model		Yanmar 4TNV88BGGEH				
Fuel		Diesel				
Injection		Direct				
Aspiration		Natural				
Cylinders		4				
Bore and Stroke	mm	88 x 90				
Displacement	L	2.19				
Cooling		Water				
Engine Oil Specification		SAE 3 Class 10W30 / IPE Grade CD,CF				
Compression Ratio		19:1				
Engine Oil Capacity	L	7.40				
Coolant Capacity	L	5.50				
Governor		Mechanical				
Air Filter		Dry				
Engine Oil Consumption	100% Load	0.27 g/kWh				

FUEL SYSTEM		
Diesel Specification		EN590
Standard Fuel Tank Capacity	L	60

FUEL TANK OPTIONS						
	Material	Capacity (L)				
Standard Tank	Plastic	60				
Tank Option 1						
Tank Option 2						



Exhaust Flange Size         mm         50.00           'AIR SYSTEM           Intake Air Flow 100% Standby         m³/h         88.70           Total Cooling Air Flow 100% Standby         m³/s         50Hz         0.80           Alternator Fan Airflow         m³/s         0.09         106.43           Total Cooling Air Flow 100% Standby         m³/s         60Hz         0.987           Alternator Fan Airflow         m³/s         0.108           SOUND PRESSURE (CANOPY ONLY)           LpA (7m)         50Hz         dB(A)         N/A						
75% Load Prime         L/h         50Hz         3.29           50% Load Prime         L/h         4.63           100% Load Standby         L/h         4.63           100% Load Prime         L/h         6.06           75% Load Prime         L/h         6.0Hz           50% Load Prime         L/h         6.41           EXHAUST SYSTEM           Maximum Temperature 100% Standby         C         470.00           Exhaust Gas Flow 100% Standby         m³/min         50Hz         4.24           Maximum Allowed Back Pressure         mbar         127.00         530.00           Exhaust Gas Flow 100% Standby         m³/min         60Hz         5.59           Maximum Allowed Back Pressure         mbar         1300.00           Exhaust Flange Size         mm         50.00           *AIR SYSTEM           Intake Air Flow 100% Standby         m³/h         88.70           Total Cooling Air Flow 100% Standby         m³/s         50Hz         0.80           Alternator Fan Airflow         m³/s         0.09         0.98           Intake Air Flow 100% Standby         m³/s         60Hz         0.987           Alternator Fan Airflow         m³/s         60Hz	FUEL CONSUMPTION					
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50% Load Prime       L/h       2.40         100% Load Standby       L/h       4.63         100% Load Prime       L/h       6.06         75% Load Prime       L/h       3.80         50% Load Prime       L/h       6.41         EXHAUST SYSTEM         Maximum Temperature 100% Standby       DC       470.00         Exhaust Gas Flow 100% Standby       m³/min       50Hz       4.24         Maximum Allowed Back Pressure       mbar       127.00         Maximum Temperature 100% Standby       m³/min       60Hz       5.59         Maximum Allowed Back Pressure       mbar       1300.00         Exhaust Flange Size       mm       50.00         *AIR SYSTEM         Intake Air Flow 100% Standby       m³/h       88.70         *AIR SYSTEM       0.80         Intake Air Flow 100% Standby       m³/s       50Hz       0.80         Alternator Fan Airflow       m³/s       0.09       106.43         Total Cooling Air Flow 100% Standby       m³/s       60Hz       0.987         Alternator Fan Airflow       m³/s       60Hz       0.987         Alternator Fan Airflow       m³/s       0.108         SOUND PRESSUR	75% Load Prime	L/h	50Ll-	3.29		
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LpA (7m) 60Hz dB(A) N/A	LpA (7m) 50	)Hz (	dB(A)	N/A		
25/ (/)	LpA (7m) 60	)Hz (	dB(A)	N/A		

MECHANICAL FEATURES			
Cooling Pack			•
Air Filter			•
Mechanical Governor			•
Electronic Governor			X
High Coolant Temperature Sender			•
Low Oil Pressure Sender			•
Advanced Coolant Temperature Sender			Δ
Advanced Oil Pressure Sender			Δ
Oil Temperature Sender			X
Water Level Sender			×
Radiator Guards			•
Hot Component Guards			•
Manual Oil Drain Pump (Canopy)		•	
Water Jacket Heater		•	
Manual Fuel Fill			Δ
Electric Fuel Fill			Δ
Racor Fuel Filter (No Alarm)		Δ	
Racor Fuel Filter (With Alarm)			Δ
Pre-Filter with Separator			×
External Spark Arrestor		Δ	
Fuel Level Sender			•
Fuel Heater			Δ
External Fuel Fill (Belly Tank)		•	
3 Way Fuel Valve and Coupling Nest		Δ	
Residential Silencer		Δ	
Industrial Silencer			•
Standard: ●	Not Available: x	Optional: $\Delta$	

Battery Size (Ah)

Battery Charger

Number of Batteries Optional Battery

Standard: •



ELECTRICAL FEATURES		
AVR DSR		•
AVR DER		X
Winding Protection Standard	X	
Winding Protection Standard +	•	
Winding Protection Grey		Δ
Winding Protection Total		Δ
Winding Protection Total +		Δ
MAUX		•
PMG		Δ
Anti-Condensation Heater		Δ
Miniature Circuit Breaker (Integrated busbar)		•
Moulded Case Circuit Breaker (with integrated bus	X	
Earth Leakage Protection (Shunt Trip)	•	
Synchronisation	X	
Socket Box (inclusive of heavy duty busbar & micro	X	
Preparation for Earth Spike	•	
Optional Voltages		Δ
Remote Screen		Δ
Panel Door Micro Switch		X
Copper Busbar/Tails		X
Emergency Stop Button		•
External Emergency Stop Button		X
Standard: ● Not Avail	able: x Optic	onal: $\Delta$
BATTERY FEATURES		
Battery Isolator		Δ
Battery Type		Dry

Not Available: x

JCB COMMUNICATION AND CONTROL					
KSI				×	
CPI				•	
CP2				Δ	
ATP				Δ	
CAN/USB				Δ	
CAN/LAN				Δ	
CAN RS-232				Δ	
Remote Modem				Δ	
	Standard: ●	Not Available: x	Optional: $\Delta$		

WEIGHT AND DIMENSIONS				
Length	mm	1450		
Width	mm	620		
Height	mm	1286		
Shipping Volume (sea ready)	m <sup>3</sup>	1.16		
Weight*	Kg	409.00		

<sup>\*</sup>Standard build with all fluids except fuel

#### **REFERENCE STANDARDS**

JCB Generators are CE certified and conform to the following Directives (subject to a country requiring such standard):

- EN 12100, EN 13857, EN 60204
- 2006/42/CE Machinery safety
- 2006/95/EC Low voltage
- 2004/108/CE Electromagnetic compatibility
- 2000/14/EC Sound Power Level (amended by 2005/88/EC)
- 97/68/EC Emissions(amended by 2002/88/EC & 2004/26/EC)
- Power according to ISO 8528 and ISO 3046
- Ambient reference conditions I 000mbar, 25°C, 30% relative humidity ISO3046
   Information based on standard specification equipment unless otherwise stated.

66Ah

Wet

Optional:  $\Delta$