

## GEM260-1

*Diesel Generator Set  
Exclusively from your Cat® dealer*



Image shown may not reflect actual package

Output Ratings		
Generating Set Model - 3 Phase	Prime*	Standby*
-	-	-
220/127 V, 60 Hz	240.0 kVA 192.0 kW	260.0 kVA 208.0 kW

\* Refer to ratings definitions on page 4.  
Ratings at 0.8 power factor.

Technical Data		
Engine Make & Model:	MWM 7.2P	
Alternator Model:	GTA252AI44	
Control Panel:	PowerWizard 1.1 +	
Base Frame Type:	Heavy Duty Fabricated Steel	
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	-	1800
Fuel Tank Capacity: litres (US gal)	457 (120.7)	
Fuel Consumption, Prime: l/hr (US gal/hr)	-	50.0 (13.2)
Fuel Consumption, Standby : l/hr (US gal/hr)	-	57.4 (15.2)



# Engine Technical Data

Physical Data	
Manufacturer:	MWM
Model:	MWM 7.2P
No. of Cylinders/Alignment:	6 / In Line
Cycle:	4 Stroke
Induction:	Turbocharged Air To Air Charge Cooled
Cooling Method:	Water
Governing Type:	Mechanical
Governing Class:	ISO 8528 G2
Compression Ratio:	16.8:1
Displacement: l (cu.in)	7.2 (438.2)
Bore/Stroke: mm (in)	105.0 (4.1)/137.0 (5.4)
Moment of Inertia: kg m <sup>2</sup> (lb. in <sup>2</sup> )	2.12 (7244)
Engine Electrical System:	
-Voltage/Ground:	24/Negative
-Battery Charger Amps:	80
Weight: kg (lb) - Dry:	590 (1301)
- Wet:	615 (1356)

Air System	50 Hz	60 Hz
Air Filter Type:	Paper Element 15"	
Combustion Air Flow:		
m <sup>3</sup> /min (cfm) -Standby:	-	21.0 (742)
-Prime:	-	21.0 (742)
Max. Combustion Air Intake		
Restriction: kPa (in H <sub>2</sub> O)	-	5.0 (20.1)
Radiator Cooling Air Flow:		
m <sup>3</sup> /min (cfm)	-	306.0 (10806)
External Restriction to		
Cooling Air Flow: Pa (in H <sub>2</sub> O)	-	125 (0.5)

Cooling System	50 Hz	60 Hz
Cooling System Capacity:		
l (US gal)	-	15.7 (4.1)
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil: kW (Btu/min)		
-Standby:	-	106.0 (6028)
-Prime:	-	95.0 (5403)
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min) -Standby:	-	40.9 (2326)
-Prime:	-	30.7 (1746)
Radiator Fan Load: kW (hp)	-	5.0 (6.7)
Cooling system designed to operate in ambient conditions up to 50°C (122°F). Contact your local Olympian™ dealer for power ratings at specific site conditions.		

Lubrication System	
Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity l (US gal):	18.7 (4.9)
Oil Pan l (US gal):	17.0 (4.5)
Oil Type:	API C14 15W-40
Cooling Method:	Water

Performance	50 Hz	60 Hz
Engine Speed: RPM	-	1800
Gross Engine Power: kW (hp)		
-Standby:	-	234.0 (314.0)
-Prime:	-	213.0 (286.0)
BMEP: kPa (psi)		
-Standby:	-	2192.0 (317.9)
-Prime:	-	1995.0 (289.4)

Fuel System				
Fuel Filter Type:	Replaceable Element			
Recommended Fuel:	Class A2 Diesel or BSEN590			
Fuel Consumption: l/hr (US gal/hr)				
	110% Load	100% Load	75% Load	50% Load
Prime				
50 Hz	-	-	-	-
60 Hz	57.4 (15.2)	50.0 (13.2)	37.4 (9.9)	26.9 (7.1)
Standby				
50 Hz	-	-	-	-
60 Hz	57.4 (15.2)	42.1 (11.1)	29.4 (7.8)	
(based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)				

Exhaust System	50 Hz	60 Hz
Silencer Type:	Industrial	
Silencer Model & Quantity:	EXSY1 (1)	
Pressure Drop Across		
Silencer System: kPa (in Hg)	-	0.21 (0.061)
Silencer Noise Reduction		
Level: dB	-	10
Max. Allowable Back		
Pressure: kPa (in. Hg)	-	10.7 (3.2)
Exhaust Gas Flow:		
m <sup>3</sup> /min (cfm) -Standby:	-	41.7 (1473)
-Prime:	-	37.2 (1314)
Exhaust Gas Temperature: °C (°F)		
-Standby:	-	630 (1166)
-Prime:	-	570 (1058)

## Alternator Performance Data

Data Item	50 Hz				60 Hz				
						380/220V			220/127V
Motor Starting Capability* kVA	-	-	-	-	-	553	-	-	831
Short Circuit Capacity%	-	-	-	-	-	300	-	-	300
Reactances: Per Unit									
Xd	-	-	-	-	-	2.118	-	-	1.577
X'd	-	-	-	-	-	0.081	-	-	0.061
X''d	-	-	-	-	-	0.058	-	-	0.043

Reactances shown are applicable to prime ratings.

\*Based on 30% voltage dip at 0.6 power factor and AUX COIL excitation system.

## Alternator Technical Data

Physical Data	
Manufactured for Olympian by:	OLYMPIAN
Model:	GTA252AI44
No. of Bearings:	1
Insulation Class:	H
Winding Pitch - Code:	2/3 - NA
Wires:	12
Ingress Protection Rating:	IP21
Excitation System:	AUX COIL
AVR Model:	GRT7-TH4

Operating Data	
Overspeed: RPM	2250
Voltage Regulation: (steady state)	+/- 0.5%
Wave Form NEMA = TIF:	50
Wave Form IEC = THF:	2.0%
Total Harmonic Content LL/LN:	5.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
-50 Hz:	-
-60 Hz:	10.9 (620)

