

OLYMPIAN™



GES300-1

*Diesel Generator Set
Exclusively from your Caterpillar® dealer*

Output Ratings		
Generating Set Model	Prime*	Standby*
-	-	-
440/254V, 60Hz	275.0 kVA 220.0 kW	300.0 kVA 240.0 kW

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

Technical Data		
Engine Make & Model:	Scania DC9 65A 10-93	
Alternator Model:	GTA252 All	
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)	250 (66.0)	
Fuel Consumption, Prime: l/hr (US gal/hr)	-	58.8 (15.5)
Fuel Consumption, Standby : l/hr (US gal/hr)	-	60.6 (16.0)

Engine Technical Data

Physical Data	
Manufacturer:	Scania
Model:	DC9 65A 10-93
No. of Cylinders/Alignment:	5 / In Line
Cycle:	4 Stroke
Induction:	Turbocharged Air To Air Charge Cooled
Cooling Method:	Water
Governing Type:	Electronic
Governing Class:	ISO 8528 G2
Compression Ratio:	18.1
Displacement: l (cu.in)	8.9 (543.1)
Bore/Stroke: mm (in)	127.0 (5.0)/140.0 (5.5)
Moment of Inertia: kg m ² (lb. in ²)	2.74 (9363)
Engine Electrical System:	
-Voltage/Ground:	24/Negative
-Battery Charger Amps:	10
Weight: kg (lb) - Dry:	887 (1955)
- Wet:	940 (2072)

Air System	50 Hz	60 Hz
Air Filter Type:	Replaceable Element	
Combustion Air Flow:		
m ³ /min (cfm) -Standby:	-	21.1 (745)
-Prime:	-	20.2 (715)
Max. Combustion Air Intake		
Restriction: kPa (in H ₂ O)	-	4.9 (19.7)
Radiator Cooling Air Flow:		
m ³ /min (cfm)	-	390.0 (13773)
External Restriction to		
Cooling Air Flow: Pa (in H ₂ O)	-	245 (1.0)

Cooling System	50 Hz	60 Hz
Cooling System Capacity:		
l (US gal)	-	57.0 (15.1)
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil: kW (Btu/min)		
-Standby:	-	106.0 (6028)
-Prime:	-	98.0 (5573)
Heat Radiation to Room:		
kW (Btu/min) -Standby:	-	28.0 (1592)
-Prime:	-	26.0 (1479)
Radiator Fan Load: kW (hp)	-	9.0 (12.1)
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):	37.0 (9.8)
Oil Pan l (US gal):	29.0 (7.7)
Oil Type:	API CE or CF
Cooling Method:	Water

Performance	50 Hz	60 Hz
Engine Speed: RPM	-	1800
Gross Engine Power: kW (hp)		
-Standby:	-	275.0 (369.0)
-Prime:	-	253.0 (339.0)
BMEP: kPa (psi)		
-Standby:	-	2068.0 (299.9)
-Prime:	-	1902.0 (275.9)
Regenerative Power: kW		38.0

Fuel System				
Fuel Filter Type:	Replaceable Element			
Recommended Fuel:	Diesel			
Fuel Consumption: l/hr (US gal/hr)				
	110% Load	100% Load	75% Load	50% Load
Prime				
50 Hz	-	-	-	-
60 Hz	60.6 (16.0)	58.8 (15.5)	48.5 (12.8)	32.2 (8.5)
Standby				
50 Hz	-	-	-	-
60 Hz	60.6 (16.0)	52.0 (13.7)	35.4 (9.4)	
(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:	Level 1	
Silencer Noise Reduction	SD125 (1)	
Pressure Drop Across		
Silencer System: kPa (in Hg)	-	0.20 (0.059)
Silencer Noise Reduction		
Level: dB	-	10
Max. Allowable Back		
Pressure: kPa (in. Hg)	-	5.9 (1.7)
Exhaust Gas Flow:		
m ³ /min (cfm) -Standby:	-	50.0 (1766)
-Prime:	-	48.0 (1695)
Exhaust Gas Temperature: °C (°F)		
m ³ /min (cfm) -Standby:	-	500 (932)
-Prime:	-	468 (874)

Alternator Performance Data

Data Item	50 Hz				60 Hz				
						380/220V			440/254V 220/127V
Motor Starting Capability* kVA	-	-	-	-	-	382	-	-	512
Short Circuit Capacity** %	300	300	300	300	300	300	300	300	300
Reactances: Per Unit									
Xd	-	-	-	-	-	3.480	-	-	2.590
X'd	-	-	-	-	-	0.180	-	-	0.130
X''d	-	-	-	-	-	0.139	-	-	0.103

Reactances shown are applicable to standby ratings.

* Based on 30% voltage dip.

** With optional Permanent Magnet generator or AREP excitation.

Alternator Technical Data

Physical Data	
Manufacturer:	OLYMPIAN
Model:	GTA252 All
No. of Bearings:	1
Insulation Class:	H
Winding Pitch - Code:	2/3 - -
Wires:	12
Ingress Protection Rating:	IP21
Excitation System:	BRUSHLESS
AVR Model:	GRT7-TH4E

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:	18.9 (1075)

Consult your Olympian representative for more information

