

“BHEEM –The Strong” - Steam Turbine Generators

Technical Data Sheet

Turbine Model	BHEEM BG 600 - 1000
Prime Mover for	750 - 1250 KVA Alternator
Design	A.P.I. Standard – balanced Mounting
Type	Single Stage, Curtis Wheel
Casing	Horizontally Split
Rotor Shaft	Solid Forged, Machined, Hard Chrome Plated at the Gland area & Dynamically Balanced Rotor with Curtis Wheel keyed to the shaft.
Seals	Eight Carbon Rings on Each side
Bearing	Babitt Bearing with forced lubrication
Lubrication	Forced Lubrication by 100 LPM oil Pump
Speed Governor	Hydro– Mechanical Throttle Control
Turbine Speed	5000 RPM
Gearbox Output speed	1500 RPM for 50 Hz or 1800 RPM for 60 Hz
Gearbox Lubrication	Forced lubrication by 100 LPM oil Pump
Inlet Steam Pressure	30 BarG
Inlet Steam Temperature	236°C (Dry Saturated) - Minimum
Inlet Steam Flow	14 Kg per KW per Hour
Steam Discharge Pressure	1.0 BarG
Steam Discharge Temperature	120
Turbine Efficiency	
Thermal	≈ 47%
Mechanical	≈ 33%
Overall	≈ 36% assuming Mech. eff. of 84% for the AC Generator.
Inlet & Discharge Connections	150 mm & 340 mm – Flanges provided
Approximate dimensions	2000 x 1400 x 1700 mm - Approximate
Approximate weight	2500 Kg

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Technical Fact Sheet

Turbine Model	BHEEM BG 600 - 1000
Prime Mover for	750 - 1875 KVA Alternator
Design	A.P.I. 611 Standard
Type	Single Stage, Curtis Wheel
Casing	Horizontally Split
Rotor Shaft	100 mm Ø
Bearing	Babitt Bearing 67 mm Ø
Turbine Wheel	715 mm Ø
Turbine Blade	Stainless Steel - 410 Grade
No of Blades	300 on each wheel 150 on Deflector
Steam Inlet	150 mm Ø – Flange supplied
Steam Outlet	340 mm Ø – Flange supplied
Speed Governor	Woodward UG-40
Turbine Speed	5000 RPM
Gearbox Output speed	1500 RPM for 50 Hz or 1800 RPM for 60 Hz
Lubrication	Initially by Auxiliary and by Main Oil Pump
Main Oil Pump	Driven by the Gearbox
Auxiliary Oil Pump	Driven by Steam Turbine / Electric Motor
Oil Cooler	ONE – Shell & Tube Type
Oil Filter	One in Operation / One as Stand-by
Dimension	2000 x 2500 x 1700 mm - Approximate
Weight	2500 Kg without Alternator