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 **Bharat Bijlee**

GreenStar
Permanent Magnet Gearless Machines
for Elevators



Over 70 years of enterprise, and dedication in putting technology to work: these, bear testimony to Bharat Bijlee's evolution from a pioneer of electrical engineering in India to one of the most trusted names in the industry today.

Our product portfolio includes power transformers, AC motors, AC and DC drive systems, electrical projects, special maintenance products, and gearless machines for elevators. The common thread is an abiding concern for quality.

Greenstar

Permanent Magnet Gearless Machines for Elevators

GreenStar from Bharat Bijlee is a new-generation gearless machine for elevators powered by a permanent magnet synchronous motor. Compact modular design, light weight and low operating noise levels make it especially suitable for machine room-less applications.

Real savings in energy consumption (up to 30%), and in space and routine maintenance, contribute

to a significant reduction in cost of ownership. Our 30 years of elevator experience, is an unbeatable value proposition.

Rated load: 6 to 20 passengers. **Rated speed:** 1.0m/s to 1.5m/s.



NO MACHINE ROOM



GEARLESS



LOW NOISE



**ENERGY SAVING
UPTO 30%**



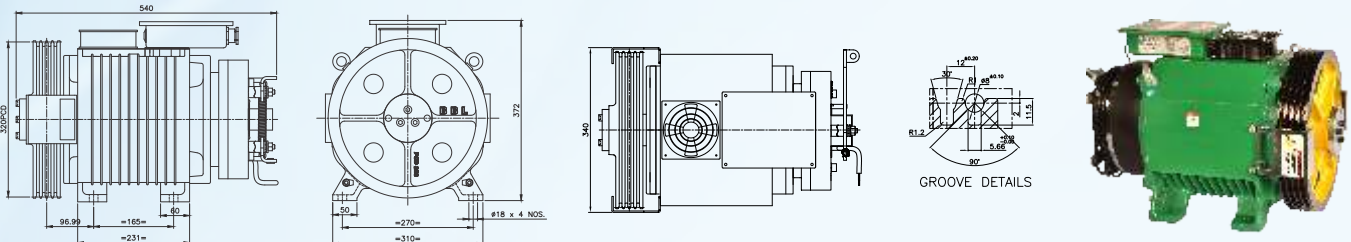
COMPACT DESIGN

Features

- Suitable for elevators with or without machine room
- No oil spillage problems
- Outstanding torque and cogging characteristics

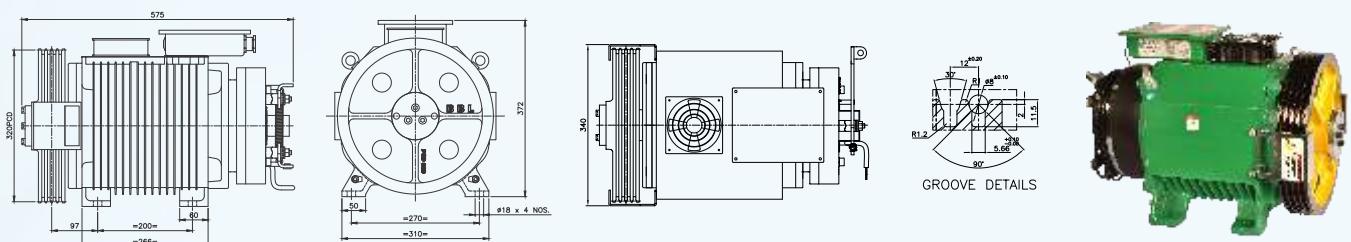
GC 06 TECHNICAL SPECIFICATION

Model		GC06-320-100	GC06 - 320 - 125	GC06 - 320 - 150
Duty Load (kg)		408		
Passenger Capacity		6		
Speed upto (m/s)		1.0	1.25	1.5
Sheave Dia.(mm)		320		
Rope Dia.(mm)		8		
No. of Ropes		4		
Roping Ratio		2:1		
RPM		120	150	180
Rated frequency (Hz)		12	15	18
Rated Torque (Nm)		215		
Rated Output Power	(kW)	2.7	3.4	4.0
	HP	3.6	4.5	5.4
Rated current (Amp)		8.0	10.0	10.0
Starts / Hour		120		
Static Load (Kg)		1300		
Machine weight (kg)		120		



GC 08 TECHNICAL SPECIFICATION

Model		GC08 - 320 - 100	GC08 - 320 - 125	GC08 - 320 - 150
Duty Load (kg)		544		
Passenger Capacity		8		
Speed (m/s)		1.0	1.25	1.5
Sheave Dia. (mm)		320		
Rope Dia.(mm)		8		
No. of Ropes		4		
Roping Ratio		2:1		
RPM		120	150	180
Rated frequency (Hz)		12	15	18
Rated Torque (Nm)		270		
Rated output Power	(kW)	3.4	4.2	5.0
	HP	4.5	5.6	6.7
Rated current (Amp)		9.4	11.0	13.0
Starts / Hour		120		
Static Load (Kg)		1300		
Machine weight (kg)		150		

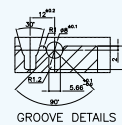
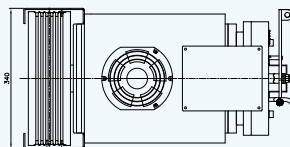
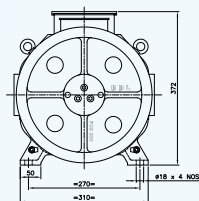
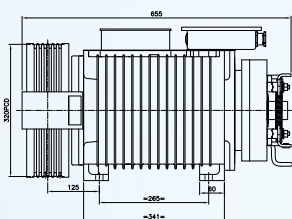


GC 10 TECHNICAL SPECIFICATION

Model	GC10-320-100	GC10 - 320 - 125	GC10 - 320 - 150
Duty Load (kg)	680		
Passenger Capacity	10		
Speed (m/s)	1.0	1.25	1.5
Sheave Dia. (mm)	320		
Rope Dia. (mm)	8		
No. of Ropes	6		
Roping Ratio	2:1		
RPM	120	150	180
Rated frequency (Hz)	12	15	18
Rated Torque (Nm)	335		
Rated output Power	(kW)	4.2	5.2
	HP	5.6	7.0
Rated current (Amp)	13.5	14.0	19.0
Starts / Hour	120		180
Static Load (Kg)	2300		
Machine weight (kg)	190		

GC 13 TECHNICAL SPECIFICATION

Model	GC13 - 320 - 100	GC13 - 320 - 125	GC13 - 320 - 150
Duty Load (kg)	884		
Passenger Capacity	13		
Speed (m/s)	1.0	1.25	1.5
Sheave Dia.(mm)	320		
Rope Dia.(mm)	8		
No. of Ropes	6		
Roping Ratio	2:1		
RPM	120	150	180
Rated frequency(Hz)	12	15	18
Rated Torque (Nm)	435		
Rated Output Power	(kW)	5.4	6.8
	HP	7.2	9.1
Rated current (Amp)	17.5	17.5	21.5
Starts / Hour	120		180
Static Load (Kg)	2300		
Machine weight (kg)	190		

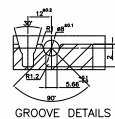
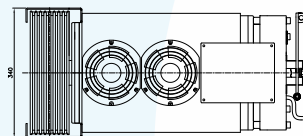
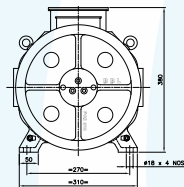
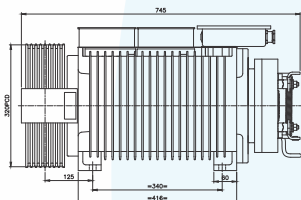


GC 16 TECHNICAL SPECIFICATION

Model	GC16 - 320 - 100	GC16 - 320 - 125	GC16 - 320 - 150
Duty Load (kg)	1088		
Passenger Capacity	16		
Speed (m/s)	1.0	1.25	1.5
Sheave Dia.(mm)	320		
Rope Dia.(mm)	8		
No. of Ropes	8		
Roping Ratio	2:1		
RPM	120	150	180
Rated frequency(Hz)	12	15	18
Rated Torque (Nm)	535		
Rated Output Power	(kW)	6.7	8.4
	HP	8.9	11.2
Rated current (Amp)	21.5	22.0	29.5
Starts / Hour	120		180
Static Load (Kg)	3500		
Machine weight (kg)	250		

GC 20 TECHNICAL SPECIFICATION

Model	GC20 - 320 - 100	GC20 - 320 - 125	GC20 - 320 - 150
Duty load (kg)	1360		
Passenger Capacity	20		
Speed (m/s)	1.0	1.25	1.5
Sheave Dia.(mm)	320		
Rope Dia.(mm)	8		
No. of Ropes	8		
Roping Ratio	2:1		
RPM	120	150	180
Rated frequency(Hz)	12	15	18
Rated Torque (Nm)	670		
Rated Output Power	(kW)	8.4	10.5
	HP	11.2	14.1
Rated current (Amp)	26.5	26.5	37.5
Duty Cycle	S3 40%		
Starts / Hour	120		180
Static Load (Kg)	3500		
Machine weight (kg)	250		



- Wrap Angle - Minimum 175 degrees • No. of Poles - 12 • Rated Voltage - 400Volts • Duty Cycle - S3 40% • Brake Voltage - 220/110 VDC
- Shaft Efficiency - >85% • Assumed car weight - 1.2 X duty load • Compensating chain necessary for travel more than 20 meters
- Maximum travel will depend upon the rated speed and the applicable fire rules • Greenstar Mini is available for home lift (Single Phase) application • Please contact our sales representative for machines with higher load & speed or different pulley combinations. • Encoder - SinCos, PPR -2048, Voltage - 5VDC.



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