

Pitch Control Slip Ring

AC7008

For GE 1.5 MW Wind Turbine

Description

Wind turbines require reliable transmission of power and data signals from the nacelle to the control system for the rotary blades. Moog's slip rings provide the performance and quality needed in demanding environments. Costly downtime is eliminated by using fiber brushes and robust mechanical components in the slip ring design.

Fiber Brush Technology

Over 30 years ago, Moog Components Group developed and patented the fiber brush technology for high reliability slip rings. The patented approach has led to hundreds of different slip ring designs for challenging applications which include satellite solar array drive power transfer, helicopter rotor blade de-icing, radar pedestals, industrial packaging equipment and now wind turbines—just to name a few. The unique feature of the fiber brush technology is its ability to perform in environmental and operational extremes. In addition, the fiber brush has the capability to handle high power while at the same time transferring data signals. And all this performance while maintenance free for over 100 million revolutions.



Direct Slip Ring Replacement

Moog Components Group now offers a direct replacement pitch control slip ring for the *GE 1.5 MW wind turbine. Moog's unit provides direct connection to the gearbox with wire terminal connections in both the stator and rotor junction boxes. Each unit is shipped with a heater already installed for cold weather installations. With over 5,000 turbines in operation, this GE series continues to be one of the world's most widely used wind turbines in its class.

Features

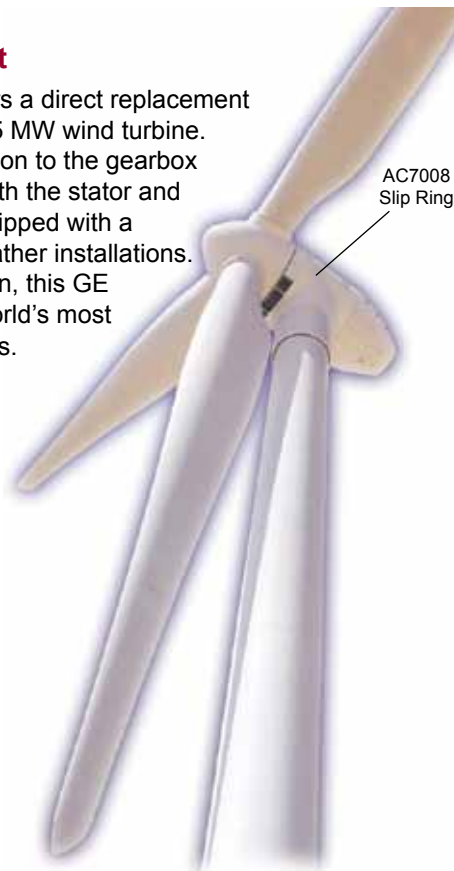
- No Maintenance Required
- Direct bolt-in replacement
- Rugged dual-row bearing
- Heater for cold weather installations

*GE Energy (www.ge.com/energy) is one of the world's leading suppliers of power generation and energy delivery technologies



Advantages

- Maintenance free for 100 million revolutions
- Minimal wear debris generation
- No lubrication required
- Wide operating temperature
- Lower life cycle cost
- High reliability
- No periodic inspections required



MOOG
COMPONENTS GROUP

Pitch Control Slip Ring

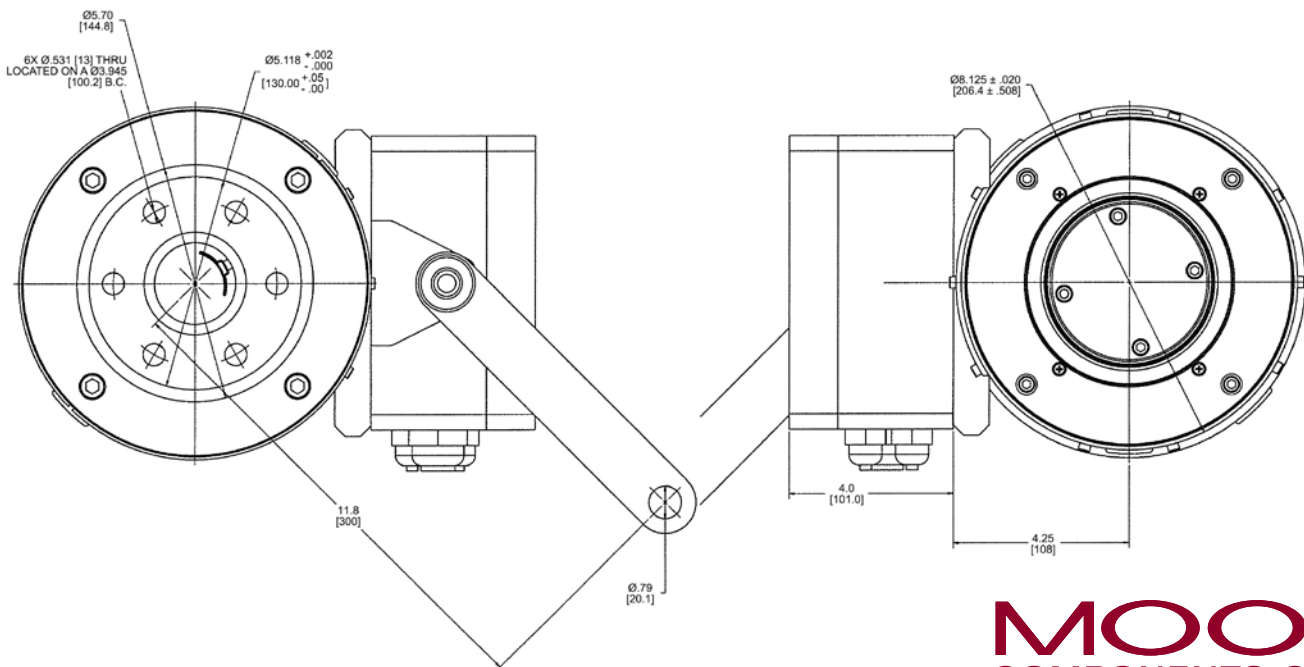
Specifications	
Weight	60 pounds
Brush Material	Silver alloy
Ring Material	Silver plate
Brush Life	> 100 million revolutions
Ring Life	> 100 million revolutions
Lubrication	No lubrication required
Cleaning / Maintenance Interval	No maintenance required
Power Circuit Rating	65 amps at 600 volts
Communication Lines	100 Mbps
Operating Temperature	-40°C to +80°C
Heating Element	13 watt, 240 volts standard
Sealing	IP 54



	Group 1	Group 2	Group 3	Group 4
Circuit Numbers	PE, L1, L2, L3, N	1PE, 1L1, 1L2, 1L3, 1N	1 through 10 STOW	11 through 25
Number of Leads	5	5	11	15
Nominal Current	65 amps	16 amps	16 amps	Data lines
Max. Operating Voltage	600 V	600 V	230 V	24 VDC
Wire Gage	8 AWG	14 AWG	14 AWG	16 AWG and 20 AW

This unit has a heater for condensation reduction. The heater is 30 watt output, 240 V. To connect heater provide 240 V supply to the 3-position terminal #26 in the stator junction box. The heater circuit is fused with a .3 amp / 250 V MDL buss fuse. Stator 3-position terminal #28 is the connection for the RTD temperature probe.

AC7008 Dimensions



Specifications and information are subject to change without prior notice.
© 2009 Moog Inc. MS3027 10/09

MOOG
COMPONENTS GROUP

Moog Components Group, Blacksburg Operations
1213 North Main Street, Blacksburg, VA 24060 • 800-336-2112 • +1-540-552-3011 • Fax +1-540-557-6400
www.moog.com/components • email: mcg@moog.com