

## WIND TURBINE TORQUE LIMITERS



Zero-Max's Torque-Limiters protect wind turbines against peak loads, reverse torques, and grid shorts. This functionality prevents the transmission of excess torque from the generator to the gearbox in the event of grid fault or disturbance and protects both the generator and the gearbox against premature failure. This allows for low voltage grid ride-through capability and helps wind turbine manufacturers meet strict grid code requirements.

The unique design of our Torque-Limiters provides reliable, consistent, and repeatable operation. Shaft-mounted to the generator shaft, our compact, bi-directional wind turbine Torque-Limiters are factory-set to slip at specific torque settings. Designed for maximum operational life, our maintenance-free Torque-Limiters feature automatic reengagement to reset after slip events with no manual intervention. Used in conjunction with our composite disc wind turbine couplings, our wind turbine Torque-Limiters provide the highest level of protection for modern wind turbine drivetrain requirements and are ideal both for original installations and after-market upgrades/replacements.



### Torque-Limiters for Wind Turbines

- Designed to protect both the gearbox and generator from torque overload and damage
- Generator shaft-mounted to avoid resonance concerns and installation difficulties
- Operation occurs internally and requires no adjustments or maintenance
- Automatic re-engagement to reset after slip events with no manual intervention
- Bi-directional functionality with no limitations
- Wide operational temperature range: -40° to 80°C (-40° to 176°F)
- All components meet or exceed C4 high corrosion resistance standards
- Manufactured to ISO 9001:2015 quality standards
- Lower Life Cycle Cost (LCC)

### Zero-Max offers solutions for the following Wind Turbines

Turbine MFG	Turbine Model	Coupling	Torque-Limiter*	NOTE**
Acconia/Nordex	AW-1500	X	X	
NEG Micon/ Vestas	NM44/NM48	X		
NEG Micon/ Vestas	NM52/NM54	X		
Pioneer Wincon	P750/49	X	X	
RRB Energy	PS600	X		
Siemens-Gamesa	G47	X		
Siemens-Gamesa	G5X	X	X	
Siemens-Gamesa	G8X/G9X	X	X	GEN2 & GEN3
Siemens-Gamesa	G114	X	X	50 Hz Only
Unison	U88/U93	X	X	
Unison	U113	X	X	
Vestas	V47	X		

\* Zero-Max Torque Limiter designed to work in conjunction with Zero-Max coupling. In most cases, the Torque-Limiter is provided standard with coupling solution.

\*\* Replacement Disc-Packs available for other models.