



## Two-Speed Fan Drives



**A**rctis Two-Speed Fan Drives offer a better, more efficient cooling solution for on- and off-highway vehicles without ram air. Rigorously tested, Arctis Two-Speed Fan Drives are engineered for reliability and long operating life in the highest-heat under-hood conditions.

### **Less noise. Exceptional efficiency.**

The Arctis Two-Speed alternates between eddy current and spring-actuated cooling for precise, highly efficient temperature control and superior horsepower performance. Under most operating conditions, the Arctis Two-Speed Fan Drives are powered by eddy current—turning the fan at a lower speed. This reduces operating noise, increases available horsepower for auxiliary systems, and minimizes radiator abrasion from dust and debris. When additional cooling is needed, the Arctis Two-Speed spring actuates and runs the fan at full input speed.

- Less slip at engagement for longer friction liner life
- Highest torque to date—2,700 in.-lbs. [305 N-m]
- Superior bearing technology for maximum reliability
- Larger air chamber for full disengagement
- Reduced noise
- Better engine performance
- Increased reliability
- Easy installation and maintenance

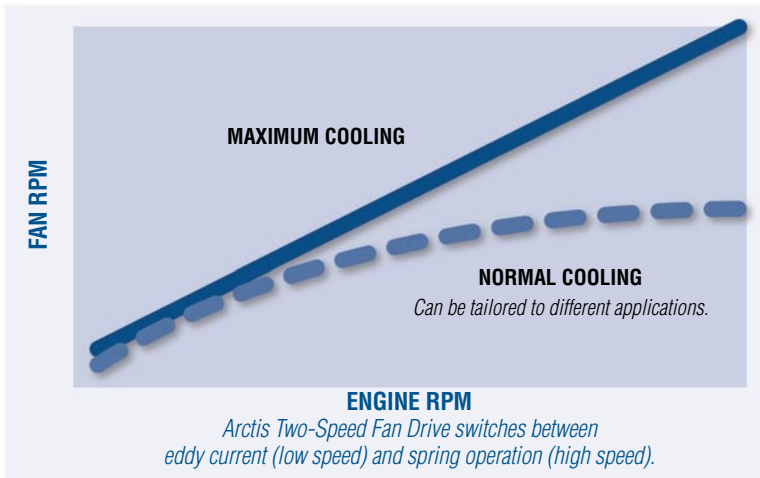
### **Cooling Solutions**

*Arctis Two-Speed Fan Drives are a quieter, more efficient alternative for today's demanding on- and off-highway engines. Another advanced cooling solution from Horton—a climate of innovation.*



Engine **Cooling Solutions** Worldwide®





### Arctis™ Two-Speed Specifications

Actuation	Eddy current at low speed with spring lock-up
Minimum air pressure to disengage	90 psi [620.5 kPa]
Out-of-box torque	2,700 in.-lbs. [305 N-m]
Friction disc diameter	7.9 in. [200.6 mm]
Fan blade capacity (diameter)	Application specific
Engine horsepower range	250–600 HP [186–447 kW]
Friction liner wear limit, minimum thickness	0.23 in. [5.76 mm]

# INSIDE INFORMATION

## Superior Performance



### Applications

Arctis Two-Speed Fan Drives are engineered to cool medium-duty trucks, buses, severe-service vehicles, rear-engine cement mixers and other on- and off-highway equipment with little to no ram air.

### Choose the leader

Horton is the leader in reliability, service and innovation. Our comprehensive research and development processes are dedicated to providing innovative cooling solutions that exceed the demands of reduced emission engines worldwide. We're driven to meet your needs today and in the future.

Engine **Cooling Solutions** Worldwide®



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### Horton Solution

### Your Benefit

Eddy current  
low-speed mode

80% reduction in fan engagement cycles for improved fan drive, belt and tensioner reliability

85% reduction in full-speed operation for improved fuel economy, reduced operating noise, increased available horsepower, and reduced radiator clogging and abrasion

Reduced friction liner wear

High-torque  
clutch pack

Ability to drive larger fans at higher ratios

Less friction liner wear per engagement for improved durability

Pneumatic control

Quick response to cooling needs

Simple control via solenoid valve

Precision engine temperature control

Faster engine warm-ups in cold weather