SAFETY SYSTEMS

# Guardian Surge Detection System (SDS)

Guardian Surge Detection System (SDS) provides SIL-3 capable surge detection and overspeed detection in a single unit.

## Overview



**What is it?**

The Guardian Surge Detection System (SDS) offers SIL-rated surge and overspeed protection for your rotating equipment — all in one device. Protect against damaging surge events in a safety-rated device that is independent of the control system.

Protecting your workforce and rotating assets is critical to your business. With the Guardian SDS, you never have to sacrifice safety for performance. By using a safety system physically separate from the control system, you can protect your equipment not only from physical issues such as sensor or controller failure, but also from devastating cyberattacks. The system's settings can only be changed with direct access to the unit, offering another layer of protection for your assets.

The Guardian SDS incorporates all Guardian ODS overspeed detection functionality into a single unit while maintaining the capability of a TUV certified SIL-3. Compliant with API-670, API-611 and API-612 standards, the Guardian SDS integrates seamlessly with industry-leading CCC control systems — making it easier than ever to safeguard your rotating assets.

**How does it work?**

Using CCC surge detection algorithms and industry standard setting overspeed detection, the Guardian SDS monitors compressors for overspeed and surge to ensure safety for critical systems. Configurable overspeed, acceleration, flow, and differential pressure settings ensure the Guardian SDS provides safe shutdown under the most severe service.

**What Problems Do They Solve?**

Combining overspeed and surge detection within a single unit minimizes complexity and cost while ensuring safe operation. API-670 requires separate safety systems from control systems. The Guardian SDS maintains that separation of safety and control within an easily configurable package.

ⓘ

Please sign in to view part numbers available for purchase based on your account

Sign In

Feedback