

## Siemens launches new SIRIUS 3UG5 line monitoring relays

- **Monitoring of all 3-phase grids from 200 V to 690 V nominal voltage**
- **Frequency monitoring from 15-70 Hz for more detailed information**
- **IO-Link enables transmission and evaluation of measured values in the controller or higher-level systems**
- **Certification according to SIL 1 (IEC 62061) and PL c (EN ISO 13849-1) standards for a wide range of applications**

Siemens has launched a new generation of line monitoring relays. The SIRIUS 3UG5 line monitoring relays combine proven technology with new functions and applications. The relays are the easiest way to monitor standards-compliant grid stability and quality, ensuring proper system operation and a long service life of components such as motors or compressors. Grid monitoring relays are used in critical areas such as hospitals or the process industry, which require a high-quality, fail-safe supply of power. Other areas of application include cranes, elevators, air, and air-conditioning compressors, as well as the timber industry.

The new SIRIUS 3UG5 line monitoring relays provide maximum protection for mobile machinery and equipment or in the event of unstable grids. This ensures that grid and voltage faults can be detected and reported at an early stage before major subsequent damage occurs. Creeping changes that indicate a need for maintenance, for example, are recorded as well. In order to react flexibly to short-term disturbances such as voltage dips or load changes, the monitoring relays have adjustable delay times. This avoids unnecessary alarms and shutdowns while increasing system availability. Depending on the variant, the relays monitor phase

sequence, phase failure with or without monitoring of the neutral wire, frequency, phase asymmetry as well as undervoltage or overvoltage. The 3UG5618 relay also offers automatic correction of the direction of rotation.

Compared to the industry standard, the new SIRIUS 3UG5 series can operate over a significantly wider frequency range – from 15 to 70 Hertz (Hz). This covers worldwide applications (e.g., 50 Hz in Europe and 60 Hz in the US). For unstable grids, it is also possible to specify the frequency to be monitored. This extends the range of possible applications. In addition, the devices can be used behind frequency converters. Railroad grids with frequencies of 16 2/3 Hz can now be monitored as well.

The IO-Link open communication standard enables the transmission and evaluation of measured values and trends in the controller or in higher-level systems. IO-Link devices can be parameterized from a PC via the TIA portal. By saving the parameters, replaced devices are parameterized automatically.

The SIRIUS 3UG5 line monitoring relays have functional safety certification in accordance with the SIL 1 (IEC 62061) and PL c (EN ISO 13849-1) standards and are suitable for use in a wide range of applications. Demand continues to rise for safety-certified components and systems that meet high quality and reliability requirements, for example for rail applications and in power generation.

Thanks to an extended measurable voltage range up to a nominal line voltage of 690 V and a reduced variance, the relays can also be used to monitor the operation of generators, for example in wind turbines. This simplifies order selection for global use and reduces inventory costs. A new housing with four operating buttons, a multicolor display and a teaching function allow for easy operation and parameterization without special prior training. The display, which can be powered off, provides energy savings of up to 20 percent.

This press release as well as press pictures / further material are available at <https://sie.ag/3OfhpCX>

For more information about Siemens' SIRIUS monitoring relays, see [www.siemens.com/sirius-monitoring-relays](http://www.siemens.com/sirius-monitoring-relays)

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**Siemens AG** (Berlin and Munich) is a technology company focused on industry, infrastructure, transport, and healthcare. From more resource-efficient factories, resilient supply chains, and smarter buildings and grids, to cleaner and more comfortable transportation as well as advanced healthcare, the company creates technology with purpose adding real value for customers. By combining the real and the digital worlds, Siemens empowers its customers to transform their industries and markets, helping them to transform the everyday for billions of people. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a globally leading medical technology provider shaping the future of healthcare. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power. In fiscal 2022, which ended on September 30, 2022, the Siemens Group generated revenue of €72.0 billion and net income of €4.4 billion. As of September 30, 2022, the company had around 311,000 employees worldwide. Further information is available on the Internet at [www.siemens.com](http://www.siemens.com).