

# DITTMAN



# & GREER



# DISPATCH

News on Automation, Process Control and Electric Heating Applications

Winter, 2009

## SAFETY BASE.COM

Announcing the new **SafetyBase.com**, Your Central Source for Industrial Safety Knowledge

Siemens Energy & Automation, Inc. has announced the launch of SafetyBase.com, a new educational safety website developed in conjunction with a dedicated network of solution experts and safety thought leaders. Designed to be a single source of safety information for everything engineers, safety professionals and operational and corporate management need to know about machine and process safety, SafetyBase.com contains resources focused on education, compliance, solutions and support, plus an experts lounge to promote networking and learning within the safety community.

Finding the latest relevant information on machine and process safety can be a challenging task. What industry standards apply? How about OSHA regulations? Risk assessment? What safety solutions are available? How will emerging trends impact your business? In the face of such uncertainty and change, where do you turn for answers?

SafetyBase.com. It's a free interactive website developed by a group of U.S. safety experts who have joined forces to bring you the latest information and resources on industrial automation safety issues. The site is sponsored by Siemens Energy & Automation, the leader in automation excellence.

"Safety is a critical issue in today's automation industry, and there hasn't been a central resource a person could go to and learn what they need to know about safety," said Raj Batra, vice president, Automation and Motion Division, Siemens Energy & Automation, Inc.

"SafetyBase.com gives them that central web-based access point to tap into an extensive knowledge base of educational information and safety expertise."

SafetyBase.com has a dedicated network of safety solution experts and thought leaders actively involved in the website. Participating companies include A E Solutions, Design Safety Engineering, Exida, Factory Information Systems, M.R. Snyder Company, RWD and Siemens. Additionally, the website is supported by Reed Business Information and its group of industry publications.

"SafetyBase.com is just what the industry needs," commented Bruce Main, president of Design Safety Engineering, Inc., one

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## NEW from Baumer

### Non-Contact EcoSpin Magnetic Encoder Measures Rotational Speed and Angles

For space-restricted rotational speed and angular measurement applications, Baumer Ltd. has introduced the versatile EcoSpin Magnetic Encoder, a modular, non-contact sensor system that delivers long-term, reliable performance in dirty, contaminated and high-vibration operating environments. With a depth of just 10 mm, this compact encoder fits easily into space-restricted locations.



The IP67-rated EcoSpin encoder contains no moving parts, so measurement is contact-free and components do not wear. The spacer strip, mounted between the magnetic ring and the sensor, eliminates the need for a feeler gauge and makes installation and adjustment simple and quick.

The EcoSpin Magnetic Encoder can be used on equipment and machinery in motion control, textile production, printing, wood/timber processing, packaging, machine tool, medical, electric motor and general industrial applications. In such markets, these encoders can measure the rotational speed of spindles, shafts, rollers and webs; determine the current position of tabletop equipment; and measure the angle of cuts made with dirty, high vibration machinery, for example.

# SICK *Introduces CLV620 and CLV630 Bar Code Scanners*

SICK has announced a new line of bar code scanners: the CLV620 and CLV630. These scanners are compact, yet powerful new tools for a wide range of logistics applications, such as distribution warehouses and high-speed packaging.

Speed, power, flexibility and ease of use are the features that define the new CLV620 and CLV630 Laser bar code scanning family. Connectivity options have also become a driving factor in bar code applications, and that is why all of the scanners in the CLV6XX family have both onboard serial and Ethernet communication versions. Other advanced features, like tracking packages with encoder input and an IP 65 enclosure rating, give this new scanner platform the high-end performance usually expected in scanners 2 to 3 times the cost.



*The powerful SICK CLV620 can read damaged bar codes and scan 1200 Hz in real-time*



These new bar code scanners offer greater reading performance via SMART (SICK's Modular Advanced Recognition Technology), added functionality that enables the scanners to read poor, partially hidden or damaged bar codes. The CLV620 and CLV630 have much higher processing capabilities (between 10 to 20 times higher), which results in real-time 1200 Hz scanning. These innovative bar code scanners also allow users to easily program complex sorting, filtering and output functionality.

The products are easy to set up using SICK's SOPAS engineering tool (SICK Open Portal for Applications and Systems). This intelligent software program provides customers with a universal platform for user-friendly data management.

## ADALET

A SCOTT FETZER COMPANY

*Dittman & Greer's Newest Partner*

The newest addition to Dittman & Greer's growing catalog is Adalet, a Cleveland-based maker of explosion-proof enclosures. Adalet, a division of The Scott Fetzer Company, manufactures stainless steel, aluminum and carbon steel industrial electrical enclosures, explosion-proof enclosure systems and cable accessories.

Adalet explosion-proof enclosures are used in the packaging of electrical/electronic components for control, measurement or monitoring applications in hazardous environments. Explosion-proof enclosures can be modified for installation of a variety of explosion-proof operator devices, viewing windows and accessories, permitting the development of customized enclosure systems.

Adalet offers an extensive line of explosion-proof and flameproof enclosures and fittings for hazardous and non-hazardous environment markets. Their engineered enclosure systems, made from cast and sheet aluminum, stainless steel and fiberglass, are suitable for NEMA type 1 through NEMA type 13 applications. These NEMA-

## Explosion-Proof Enclosures

FOR USE IN HAZARDOUS ENVIRONMENTS



*Adalet's line of explosion-proof enclosures*

rated electrical enclosures carry extensive certifications and approvals both domestic and international. UL, CSA, FM, CENELEC and ATEX approvals are among some that Adalet can offer.

As a new distributor of Adalet enclosures in the Northeast, Dittman & Greer now offers turnkey, expedited services on a wide range of enclosures for hazardous environments. Contact us for more information about this exciting new line.

## Introducing the **NEW** Analog Controlled Solid State Relay from Carlo Gavazzi

The most innovative SSR manufacturer in the world has raised the bar once again. Carlo Gavazzi recently released the RJ1P Series, a microprocessor-controlled device with analog input and proportional output capabilities. The RJ1P Series is a single-package solution that is capable of switching single-phase 230, 480 or 600 VAC, up to 50 AAC loads with five different operating modes, when controlled by 0-10 VDC or 4-20 mA signals. The RJ1P Series comes with an integrated heat sink and is ready for DIN rail mounting.



**CARLO GAVAZZI**  
Automation Components **CARLO GAVAZZI**

The RJ1P Series solid state relay provides equipment designers with the ability to precisely control output power. 4 mA or 0 VDC corresponds to 0% output, linearly increasing to 100% at 20 mA or 10 VDC. A rotary selector switch on the front of the device is used for selecting the preferred mode of operation; i.e. either phase angle, distributed full cycle or three types of burst modes (1, 3 and 10 sec.) The RJ1P Series is designed to work with analog output temperature controllers for switching a variety of applications, including heating and lighting. It comes with an integrated varistor and has extremely high surge capabilities (18,000A).

The RJ1P is ideal for HVAC, lamp and lighting control, printing, plastic and rubber, wood and industrial heating applications. It is a solid complement to Carlo Gavazzi's existing range of SOLITRON products, providing a flexible, single-package solution that can serve several purposes.

## Introducing SafetyBase.com *cont. from page 1*

of the participating company experts. "Not only will a person be able to learn about a wide scope of safety issues – such as the latest safety news, current industry standards and OSHA regulation, risk assessment strategies, available safety products and emerging technology trends – but users will also have access to user forums and specialized safety expertise."

*SafetyBase.com offers the following benefits:*

- Central source of safety information accessible 24/7/365
- Extensive safety knowledgebase with free access to everything having to do with machine and process safety
- Discussion forums for networking and sharing information within the safety community, including access to safety industry experts
- Understanding how safety can be leveraged into a competitive advantage for your company

*SafetyBase.com is an invaluable resource for:*

- Engineers
- Safety professionals
- Operational management
- Corporate management

Visit SafetyBase.com and check out the available resources that will help you: address industry standards and OSHA regulations; understand how safe environments correlate to increased productivity; improve machine, process and personnel safety; as well as reduce risks; and minimize insurance/liability costs.

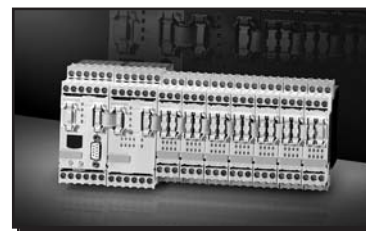
**Visit SafetyBase.com Today!**

## SIEMENS Releases its Innovative Modular Safety System – The SIRIUS 3RK3

The 3RK3 modular safety system from Siemens is a software-parameterizable safety relay. The core of each MSS is the central module. The quantity structure (the number of inputs and outputs) can be easily modified using expansion modules and can thus be freely adapted to different applications. Using a bus module, the MSS can be connected via PROFIBUS to host systems. Safety functions are parameterized quickly and easily using the MSS ES software.

The SIRIUS modular safety system 3RK3 Basic consists of:

- Central module
- Expansion modules
- DP interface module
- Parameterization software



*SIRIUS Modular Safety System 3RK3*

It is used where more than three safety functions have to be evaluated and where parameterizing the wiring of safety relays would be very time-consuming and expensive. Siemens thus offers an integrated portfolio covering safety solutions.

The MSS can be used in a wide range of industries worldwide for many different applications, up to

*Story continued on page 4...*

## SIRIUS Modular Safety System *con't. from Page 3*

Category 4, in accordance with EN 954-1, Performance Level E in accordance with EN 13849-1; and up to SIL 3 in accordance with IEC 61508.

The advantages at a glance:

- High flexibility and reliability of planning thanks to a modular design
- More space in the control cabinet; lower costs thanks to a highly modular quantity structure
- More functionality and time savings thanks to a parameterizable system
- Extensive diagnostics on site using the MSS ES software
- Improved plant diagnostics and higher plant availability thanks to the exchange of data via PROFIBUS

## New Uninterruptible Power Supply with Maintenance-Free Capacitors Saves Batteries

Siemens' Industry Automation Division has equipped its new uninterruptible 24-volt Sitop UPS500S power supply for direct voltage systems with an innovative, maintenance-free capacitor system. This new energy store contains high-capacity, double-layer capacitors and has a long service life, even where ambient temperatures reach 140 degrees Fahrenheit. That is a big advantage over conventional lead-acid batteries that have to be replaced every year where temperatures are just 104 degrees. Moreover, the place of use no longer needs to be expensively ventilated, as capacitors do not emit explosive hydrogen gas. Depending on needs and the expansion stage, when a power failure occurs, the new 15-ampere Sitop units guarantee the continued operation of 24-volt loads – such as industrial PCs and numerical and programmable logic controls – for up to several minutes.

The basic Sitop UPS500S unit is 4.7 inches wide. Its capacitors can store either 2.5 or 5 kilowatt seconds of energy and deliver an output current of up to 15 amperes, thus converting a 24-volt power supply unit into an uninterruptible power supply unit (UPS). Simply plugging 2.7 inch wide, 5 kilowatt expansion modules into the basic unit lengthens the buffer time. This ranges

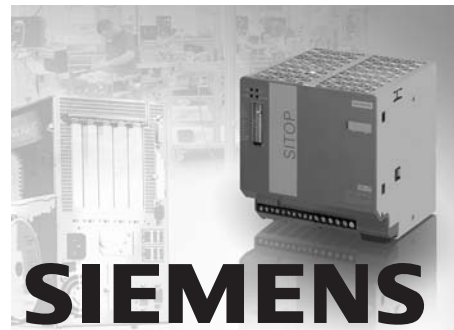
from a few seconds to several minutes, according to the desired load current and configuration. This provides sufficient time to back up important data or ramp down a terminal device in a controlled manner – depending on the application. The desired buffer time is set with DIP switches. These new 24-volt UPS units are characterized by a short recharging time, which quickly restores the buffering capability after a power failure. It only takes a few minutes to recharge the capacitors, in comparison to the hours required for lead-acid batteries.

Sitop UPS500S can be used in ambient temperatures up to 140 degrees without any maintenance expenditure. For example, the energy storage capacity falls by only 20 percent over eight years at an ambient temperature of 122 degrees. This is a big advantage over lead-acid batteries whose capacity at a cabinet temperature of just 104 degrees dwindles steadily to such an extent that they have to be replaced every year.

The basic module has relay contacts and a USB interface for outputting status messages. There is a software tool available for download from [www.siemens.com/sitop](http://www.siemens.com/sitop) for further processing status messages on a PC. These new Sitop power supplies have been tested and harmonized with the Simatic PC system. This ensures that these units are not only ramped down under control, but also restarted correctly in all situations. For trouble-free 24-hour operation of PC applications, there is, for

example, a system tested combination of new uninterruptible power supplies and the Simatic PC Microbox.

The new Sitop UPS500S units offer IP20 protection and are designed as standard mounting rail modules for mounting in control cabinets. Versions with the higher degree of protection IP65 for distributed use in tough environments are under development. These units will supply a 7 ampere output current and be fitted with 5 or 10 kilowatt second capacitor energy storage.



**DITTMAN**



*The Right People –  
The Right Products*



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