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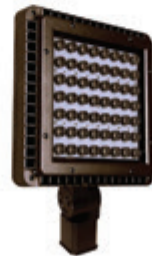
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COMPANY PROFILE

4 Generator InterLock Technologies, LLC

COVER STORY

8 Protect Yourself Miller Safety Consultants *A Leader in Arc Flash Protection*

FEATURE

12 Getting in Control How Resistors Benefit Motor Control

CASE STUDY

18 The Right LED Solution for the Fant-Ewing Coliseum

FEATURE

22 Selecting the Correct Power Backup Solution for the Pandemic and Beyond BY ED SPEARS

DEPARTMENTS

- 25 INDUSTRY NEWS
- 28 NEW PRODUCTS
- 32 AD INDEX

ON THE COVER

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Generator InterLock Technologies, LLC

Generator InterLock Technologies, LLC, is a small-based company that manufactures and sells its products across the country. The company was founded after Hurricane Isabel hit the east coast in 2003. The product was developed to meet the need for a safe way to use portable generators to power homes in the event of power loss.

The initial inspiration for the product came from a persistent friend of an electrician working for Master Electrical Services. As electrical contractors, they had seen various unsafe and illegal methods that people had used to try to power their houses with their portable generators. The electrician set out to develop a product that would meet National Electrical Code requirements and at the same time be cost effective and convenient for the homeowner. From that original inspiration came a new company: Generator Interlock Technologies or GIT.

The Interlock Kit is a simple safety product that locks out the Main breaker in the existing home panel and allows for the portable generator to power the home through a back feed generator breaker. While many electrical inspectors liked the product; they all agreed that the product would have to be listed to UL standards. After thousands of dollars in fees, rigorous tests, a year of changes and modifications, the Interlock Kit was finally approved for production to be used with panels listed under UL Standard 67.

The company started filling orders in early 2005, using Master Electrical Services as its basis for customer awareness.

Starting with a few kits that fit the most recent Square-D and Cutler Hammer panels, the offerings grew to over 30 different models in less than one year. Generator Interlock Technologies now has kits for panels from 30 years ago to the most current and they continue to add new kits to meet their customer's needs. While contractors in Florida and the North East are the biggest customers, Interlock Kits have been sent throughout the United States and parts of Canada. Whether the power loss is due to coastal hurricanes or from crippling ice storms in the northern , GIT has a kit that will allow customers to keep the power on in their homes.

The Interlock Kits are designed to be installed by licensed electricians and are cost effective for both the customer and the installer. Other products on the market such as generator sub-panels and transfer switches require extensive rewiring of the home panel, often taking the electrical contractor 6 to 8 hours to install. With the Interlock Kit, a qualified electrician can install a complete system in 2 hours or less by simply mounting the correct kit to the face of the panel and wiring a gen-



erator convenience outlet to a breaker installed in the panel.

To use their portable generator, a homeowner plugs an extension cord from their generator to the new generator convenience outlet. He then starts the generator, turns off the main breaker, slides the Interlock Kit, turns on the generator breaker and selects the circuits for use up to the capacity of the generator.

Generator Interlock Technologies' Kit is a defining safety product that has been recognized as a Innovation Award Winner by *Electrical Contracting Products* magazine and one of the Top Products by *Electrical Products and Solutions* magazine.

Generator Interlock Technologies, LLC, has taken a problem of safety and convenience and developed a system to keep danger and expenses to a minimum. Starting with an idea of helping a friend in need, to helping thousands across the country, GIT continues to grow due to its commitment to deliver a quality product. Visit www.interlockkit.com for a complete list of products and details. □

With the Interlock Kit, a qualified electrician can install a complete system in 2 hours or less by simply mounting the correct kit to the face of the panel and wiring a generator convenience outlet to a breaker installed in the panel.

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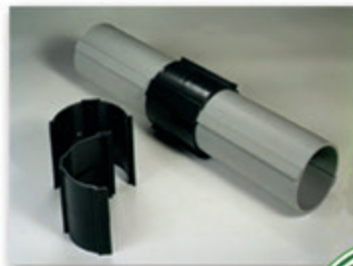
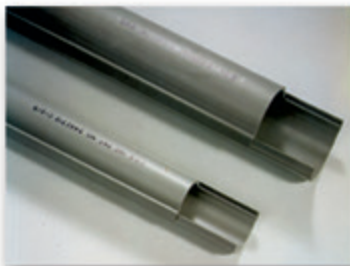
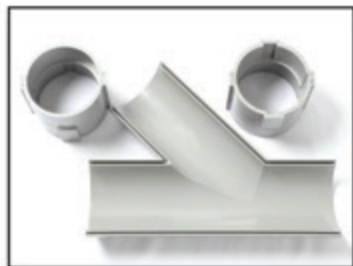
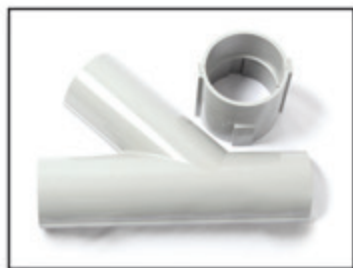


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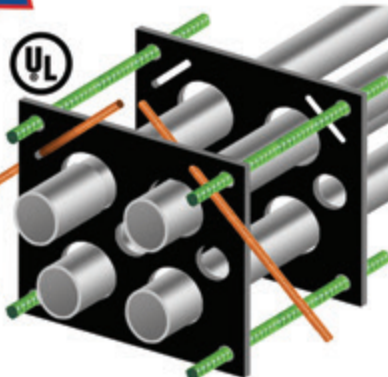
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Vince Miller started Miller Safety Consultants, a veteran owned business in 1999. The goal of the business was to provide cost effective safety consulting, employee training such as: confined space entry, fall protection, electrical safety and provide sales of electrical shock and flash protective equipment and fall protection equipment to businesses in the Washington DC area.

Reliance Industries provided fall protection products and much of the sales and training was on behalf of the supplier. In 2000, the owner decided to retire from his business, and Vince decided to discontinue the fall protection line of his business and concentrate more in the electrical training and products.

Vince had been a distributor for Certified Insulated Products (CIP), a manufacturer of electrical insulated tools and electrical arc flash clothing manufactured by Otex in Rochester, New York. As a distributor, Vince provided sales through his internet website and much through relationships with electrical contractors. His training was a classroom environment and was provided directly to customers but he also taught as a sub-contractor for other safety consulting companies and the Chesapeake Safety Council in Baltimore, Maryland. In 2005, Vince partnered with Vivid Learning Systems in Cascades, Washington to provide on-line training in safe work practices.

Training in electrical safe work practices is still provided locally in the Washington DC area. The training is based on the Occupational Health and Safety Administration (OSHA) standards and the National Fire Protection Association (NFPA) 70E standard.

Miller Safety Consultants is now a distributor for Cementex USA, Burlington, New Jersey, for insulated tools and equipment and clothing from OTEX Protective, Rochester, New York.

The majority of his sales of products are from the web-based store. Cementex is nationally known for their quality





equipment. Otex Protective is becoming more known for their quality clothing. For years, they have manufactured their products under other provider labels. Vince chose to not create his clothing line, but to sell the manufacturer product.

Vince has worked with many electrical company employees to fine tune the clothing to be more comfortable for the user. Working closely with the manufacturer, they have made slight changes in how the cloth pattern was modified to meet final production. An example is the lightweight 40 Calorie vented hood offered by Otex.

The material is of the latest technology. The vented assembly is constructed for balance on the back of the hardhat and the airflow is 27 CFM to prevent fogging of the face shield and provide cooling to the worker. It took over a year to develop the product with the user prior to having the hood “flash tested”. This product is now standard issue with many electrical contractors.

Being a small business and having quality providers has resulted in satisfied customers for Miller Safety Consultants. Being a direct supplier for OTEX Protective, another small business means customized customer needs can be met. □

*For more information, visit
Miller Safety Consultants at:
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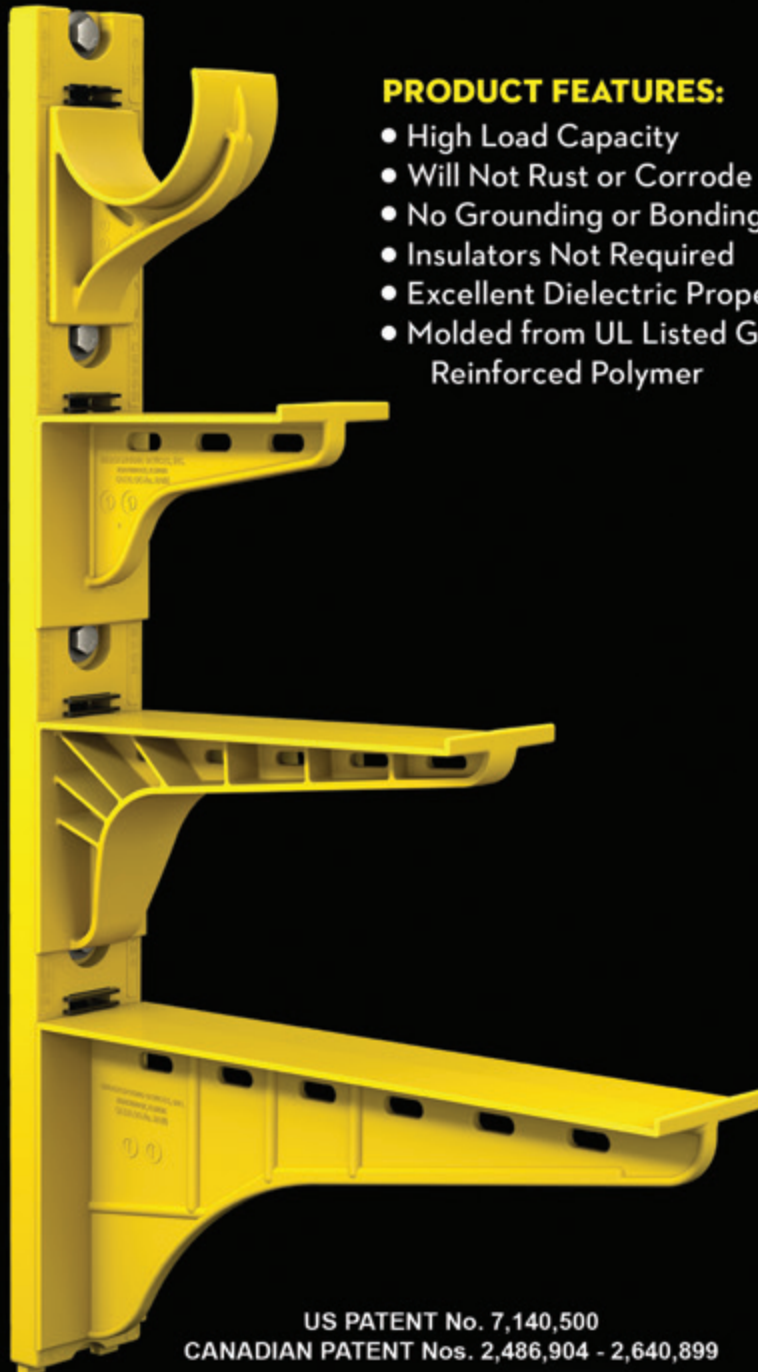
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HDL Arm Lock shown with
RA04 Arm and CR36-B Stanchion



3HDS - 3" throat saddle shown with
a cable secured by cable ties.



RA08 - 8" arm shown with three
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US PATENT No. 7,140,500
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Getting in Control

How Resistors Benefit Motor Control

FROM THE ELECTRIC FANS AND POWER TOOLS in our homes, to crane control systems and industrial machinery — motors can be found in mechanical applications of all shapes and sizes. But what exactly keeps them turning? Here, Joshua Piccaver, electrical design engineer at power resistor manufacturer Cressall Resistors, explains why resistors are key to ensuring steady motor control.

An electric motor converts electrical energy into rotary, kinetic energy in order to power a diverse array of processes such as drives, fans, pumps or conveyor belts. Each process requires a specific motor, with specialised characteristics for each unique function. Electric motors of all types share common characteristics during their starting and run-up. Without some form of control, the motor will take very high currents and the switching may cause voltage spikes that could damage equipment.

High currents risk overloading the supply that passes through the motor, while overvoltage can damage the electrical insulation of the supply — or even the motor itself.

Going Old-School

Traditionally, motors were controlled by temporarily introducing resistors into the motor supply. In fact, any old-school electrical engineering textbook will have several chapters devoted to the ingenious methods of simultaneously

keeping starting currents and voltages at acceptable levels while creating sufficient torque to accelerate the motor to operating speed.

Today, the introduction of variable speed drives (VSDs) has taken over many of these techniques as the device is used to convert the fixed incoming power to a variable voltage and then manage the motor's output speed according to the device's changeable demands.

However, when spares or replacements are wanted for existing installations and motors of all types, engineers can turn to resistors to address their motor's power needs.

Wound Up

Despite the introduction of VSDs, round rotor motors with slip rings are still used for high power or medium voltage applications, typically in gruelling operation conditions where the combination of precise control and high reliability cannot be achieved using a VSD. Take a cement plant, for example. There, equipment such as large grinding mills that need to drive high torque load demands at low speeds. (CONTINUED ON PAGE 16)

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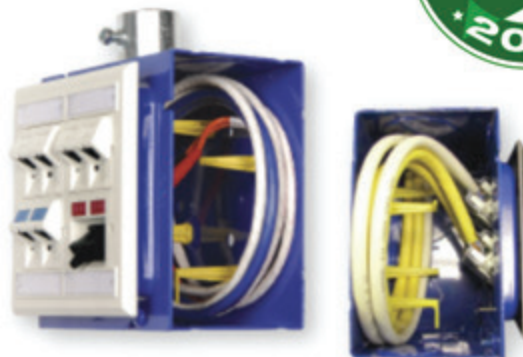


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In this motor application, the rotor windings are connected to external resistance through slip rings that control the output of the motor. To control the current during the motor's start-up, multiple sets of resistors are connected across the slip rings. As the motor speeds up, the resistances are removed in timed steps using short-circuiting contactors.

Star-delta

The majority of induction motors are started directly on the line. However, when very large motors are started in this way, their large starting current surges can cause a voltage disturbance on the supply lines. To limit the starting current surge, some large induction motors are started at a reduced voltage before receiving their full voltage supply.

Star-delta is a commonly used starting method in which the stator coils of the motor are initially connected in a star configuration and are switched to delta as the motor speed increases. This reduc-

When the crane's hook is loaded, the load may overhaul the motor and requires a dynamic braking resistor, such as those supplied by Cressall, to ensure the load won't run away and crash.

es the start current applied to the motor, reducing the risk of disturbances and interference on the electrical supply.

A challenge to this solution can arise when the motor coils in the configuration are briefly open-circuit, causing a voltage spike. To eliminate this problem, a selection of small resistors are put into the circuit for a short period of time via a third contactor.

Crane Control

For overhead cranes used in industrial facilities, resistors are used to control hoisting and lowering speeds, as well as positioning the crane itself. Both wound rotor motors and DC motors are frequently used to power these cranes and

hoist heavy loads, which require a careful balance of force and control.

Hoisting is pretty straightforward — the load resists the motor, requiring positive torque against gravity. But when the crane's hook is loaded, the load may overhaul the motor and requires a dynamic braking resistor, such as those supplied by Cressall, to ensure the load won't run away and crash.

While VSDs have taken over a number of traditional motor control techniques, many applications still require resistors to help keep them turning effectively. Whether it's for a wound rotor motor for heavy industrial operations, or to limit starting motor current, resistors still play a key role in keeping motors in control. □

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The Right LED Solution for the Fant-Ewing Coliseum


OVERVIEW

When the Warhawks take the floor this season, Players, Spectators, and Fans at home will have a brand-new experience. They will be able to view the Coliseum in a whole new light due to the AEON Sports Lighting Retrofit that took place over the summer. The University of Louisiana-Monroe replaced the traditional 104 PCS x 400W MH Fixtures with 54 PCS x 230W AEON LED Luminaires that significantly reduced energy and maintenance costs and enhanced the quality of illumination for broadcasting games.

Solution

When looking for the right LED solution for the Fant-Ewing Coliseum, the two main things the University was looking for were: Better Lighting & Reducing Maintenance Costs. The 104 PCS x 400W MH Fixtures were not efficient and due to the height & location, did not make changing the burnt-out bulbs and ballasts easy. The old Metal Halide lights were averaging around 30-foot candles and with inconsistent light levels (due to lamps and ballasts all depreciating at different rates) across the playing surface.

The traditional Metal Halide Fixtures were replaced with 54 PCS x 230W AEON LED Luminaires. A Photometric Study was done (CONTINUED ON PAGE 20)



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to engineer even illumination across the court. Now the Fant-Ewing Coliseum is averaging close to 100-foot candles with no dark spots or uneven lighting! AEON Maintains the Delivered Foot Candles over the Luminaire's Life. Our Proprietary Glare-Free Illumination has No Uncomfortable Sensation or Visual Discomfort for the Players, Spectators, or the Broadcast with a UGR<19. AEON meets and exceeds Broadcasting lighting standards. The ULM Redhawks are ready for national broadcasts with our High Color Rendition showing True Colors: CRI >85.

"I didn't really know what to expect when our new AEON LED lights were being installed in our coliseum. Once completed and the lights were turned on I was shocked at how bright and impressive the inside now looked. Our pictures taken have improved dramatically, broadcasting of TV games will be so much better and I haven't had one player complain about the lighting like they used to. Definitely needed and very happy with AEON LED lights." Keith Richard ULM Men's Head Basketball Coach

The AEON LED Luminaires have an incredibly long lifespan that will last over 100,000 hours, and help significantly reduced those expenditures associated with traditional lighting.

Savings

Prior Traditional Energy Consumption (including Ballast Draw Factor):

$$104 \times 480W = 49,920W$$

Current AEON Energy Consumption:

$$54 \times 230W = 12,420W$$

Conclusion

The Fant-Ewing Coliseum on the Campus of the University of Louisiana Monroe has an LED solution that will provide high quality light levels for many years to come, while eliminating maintenance. This will allow the Univer-



sity to save time, money, and resources on more productive projects instead of changing failed lamps and ballasts.

If you are looking to build a State-

of-the-Art Lighting System from the Ground-Up or Update your Current Lighting System AEON has the solution for you and your project. □



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Selecting the Correct Power Backup Solution for the Pandemic and Beyond

BY ED SPEARS



WHILE 2020 HAS BEEN A CHALLENGING YEAR for businesses, many have responded by making technology advances that they will be able to leverage for years to come. COVID-19 has forced many IT departments to rely more on digital infrastructure to keep workforces and operations running. And just as the trend toward digitalization had already begun prior to the pandemic, every indication is that it will continue far beyond the current crisis.

As the pandemic has accelerated the digital transformation, Mother Nature has reinforced the importance of redundancy. This year the United States has already run out of names for hurricanes based on the traditional format and transitioned to the Greek alphabet for the

first time since 2005's devastating storm season. Simultaneously, the West Coast has been facing wildfires of historical significance – turning skies orange and producing smoke visible from the other side of the country.

It's important for electrical contractors

to consider how these dynamics impact their customers' power management demands and their ability to maintain business continuity. In this article series, I'll explore some key considerations for deploying the right uninterruptible power systems (UPSs) for reliable power backup.



A Guide to a Stronger Infrastructure

The digital evolution has pushed many companies away from a centralized IT framework – meaning network closets and intermediate distribution frames (IDF) are often scattered about in differ-

ent building locations or facilities. Exacerbated by elements of the pandemic, businesses may not have dedicated IT staff close by to respond if something happens. Yet, an IDF or network closet being knocked out of commission can cause significant problems – including

financial loss and equipment losses – due to downtime from a power outage.

Having the right UPS battery backup system in place at these locations can help alleviate vulnerabilities – providing enough power to ride through brief or extended outages. (CONTINUED ON PAGE 24)

However, electrical contractors should weigh multiple considerations as they tailor the right solution for a customer. Below are some tips to help guide this process and create IT networks that are resilient and reliable.

1. Consider the right UPS battery backup form factors

A UPS form factor might seem confusing – but it simply refers to how a UPS is shaped.

Rackmount UPSs are measured in U, or rack units, which is equivalent to 1.75 inches of vertical rack space. Rackmount UPSs typically come in 1U or 2U models, though some larger models are 3U. The good news with rackmount UPSs is that they slide in alongside IT equipment off the floor away from water leaks and spills. Technicians should be sure that the

half, the runtime could be doubled, or even tripled. For example, if a company's 1500 volt-amperes (VA) UPS lasts for five minutes at full load, it will run for approximately 15 minutes if the load was cut down to 750 VA.

In addition to adding battery packs to a UPS, another common practice is to combine the immediate power backup of a UPS with the long-term power of a generator.

3. Determine the right capacity

The first step should be to total up the wattage of all the equipment IT teams are planning to connect to the UPS and then multiply that total by 1.2 to account for future expansion. With this grand total in watts, contractors can work with IT teams to find a UPS that has enough power capacity.

While choosing the right UPS is a process, taking a careful approach will allow electrical contractors to ensure they are deploying the best solution for their customers.

proper 2- or 4-post mounting hardware is included with the UPS battery backup or they will need to purchase it separately. When it comes to installing the UPS, it's almost always the heaviest component in the rack so bottom placement in the rack is recommended – especially if there are external battery packs present.

2. Evaluate battery runtime needs

The most common questions about UPSs are those about pricing and how long the batteries will last during a power outage. UPS batteries are heavy (though lithium-ion batteries are about 40% lighter than lead-acid ones) and extra battery packs can quickly increase costs. Most power interruptions are short—less than two minutes—so users usually look for approximately seven to 10 minutes of battery runtime. As a general rule, when cutting the load (equipment plugged into the UPS system) in

A UPS battery backup is rated in both VA and watts. Watts is a measurement of real power and is the key rating. However, it's easy to be fooled by VA ratings. For example, a UPS rated at 1000 VA / 900 watts provides one third more real power than one rated at 1000 VA / 600 watts even though at first glance it appears that they have the same power rating. Learn more about the difference between watts and VA.

4. Choose the correct input plug and facility site voltage

Once the correct wattage for the UPS is determined, contractors should review UPS models with an adequate power rating. In North America, the National Electrical Manufacturers Association's number for the standard wall socket is called a 5-15R. UPS models 1500 VA and below use a matching 5-15P input plug rated at 15 amps. Some sites may have a 5-20R as the standard, which ac-

commodate both 5-15P and 5-20P UPS input plugs. If companies want a larger UPS system and don't have a 20- or 30-amp wall socket, then an electrician can work with them to install the right socket.

In North America, the typical office outlet delivers 120V and convenience is the primary benefit. Users could simply plug in the uninterruptible power supply and they're ready to go. While it's the most convenient method, total requirements may exceed what's available with 120V outlet. It's also possible to deploy a 120/208V split-phase UPS. Using 208V single-phase power is an even more flexible and energy efficient solution.

5. Make sure the UPS has enough output receptacles

A UPS battery should have enough output receptacles so that it can accommodate all the devices that need to plug into it. If you are short on output receptacles, an option for adding additional outlets is to deploy a flexible power distribution unit (PDU) – which can serve as a short power cord for easy, close mounting to a UPS system. PDUs are available with a variety of output receptacles for connection to a wide range of equipment.

While choosing the right UPS is a process, taking a careful approach will allow electrical contractors to ensure they are deploying the best solution for their customers. Being strategic is especially important considering how IT demands are evolving in our current circumstances – and the uncertainty that always underlies Mother Nature. In a follow-up article, I'll offer a few more tips to consider for the design and organization of UPS solutions to keep critical data processes protected.

ABOUT THE AUTHOR:

Ed Spears is a product marketing manager in Eaton's Critical Power Solutions Division in Raleigh, North Carolina. A 40 year veteran of the power-systems industry, Ed has experience in UPS-systems testing, sales, applications engineering and training—as well as working in power-quality engineering and marketing for telecommunications, data centers, cable television and broadband public networks. He can be reached at EdSpears@Eaton.com, or find more information at Eaton.com.

Engineered Products Company Hires Industry Veteran Ryan Montgomery as New Western Regional Sales Manager



Ryan Montgomery

Engineered Products Company (EPCO), a supplier of specialty lighting and wiring consumable products for electrical contractors, today announced that Ryan Montgomery has joined Engineered Products Company as the new western regional sales manager. Based in Colorado, Montgomery will be responsible for growing and managing sales, as well as new product sales training for nine sales representative agencies serving 10 states in the western region of the United States.

Prior to joining EPCO, Montgomery was director of sales for Rocky Mountain Lighting where he was responsible for managing new account sales in a 10-state region. During his tenure, Montgomery grew sales by working with architects and designers, successfully placing prod-

ucts in commercial, multi-family, education, and hazardous industrial locations.

Additional experience includes account management and sales positions at Ledvance and Voss Lighting. As a regional sales manager at Ledvance, Montgomery grew his territory and experienced year-over-year sales growth doubling revenue during his tenure. At Voss Lighting, Montgomery revived a struggling territory exceeding yearly quota goals by aggressively prospecting and managing customer needs and expectations.

“Ryan is an expert in setting and exceeding expectations,” said Engineered Products Company president Jim Anderson. “As we look towards continuing our market and product expansion in the western region, Ryan brings mindshare and a passion for the industry that really complements our corporate culture. We are happy to have him on board.”

“A sale is the beginning of the process not the end,” said Montgomery. “By cultivating relationships and ensuring a positive customer experience, I create customers for life.”

For more information about job openings, products or services, please visit the Engineered Products Company website at www.engproducts.com or call 800-336.1976. □

“As we look towards continuing our market and product expansion in the western region, Ryan brings mindshare and a passion for the industry that really complements our corporate culture. We are happy to have him on board.”

— Engineered Products Company president Jim Anderson



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ABOUT EPCO

Engineered Products Company supplies electrical distributors with specialty lighting, lighting accessories and wiring solutions that address a wide range of standard and unique applications. EPCO's durable, reliable products, high fill rate, on-time delivery and no-risk purchase terms optimize distributor cash flow and profit margins on the consumable products electrical contractors use for commercial, industrial, agricultural and residential buildings. Known for its exceptional pre-and post-sale customer service, as well as sales representatives who are the most knowledgeable in the electrical industry, the Minneapolis-based company offers multiple configurations of products to meet a broad variety of building applications. For more information about Engineered Products Company and its products, visit www.engproducts.com or call (800) 336-1976. Follow the company on Twitter @EPCO1976 or subscribe to the EPCO blog by visiting www.epcoblog.com.

WAGO Welcomes New Regional Sales Manager for Chicago Area

Daniel Ondik has been hired as the new Regional Sales Manager Chicago Region. Daniel is a graduate of Penn State University with a degree in Electrical Engineering.

Prior to joining WAGO, Ondik gained experience at Rockwell in the Nashville area for 3 years as a sales engineer before moving back home to Illinois and working at Rittal for 4 years as an account manager.

Growing up in the western Chicago

suburb of Naperville, Daniel believes his background in automation will help to expand his knowledge of the more technical aspects of WAGO's product offering and to share those solutions with local customers and distributors. "I want to be able to help our customers by providing them with the best product and support solutions in the industry," says Ondik.

For more on the latest from WAGO, visit www.wago.com/us/press-contact. □



Daniel Ondik



ABOUT WAGO

Innovation is at the heart of everything we do at WAGO. From our pioneering CAGE CLAMP® spring pressure connection technology to our extensive range of Interconnect, Interface and Automation solutions, such as the fieldbus independent WAGO-I/O-SYSTEM, our customers count on the unconditional performance and reliability of our products to ensure the safe, efficient operation of their systems every time.

For additional information, visit www.wago.us. Contact WAGO at 1-800-DIN-RAIL or info.us@wago.com.

Universal Lighting Technologies Partners with Illumination Technology Group in Northern Illinois

Universal Lighting Technologies, Inc., a global leader in commercial lighting and a member of the Panasonic family of companies, recently announced a strategic partnership with Illumination Technology Group (ITG). Based in Naperville, Illinois, the agency will support Universal's distributor network of LED lighting solutions across the Northern Illinois region.

Universal markets their end-to-end LED lighting solutions, from simple LED upgrades to enabled IoT solutions. Their approach is to ensure a comprehensive end-to-end installation including IoT Controls, LED Drivers, LED Tubes, LED Retrofit Kits, and LED Luminaires.

"We are thrilled to partner with an agency who takes customer service to the next level. With their strong market knowledge and commitment to building strong relationships, we felt this was a perfect match," said Eric Schlechtweg, Universal Lighting Technologies Eastern Region Director of Sales. "Illumination Technology Group has built their company on truly listening to customer needs and offering their expertise; so, choosing ITG as an easy decision. We are confident the talented and experienced team will provide tremendous support for our customers in this region."

Illumination Technology Group is a lighting sales and service organization that

represents dozens of leading manufacturers to provide comprehensive, cutting-edge solutions that deliver the best function, design and value. Dedicated to a "customer-first" approach, the company prides itself on listening first and offering the right solution at the right time.

ITG offers extensive market knowledge for any type of lighting application, as well as deliberate selection of vendor partners to ensure client projects are completed in a timely manner and supported by a strong sales organization.

For more information about Universal's partnership with Illumination Technology Group please visit www.unvlt.com. □



ABOUT UNIVERSAL LIGHTING TECHNOLOGIES, INC.

Universal Lighting Technologies, Inc. a member of the Panasonic group and a subsidiary of Panasonic Lighting Americas, Inc., engineers, manufactures and markets innovative solutions for commercial lighting across North America, including LED drivers, LED modules, fluorescent, HID and connected devices using wired and wireless technology. Universal's EVERLINE® LED retrofit continuum provides a range of solutions for upgrading fluorescent to LED. With over 70 years of experience, the company is recognized for its commitment to quality and customer service. Learn more about Universal at www.unvlt.com. Like us on Facebook and follow us on LinkedIn and Twitter.

Bridgeport Fittings' Wendy Pelkey Retires

Wendy Pelkey, Customer Service Manager at Bridgeport Fittings, retired from the company on October 30.

"In the many years she has been in customer service," remarked Dennis Swindon, Bridgeport's Business Technology Vice President, "Wendy has made profound and lasting changes in every position she has held. Her attention to detail, her quick, snappy replies, and her genuine caring for the customer, has made her the 'Go To' person for all Bridgeport Fittings' sales representatives."

Other accolades for Wendy include one from Gary Block, of Becker Sales in Chicago: "In the many years she has been in the Bridgeport office, she has made undeniable differences in our customer service levels. Her concern for not

only the customer, but our internal staff, makes us feel we are losing not only a trusted co-worker but a caring family member."

Craig Urie of NESCO, Inc., in Toronto, says of Wendy: "She is a legendary Bridgeport personality, a true customer service asset that kept customers engaged, informed and confident that they were being treated in a way that reflected Bridgeport's core values of innovation, value and customer satisfaction."

"The entire staff at Bridgeport Fittings wishes Wendy congratulations on her retirement. It won't be the same without her. We wish her good health and happiness in the years to come," notes Swindon.

Bridgeport Fittings is a leading manufacturer of quality fittings to the in-

dustrial, commercial and residential channels of the electrical industry. Its completely stocked selection of quality electrical fittings and innovative product solutions are available from major electrical distributorships across the U.S. and Canada.

For information about Bridgeport's solutions that help contractors become more productive on the job site or in the shop, contact: Bridgeport Fittings, Inc., 705 Lordship Blvd., Stratford, CT 06615; Tel: (203) 377-5944; Fax: (203) 381-3488; or visit Bridgeport's website at www.bptfittings.com. □



IDEAL Networks Appoints New Chairman

Neil Gaydon has been appointed Chairman of IDEAL Networks, the global provider of innovative, simple to use cloud connected copper and fiber network test equipment.

Neil joins IDEAL Networks with 40 years' experience in the technology sector and Board-level leadership. He has previously held notable roles at UK company Pace plc, leading it to become the global number one in its sector with revenues of \$2.3 billion, and SMART Technologies Inc., which was reinvented with a new vision, strategy and value proposition, ultimately leading to its acquisition by Foxconn Technology Group.

He attended Harvard Business School and has been the recipient of numerous business awards during his time spent living and working in the UK and North America.

"IDEAL Networks is committed to continued innovation and transforming

the way that our global customers work with exceptional solutions and products," says Paul Walsh, CEO of IDEAL Networks. "We know that Neil's passion and expertise will support this, and our whole team is delighted to welcome him as our Chairman."

"I am delighted to be joining IDEAL Networks at a time of expansion where my experience can support the management team's exciting vision for the company," says Neil Gaydon, who is also Chairman of two Private Equity owned companies, Adare International and Adare SEC.

"Neil has a reputation for working strategically with management teams to create great companies with strong financial performance, that teams are proud to be part of. We are confident that he will be a great asset to IDEAL Networks," says Matthew Hutchinson, Partner at CBPE Capital LLP ("CBPE"), which acquired



Neil Gaydon

a majority ownership position in IDEAL Networks in December 2018.

For more information please visit www.idealnetworks.net. □



ABOUT IDEAL NETWORKS

IDEAL Networks offers easy to use data cable testers for cable installers and network testers to assist IT technicians with troubleshooting. The data cable tester range includes copper and fiber testers for cable verification, Ethernet transmission testing and cable certification that provide proof of performance. The unique network tester range helps to pinpoint and solve networking issues quickly. They decrease downtime by allowing field technicians to discover the root cause of network connectivity issues such as incorrect IP configuration, rogue network services, network bandwidth issues and PoE supply problems. Visit www.idealnetworks.net.



AEMC® Introduces two NEW Hand-Held Megohmmeter/ Multimeter, Models 6528 & 6529

The Models 6528 and 6529 are low cost 1000V hand-held instruments that offer Multimeter functions as well as Megohmmeter functions. These two models are aimed at the commercial, industrial and contractor markets and are simple to use. They are priced at a point tailored to contractors and independent electricians that need to check the quality of insulation as well as perform basic electrical measurements.

They are True Megohmmeters® in compliance with IEC 61010 and designed with features and functions for use in the field: lightweight, compact, rugged, and easy to handle, even when wearing gloves. Their construction and interface are intended to simplify use. An intuitive pass/fail indication offering a blue/red backlight makes it very easy to identify defective conditions.

They include an automatic test inhibit if connected to a live circuit as well as automatic discharge at the completion of the test.

A relative measurement function called Differential Mode Resistance (DMR), unique to AEMC, provides the capability to compare measurements to a known reference quickly recognizing potential problems. Multimeter functions include AC/DC voltage, resistance, and continuity.

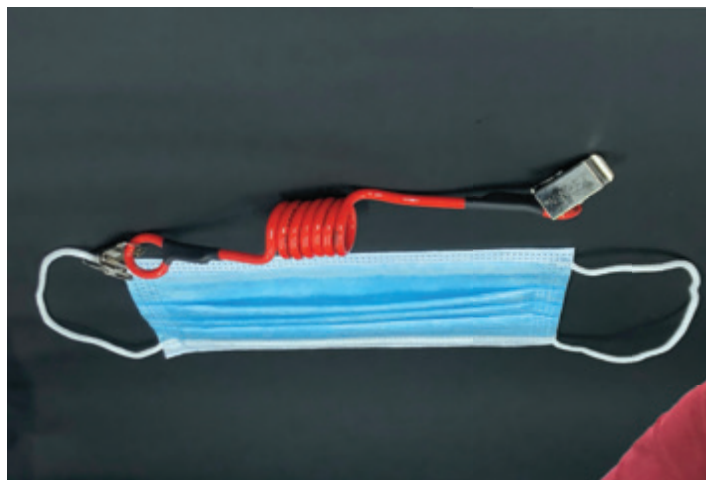
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Lucky Number 7in1! Milwaukee® Expands Electrical Hand Tool Solutions with New 7in1 High-Leverage Pliers

Milwaukee Tool is changing the game once again with the introduction of the new 7in1 High-Leverage Pliers. The new pliers are an expansion to the popular 6in1 Combination Pliers and have been completely redesigned to deliver even more innovation to users in the electrical trade.

“Since we introduced a new-to-world design with our 6in1 Combination Pliers, they have become a staple in the electrical field,” said Adam Moscherosch, Senior Product Manager for Milwaukee Tool. “With the new 7in1 Combination Pliers, we are excited to equip users with 7 core install functions for maximum productivity on the jobsite.”

Like the 6in1 model, the new 7in1 pliers will feature a built-in reamer that enables users to ream “-1” conduit, a bolt cutter that cuts through #6 and #8 bolts, a wire cutter, wire stripper, and loop maker for quick wire preparation. New on the 7in1 pliers are wide jaws to easily grab and twist wire, an on-board crimping tool to equip users with added functionality for working with both insulated and non-insulated terminals, and high-leverage handles for easier cutting and crimping.

Backed by a limited lifetime warranty, these new pliers confirm Milwaukee’s commitment to best-in-class durability and its relentless commitment to provide innovative solutions that will increase productivity.



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Does your product help to increase profits or improve safety and overall working conditions for the electrical contractor? If so, don't forget to submit your product for nomination as one of *Electrical Products & Solutions*’ “TOP PRODUCTS OF 2020”. All the winners will be featured in our December issue.

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Platinum Tools® (www.platinumtools.com), the leader in solutions for the preparation, installation, hand termination, and testing of wire and cable, is proud to announce it has added NSi Industries' complete RHINO Safety™ Personal Protective Equipment (PPE) line to its product offering.

"This one stop PPE solution, which offers protection on the job site and beyond, is a comprehensive offering and includes a line of safety solutions merchandising displays with a full range of configurations to meet the need of a distributor," said David Johnny, Platinum Tools general manager. "All of our RHINO Safety products are engineered and manufactured to provide a high quality job site protection solution and a clear alternative to PPE offered by current market leaders."

NSi and Platinum Tools are making serious commitments to the Safety category with the introduction of RHINO Safety. PPE is becoming increasingly important in the electrical construction trades, and Platinum Tools' distributor partners are looking to establish themselves as the primary source for these products. RHINO Safety is designed to offer the distributor and contractor the highest quality and best value PPE line in the electrical markets.

The RHINO Safety line includes:

- hearing protection (ear plugs and earmuffs) • eye protection (safety glasses) • safety gloves • safety vests • safety helmets

With the development of unified branding and packaging across the portfolio, the line is poised to make a bold statement in the market.



**For more information, visit
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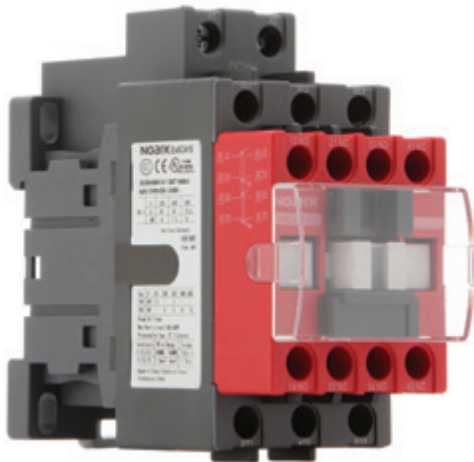
New Ex9CA Safety Contactor from NOARK Electric

NOARK Electric is proud to announce the release of the new Ex9CA Safety Contactor. The NOARK Ex9CA Safety Contactor is designed for use in safety function applications. It offers unique features that allow the design of safety control circuits with current ratings up to 38A. The Normally Closed (NC) Auxiliary contact is a mirror contact to the main contacts and is mechanically linked to the Normally Open (NO) Auxiliary contacts. This allows for optimal design selections in SRP/CS*. Applications for the Ex9CA include: E-stops, light curtains, safety gates and safety interlocks.

The NOARK Electric Ex9CA is equipped with a permanent transparent cover that prevents manual operation and provides easy identification of the device status. They are available with either AC or DC operating coils. DC coil models are equipped with integrated surge suppression. Each unit is clearly identified by the prominent red front cover marked with a mechanically linked contact symbol. They install easily on 35mm DIN rail or on panels. Like all NOARK Electric products, the Ex9CA is backed by a 5-year limited warranty.

NOARK Electric is a global manufacturer of low-voltage electrical components for industrial manufacturing applications. We specialize in motor controls and protection for original equipment manufacturers. Our mission is to provide customers with the highest quality products at an exceptional value and back them with world-class service and support. Every NOARK product is tested and certified to the highest standards and covered by our exclusive five-year limited warranty.

**For more information, visit
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Triplett Magnetic Field Meter Measures Electro-magnetic Fields in Variety of Applications

Meter specializes in extremely low frequency (ELF) electro-magnetic fields

Triplett Test Equipment, a leading maker of test equipment tools, announces the launch of the innovative EMF20 Magnetic Field Meter, an all-new handheld tool designed to measure extremely low frequency (ELF) electromagnetic fields in numerous applications.

The rugged, handheld EMF20 measures ELF electromagnetic fields (30 to 300Hz) produced from electric transmission equipment, power lines, microwave ovens, air conditioners, refrigerators, computer monitors, fans, hairdryers, and many other appliances that emit electromagnetic fields. Measurements have a guaranteed $\pm 2.5\%$ accuracy, and can be displayed in milligauss (mG) or μTesla (μT).

Other helpful features of the EMF20 Magnetic Field Meter include its single axis sensor, max hold function for storing the highest reading, and included carrying case to keep the unit safe en route to the site. The EMF20 is also backed by a 1-year warranty.

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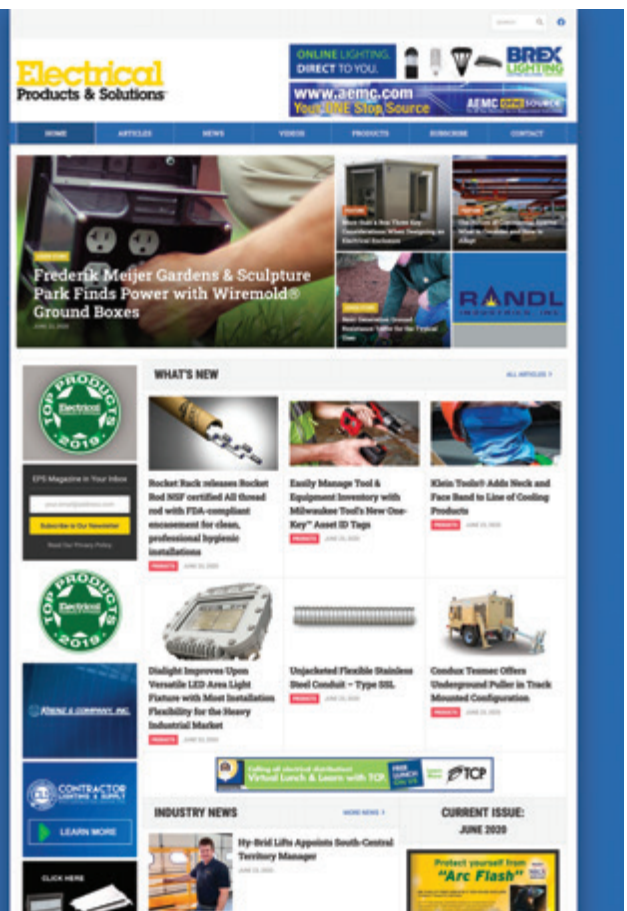
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