

**THREE-D AGENCIES**  
THE CABLE ACCESSORY COMPANY

**DISTRIBUTOR OF CHOICE FOR SUPERIOR QUALITY CABLE ACCESSORIES**

For nearly 50 years, Three-D Agencies has been at the forefront of supplying premium cable accessories to a broad spectrum of South African industries. Our commitment to quality and excellence has helped us grow into one of Southern Africa's leading cable accessory companies. We source our products from leading cable accessory manufacturers situated across the globe, helping us to grow into one of Southern Africa's leading cable accessory companies.

Today Three-D prides itself upon being a preferred supplier to major industry participants. Our highly experienced sales force and strategically located stocking branches in Johannesburg, Cape Town and Durban are continuously driven to provide world class support and product availability to our customer.

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Three-D is proud to be an authorised dealer of HikMicro products in Southern Africa, offering the latest in high-resolution thermographic technology to our valued customers.

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**Your trusted supplier of uni-trend testing in**  
As a trusted supplier in Southern Africa, Three-D guarantees that you receive

## THREE-D AGENCIES: DISTRIBUTOR OF CHOICE FOR SUPERIOR QUALITY CABLE ACCESSORIES



genuine Uni-trend products with full manufacturer support and warranty. Our knowledgeable staff is available to provide expert advice and support, helping you select the right tester for your needs. We keep a wide range of Uni-T products, ensuring that we can meet your diverse requirements. Over and above that, we offer competitive prices on all our products, giving you great value for your investment.

**Discover top-tier cable management products**  
Our solutions ensure organization, safety, and efficiency for your workspace. We are dedicated to supplying superior cable management solutions, which is why we source the finest Copper Lugs and Ferrules from international brands such as Hex. Hex's products are known for their exceptional quality and reliability, ensuring that customers receive components that meet rigorous performance standards and provide excellent long-term service. Hex's copper lugs and ferrules are designed to meet the demands of modern electrical systems, providing efficient and reliable connections that enhance the performance and safety of electrical installations.

### Three-D on sourcing the best cable ties from SapiSelco

Three-D is committed to providing top-tier cable management products, ensuring they meet the highest performance standards for various applications. To achieve this, Three-D sources cable ties from SapiSelco, a manufacturer known for

its stringent quality controls. SapiSelco cable ties comply with key market certification standards, guaranteeing reliable long-term performance and service for customers.

### Safeguard your cables with top-quality protection products

In the fast-paced world of electrical wiring and installations, ensuring the longevity and safety of your cables is paramount. At Three-D Agencies, we understand the critical importance of cable protection, which is why we offer top-quality solutions designed to meet all your wiring needs. Our comprehensive range of cable protection products guarantees durability and security, providing peace of mind whether you're managing a complex industrial setup or a simple home installation.

### Why choose Three-D as your cable accessory distributor of choice

Three-D Agencies aim is to provide its customers with the highest level of service and expertise at all times. By only providing products of the finest quality our goal is to be the preferred supplier to our clientele. Through this approach to quality and consistency Three-D strives to become South Africa's Number One Cable Accessories Company.

Whether you need test instruments, power tools, hand tools, wire and cable markers, lugs and terminals, cable protection solutions, or battery and hydraulic tools, Three-D Agencies has you covered.

Enquiries: [www.three-d.co.za](http://www.three-d.co.za)

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## Empowering South Africa with cutting-edge high and low voltage power solutions

In today's fast-paced world, reliable and efficient power solutions are more critical than ever. Voltex, a leading name in the electrical industry, is proud to introduce our advanced high voltage power Combos, designed to meet the demanding needs of modern infrastructure and industry. Alongside diverse high voltage solutions, Voltex also offers an impressive range of 65 low voltage residential and commercial

combos, ensuring that every power requirement is met with a relevant solution.

### Solutions for modern infrastructure

Voltex's High Voltage power combos are engineered to deliver unparalleled performance and reliability. These solutions are crucial for large-scale operations, industrial facilities, and critical infrastructure projects where uninterrupted

power supply is essential.

Voltex High Voltage combos are designed with the latest technology, providing robust power distribution and ensuring stability in the most demanding environments. From high-rise commercial buildings and industrial plants to sprawling complexes, Voltex's high voltage solutions are the backbone of modern infrastructure.

The range of products are meticulously

tested and certified to meet the highest industry standards, ensuring safety and efficiency. Whether it's for new installations or upgrades to existing systems, Voltex's high voltage combos offer scalable solutions that can be tailored to specific project needs.

### Low voltage solutions for every need

Complementing high voltage offerings, Voltex provides a diverse range of 65 low voltage power combos.

These solutions cater to both residential and commercial applications, ensuring that homes, offices, and small businesses have access to reliable backup power.

In an era where power outages can disrupt daily life and business operations, Voltex's low voltage combos are a critical investment. These low voltage solutions range from 5kW to 12kW, providing flexible options to meet varying power requirements. These combos are ideal for ensuring the continuity of essential appliances and devices during power interruptions. For residential customers, this means keeping lights, refrigerators, Wi-Fi routers, and other critical devices running smoothly. For commercial clients, low voltage combos ensure that operations continue without interruption, safeguarding productivity and customer satisfaction.

### Trusted brands and quality components

Voltex is proud to collaborate with some of the most respected brands in the industry, ensuring that our power combos are built with top-quality components. Our Low Voltage combos feature renowned brands such as Hubble, Sunsynk, Luxpower, Solis, Freedom Won, Aberdare, Chase Technologies, Megarevo, and Greenrich.

These partnerships guarantee that our solutions are reliable, efficient, and durable.

### Commitment to innovation and quality

Voltex, is committed to pushing the boundaries of innovation and quality in the power solutions industry.

The extensive portfolio of products is a testament to Voltex's dedication to meeting the evolving needs of customers. Voltex also invest in research and development, ensuring that our solutions incorporate the latest advancements in technology and design.

The high voltage and low voltage power combos are designed with the user in mind, offering ease of installation, scalability, and long-term reliability. Voltex understands that every customer has unique needs, and our team of experts is always ready to provide customised solutions and support.

### A partner in power solutions

Choosing Voltex means partnering with a company that has a deep understanding of the power solutions landscape. Products are supported by a robust distribution network and a team of highly skilled professionals dedicated to providing exceptional service. We are proud of our footprint in South Africa and our role in powering the nation's growth and development. In addition to our 54 physical stores, Voltex enhances your shopping experience with an intuitive online platform available on their website and a dedicated mobile app.

This allows customers to enjoy the convenience of browsing a wide array of products with the option of delivery or 'click and collect' service.

Enquiries: [www.voltex.co.za](http://www.voltex.co.za)

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Ts & Cs apply. Valid until end of September 2024, while stocks last.



## Protecting cables from rodents: The innovative Twist-In-RR rodent repellent

In the battle against rodent damage, especially to electrical cables and wiring, innovative solutions are continually sought after. One such solution gaining attention is the Twist-In-RR rodent repellent from Hellermann Tyton, designed specifically to protect cables from rodents without resorting to harmful chemicals or traps.

The Twist-In-RR stands out due to its unique construction based on fiberglass. This material is not only lightweight but also offers exceptional durability and flexibility. Its open shape and self-wrapping feature make installation fast and straightforward, even around existing cables. This flexibility allows for easy branching of cables in or out of the protected area, accommodating various installations and cable sizes.

The effectiveness of Twist-In-RR is rooted in its ability to deter rodents through physical means. When a rodent attempts to gnaw on the Twist-In-RR, the fiberglass material breaks down into tiny microparticles. These microparticles are

sharp and uncomfortable, causing irritation to the rodent's gums without causing harm. This discomfort serves as a strong deterrent, discouraging rodents from further damaging the cables or wiring.

Unlike chemical repellents that may wear off over time, Twist-In-RR provides long-lasting protection. Its fiberglass composition ensures that the deterrent effect remains effective over an extended period, making it a reliable choice for continuous rodent control.

The unique design of the Twist In RR makes it extremely easy to install on existing installations, where cables may be lying very close to each other. The installation time is also reduced compared to alternative methods.

Furthermore, Twist-In-RR's good flammability properties add an extra layer of safety, particularly important in environments where fire hazards are a concern. The material can be cut with scissors to fit specific lengths and shapes,

enhancing its adaptability during installation.

In practical terms, using Twist-In-RR means minimizing the risk of costly damage caused by rodents. By preventing rodents from accessing and damaging cables, businesses and homeowners can avoid downtime, repairs, and potential safety hazards associated with electrical failures.

Overall, Twist-In-RR represents a humane and effective solution to rodent control, providing peace of mind through its reliable protection of cables and wiring. Its innovative use of fiberglass to deter rodents without causing harm ensures both effectiveness and safety, making it a preferred choice for those looking to safeguard their infrastructure against rodent damage.

Whether in residential, commercial, or industrial settings, Twist-In-RR proves to be a valuable tool in the ongoing effort to mitigate the impact of rodents on electrical systems.

Enquiries: [www.hellermannityton.co.za](http://www.hellermannityton.co.za)



## LESCO Manufacturing's Apollo range is pure South African innovation

With a quarter-century of manufacturing expertise, LESCO Manufacturing stands as a leader in innovation. The company has invested significantly in new tooling and injection moulding machinery to locally produce the Apollo range of switches and sockets. Boasting a sleek 6.9 mm profile, this range is the slimmest on the Southern African Development Community (SADC) market.

The Apollo range emerged from over two years of intensive research and development. The project focused on designing components and an efficient assembly process tailored to the abilities of the existing workforce. This effort led to a premium product line that is both affordable and high-quality, according to CEO Jonathan Shapiro.

He highlights that approximately 40% of their factory employees have disabilities, which attracts many customers to their brand.

Shapiro's grandfather, Natie Shapiro, founded Switch King in 1958, and his

father, David Shapiro, established LESCO Manufacturing in 1999. The company consolidated its manufacturing operations into a larger facility in City Deep, Johannesburg, in March last year, just before launching the Apollo range. This new facility, three times the size of the previous one, is equipped with rooftop solar panels to reduce reliance on the national grid and minimise shutdowns.

Based on demand, LESCO Manufacturing produces millions of units across its product ranges annually.

The Apollo range features reinforced rivets, ultra-strong clips, and frame clips for robust assembly.

The socket terminals can accommodate 3 mm x 2.5 mm stranded house wire conductors. The range is available in Contemporary White, Edgy Sapphire Black, and Elegant Gold, with options for custom colours.

Additionally, it includes touch-sensitive markings to assist visually impaired individuals.

After just over a year on the market, the Apollo range has become LESCO Manufacturing's most popular offering, available in over 1,000 major do-it-yourself stores across South Africa. The company has also hired six new sales representatives in Cape Town, Durban, and Johannesburg to promote its products.

LESCO Manufacturing exports some of its products to other countries within

the SADC Free Trade Area, benefitting from duty-free imports under the SADC Protocol on Trade. There is also increasing interest from overseas customers in collaborating with LESCO Manufacturing to design, develop, and export products to various regions, supporting Shapiro's long-term business plans.

Enquiries: [www.lescosk.com](http://www.lescosk.com)

## Why energy storage solutions are crucial to the country's energy transition

According to Richard von Moltke, General Manager at Static Power, a division of ACTOM, South Africa is facing a critical juncture in its energy transition where energy storage is key, promising stable grids and integrating renewables.

However, it is crucial to differentiate between two distinct segments – in-front-of-the-meter systems and behind-the-meter systems. These segments have different timelines, approaches and resource pools, but both are equally important for the country's transition.


Behind-the-meter (BTM) systems are typically smaller and usually fall into the private sector space such as residential, commercial, and industrial systems. These systems are quicker and easier (although still complex) to install and could have a faster impact on South Africa's transition. This impact of distributed systems has already been seen over the past three years with the proliferation of solar PV installations, mainly by small businesses and residential users.

In-front-of-the-meter (FTM) systems are bigger utility-scale projects that will be driven by Eskom or other power utilities or independent power producers (IPPs) and Eskom.


Behind-the-meter solutions provide immediate relief to the country's energy constraints. Load shedding has forced the country to transition quickly to accepting energy storage solutions in behind-the-meter applications. However, it has been a far harder sell when it comes to commercial and industrial consumers because.

Encouragingly, people are starting to better understand all the benefits of energy storage. Looking ahead proper financial structures and frameworks should be developed by all utilities for selling excess energy back into the grid. From a residential, commercial, and industrial point of view, this would also make the adoption of energy storage solutions a lot easier.

Enquiries: [www.actom.co.za](http://www.actom.co.za)




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[sales@enerji.co.za](mailto:sales@enerji.co.za)



## Pratley products: Essential for on-the-go repairs

In 2016, Wessel Bosman embarked on an epic journey across Africa in a Ford F250, unaware that he would face a head gasket failure in a remote and harsh environment. Fortunately, he had Pratley Putty and Pratley Steel Quickset with him, proving invaluable for repairs under these challenging conditions.

Bosman, a seasoned adventurer, has competed in the Dakar Rally four times. As a Lesotho motorcycle racer of South African origin, he first entered the Dakar in 2015 after impressing organisers by riding from Cape Town to Egypt to compete in the Pharaoh's Rally. He placed tenth after 17,000 km of grueling terrain.

After retiring from the 2015 Dakar Rally due to injuries, Bosman shipped his Ford F250 to the Dakar Organisation headquarters in Paris, France. From there, he moved it to Italy and decided to drive it through North, West, and Central Africa, including the Congo, Angola, South Africa, and finally Lesotho, covering 21 countries.

"When embarking on an adventure or rally, most people plan for any eventuality. However, a head gasket failure isn't typically part of the plan," Bosman says. He always carries Pratley Steel Quickset and Pratley Putty, even on his bike. "These products can repair almost anything, allowing you to reach a safe destination where you can properly replace parts."

At the border between Morocco and Mauritania, Bosman discovered a severe hole in the head gasket, where the compression pushed gases into the water-cooling port. Using Pratley Steel Quickset, he filled the steel ring around the pistons, then used Pratley Putty to block the damaged water port in the head cylinders and the block.

After placing the gasket back, Bosman rolled Pratley

Putty into a cylindrical shape and fitted it into the water port slot between the head and the block. "I then told my road assistant that we had 25 minutes to tighten the head as much as possible to spread the Pratley Putty evenly and ensure a reliable repair."

Sixteen thousand kilometres later, Bosman completed his journey at the AfriSki resort, encountering only a single flat tyre. This remarkable journey had started 24,000 km and 84 days earlier in Italy. Wessel, the founder of AfriSki, laughingly noted, "Yes, I had to rebuild the Ford F250's engine, but now it helps clear the roads of snow for people visiting AfriSki and the towns and mines in Lesotho!"

Pratley Putty is a versatile epoxy putty that can be moulded to fill gaps, cracks, and holes, curing to a hard, durable finish that adheres to various surfaces, including metal, explains Mark Bell, National Sales and Marketing Manager at Pratley Adhesives.

Pratley Steel is a high-strength adhesive designed specifically to bond metal surfaces, creating a strong and durable bond that withstands high temperatures and extreme conditions.

For the type of head gasket repair Bosman and his team performed, preparation is crucial. First, clean the damaged area thoroughly to remove any debris, oil, or grease, ensuring the surface is dry before proceeding. Use Pratley Putty to fill in any cracks, holes, or gaps, moulding it to match the shape of the surrounding area and pressing it firmly into place.

Curing time, which depends on temperature, is essential to allow the putty to harden properly. "After the repair is complete and the adhesives have fully cured, it's a good idea to test the head gasket to ensure it functions correctly and



A gasket repaired with Pratley Steel Quickset. Standard Setting Putty.



holds up under pressure," notes Bell.

Bosman is well-acquainted with Pratley's reputation for quality. Having travelled to over 80 countries by vehicle or motorbike, he always carries Pratley Putty and Pratley Steel for emergencies. When Wessel returned the Ford F250 for manufacturer maintenance and repair, the technicians were so impressed by the effectiveness of Pratley Putty and Pratley Steel Quickset that they encouraged him to contact Pratley about his story.

"Our products are world-class, known for performance and quality. Pratley Putty is the only South African-manufactured product to have gone to the Moon, so we were proud to learn about Wessel's use of our products during the Dakar Rally," says Bell.

Enquiries: [www.pratleyadhesives.com](http://www.pratleyadhesives.com)

## Local manufacturing quality that meets international design standards

Crabtree South Africa, from day one, has focused on exceptional quality, effectively meeting – and continually exceeding – the high demands of its customers.

Its range of technically superior products, unrivalled service, and superior support has ensured for the company, a reputation as one of the top electrical installation component suppliers in the industry.

In a time when markets are overrun by cheap and largely inferior imports, it is good to know that good old South African ingenuity and excellent quality is still to be found alive and well, in keeping with Crabtree's tag line: "That Which is Built Soundly Endures Well". Crabtree ranges include:

### Classic range

Crabtree's legendary Classic Range has stood the test of time in South Africa. Over the years it has become the go-to product range when it comes to electrical installation components, installed in countless South African homes and businesses. All switches and sockets carry the SABS mark and comply with all SANS requirements.

Products in the Classic Range are locally manufactured, thus supporting local industry whilst also uplifting the local community. The Classic steel cover plate range is durable and perfect for any residential or commercial use.

### Diamond range

Crabtree's Diamond Range is an

expansive modular range with clip on cover plates that fit the standard wall boxes installed in South African homes and offices. Cover plates are available in white, black, red, blue, and three modern colours to complete any wall.

### Topaz range

Topaz offers an affordable range of quality electrical switches and sockets. The stylish design offers a simple, soft, and modern look, that adds a touch of class to any home. The Topaz range has clean lines and recessed electrical switches which enhance the uniqueness by providing a flat appearance without the switches protruding from the cover plate.

### Hospital range

The Crabtree Hospital Range of products is specifically designed to satisfy the needs of the healthcare industry.

Featuring a range of SABS approved electrical components that meet the highest quality standards, the Hospital Range has become the gold standard for electrical components in the country's foremost medical institutions.

### Domestic range

Every home in South Africa has

at least one extension cord in use. Crabtree's extensive range of adapters and multi-plugs allows users to safely plug more than one device into just one socket. In addition to top quality electrical extension cords, Crabtree also manufactures a range of quality, solid pin plug tops.

### CMS range

Crabtree's Cable Management System range is quick and easy to install, will not rust or corrode, is flame and UV resistant.

Crabtree as a company is ISO9001:2015 certified, trunking and conduit fittings are all fully compliant with SANS specifications, and carry the SABS mark.

### 13A British Standard Range

In addition to its ranges, Crabtree also manufactures a range of electrical plugs and sockets for the British market.

Crabtree South Africa pride themselves on being industry stalwarts in South Africa, they strive to remain the go-to brand when it comes to electrical plugs, switches, and sockets.

Enquiries: [www.crabtree.co.za](http://www.crabtree.co.za)



## RS South Africa to exhibit at MTE Hotazel and MTE Kathu

RS South Africa exhibited products at MTE Hotazel on 9 July and at MTE Kathu on 11 July, both in the Northern Cape.

The Hotazel Complex is situated about 217 km northeast of Upington. It comprises Wessels Mine, a high-grade underground manganese mine, and Mamatwan Mine, a medium-grade open-pit manganese mine, both owned and operated by South32.

The Kathu region in the Northern Cape is known for its significant iron ore and manganese mining activities. These include the Sishen Mine, operated by Kumba Iron Ore, which contributes significantly to the local economy. Other prominent mines are Khumani, also operated by Kumba Iron Ore, and the smaller Sedibeng Mine.

"RS is well-positioned to supply the mining and industrial sectors with high-quality, robust products designed for arduous and demanding operational conditions. We partner with our suppliers to offer specialised equipment suitable for these tough environments," comments RS Sales Director Erick Wessels.

Tooling and safety are paramount for the mining sector, and RS offers the premium Fluke brand. It includes essential equipment such as a range of handheld digital multimeters to measure AC/DC current, voltage, capacitance, continuity, diode, frequency, and resistance.

The full offering from RS extends from test and measurement equipment (Fluke, Megger) to tooling (DeWalt, Wera), personal protective equipment (3M, Ansell), automation and electrification (Siemens, Schneider), and machine safety (Allen-Bradley, Eaton). RS has more than 750,000 products across 2,500 global brands. Private label brand RS PRO will also be highlighted, featuring over 88,000 products across different technologies.

"The MTE events provide us with the opportunity to showcase the latest industrial technologies and solutions for designing, building, and maintaining operations in critical sectors like mining and industry," concludes Wessels.

Enquiries: [www.mteexpos.co.za](http://www.mteexpos.co.za)



## Electra Mining Africa 2024: Uniting key industries for growth

This year's Electra Mining Africa exhibition is set to be the largest yet, featuring over 850 companies across six exhibition halls and four extensive outdoor areas. Taking place in Nasrec, Johannesburg, from 2 to 6 September, the event will showcase thousands of new products and technologies, along with hundreds of live machinery and equipment demonstrations.

Electra Mining Africa is a '5-in-1 Trade Show,' encompassing five integrated shows: Electra Mining Africa, Automation Expo, Elenex Africa, POWERex, and Transport Expo. These shows will highlight mining, manufacturing, engineering, automation, instrumentation, electronics, electrical sectors, power generation, and transport industries. For the first time, the Local Southern African Manufacturing Expo will also be included, focusing on local manufacturing.

"Electra Mining Africa has established itself as a key platform for trade, where buyers and sellers meet to conduct business and form beneficial partnerships," says Gary Corin, Managing Director of Specialised Exhibitions, organisers of the event. "This massive five-day trade event stimulates trade in South Africa's industrial, manufacturing, and mining sectors."

Industry leaders will deliver a series of world-class, free-to-attend seminars, discussing the latest developments in the mining and industrial sectors. Topics will include new legislation, local industry

challenges, successful case studies, and leading technologies. The seminars will align with daily themes such as sustainability, women's day and skills development, safety and lifting, innovation, and South Africa day, and will be hosted in Hall 9 by the South African Institute of Mechanical Engineering (SAIMEchE).

The Lifting Equipment Engineering Association of SA (LEEASA) and the

Southern African Institute of Mining and Metallurgy (SAIMM) will also host conferences, providing valuable insights. Charlene Hefer, Portfolio Director at Specialised Exhibitions, highlights that Women in Mining South Africa (WiMSA) will conduct a half-day workshop on Women's Day. Additionally, WiMBIZ, representing 500 female-owned mining companies, will create networking opportunities for visitors

and exhibitors.

Visitors can also anticipate the Forklift Driver competition, organised with LEEASA and Lifting Africa, and the Innovation and New Products Awards, presented in partnership with the South African Capital Equipment Export Council (SACEEC) on Innovation Day.

Enquiries: [www.electramining.co.za](http://www.electramining.co.za)

## SAEEC wins AEE International Best Chapter award

The Southern African Energy Efficiency Confederation (SAEEC) is proud to celebrate its 22nd anniversary as the largest chapter of the Association of Energy Engineers (AEE) in Africa. This milestone is marked by a prestigious accolade: the SAEEC has been awarded the Best Overall Chapter Performance - Chapter Recognition Award for International Chapters 2024 by the AEE.

This award is a significant global recognition, highlighting SAEEC's exceptional performance amidst tough competition from numerous countries. The AEE, a global network with over 17,000 members, connects more than 32,000 professionals across 125 countries. Both SAEEC and AEE are committed to advocating for energy industry professionals and promoting sustainable development worldwide.

In addition to the "Best Overall Chapter Performance" award, SAEEC has also been honored with two additional awards:

- Best Chapter Newsletter - Chapter Recognition Award for International Chapters 2024
- Best Chapter Leader - Chapter Recognition Award for International Chapters 2024, awarded to Thieda Ferreira

These accolades will be officially presented at the AEE Chapter Leadership Meeting, taking place on Tuesday, 24 September, at the Music City Centre in Nashville, Tennessee, USA, during the AEE World event.

Enquiries: [www.saeecconfed.org.za](http://www.saeecconfed.org.za)

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## ABB launches new campaign to boost digitisation

ABB, a global technology leader, has launched the "Do More With Digital" campaign, aimed at accelerating digitisation across process industries. By leveraging advanced solutions, ABB seeks to bridge digital gaps and help industries such as pulp and paper, mining, metals, and cement to realise their full potential.

ABB's campaign draws on insights from a team of experts across five disciplines to deliver tailored solutions. The focus areas include energy management, process safety, skills retention, and process performance, where significant opportunities for improvement exist.

ABB's extensive experience in these industries positions it well to guide companies on their digitisation journey. Despite the challenges of high production volumes, remote operations, and complex energy requirements, digital solutions offer a pathway to substantial emissions reductions.

According to the World Economic Forum, digital technologies can deliver up to 20% of the emissions reductions needed by 2050, as projected by the International Energy Agency.

The company has a long history of deploying digital solutions like advanced process control (APC), energy management systems (EMS), and manufacturing execution systems (MES). These technologies have evolved to meet industry-specific needs and are now integral to the next generation of digital advancements.

ABB identifies three stages of digitisation among its customers: starters (those new to digital technologies), stallers (those piloting advanced solutions), and scalers (those expanding their digital initiatives). ABB collaborates with companies at all stages to design and develop solutions for current and future challenges.

"Adoption of advanced digital technologies in the process industries is slower than expected," said Sanjit Shewale, Global Business Line Manager for Digital, ABB Process Industries. "Customers face challenges in proving and scaling up solutions for transformative change. However, there are opportunities to retain process knowledge as employees retire or move on more quickly than in the past. Through co-creation, we can achieve unprecedented levels of energy management, efficiency, sustainability, safety, and service."

ABB is also working with global technology partners to integrate generative artificial intelligence (Gen AI) and other advanced technologies into the ABB Ability™ suite of industrial software. This collaboration aims to enhance data collection, unlock operational insights, and significantly improve efficiency and productivity. Additionally, ABB is involved in initiatives to accelerate the adoption of digital solutions to help industries achieve net-zero emissions. One example is the use of cloud-based software for real-time data transmission integrated with ABB systems.

ABB's strategy is built on five key pillars: operational excellence, process performance, asset performance, sustainability, and a connected workforce, all underpinned by embedded cybersecurity. This framework helps industries keep pace with innovation, optimise efficiency, and reduce energy waste and costs.

Enquiries: [www.go.abb/processautomation](http://www.go.abb/processautomation)



## Africa Data Centres secures R2 billion funding for expansion

Africa Data Centres, a business within the Cassava Technologies group, has successfully secured ZAR2 billion in funding to expand its data centre capacity and meet the rising demand for cloud computing services in South Africa. This bespoke financing solution was arranged by Rand Merchant Bank (RMB), underscoring the strong financial standing of Africa Data Centres and their dedication to driving digital transformation in the region.

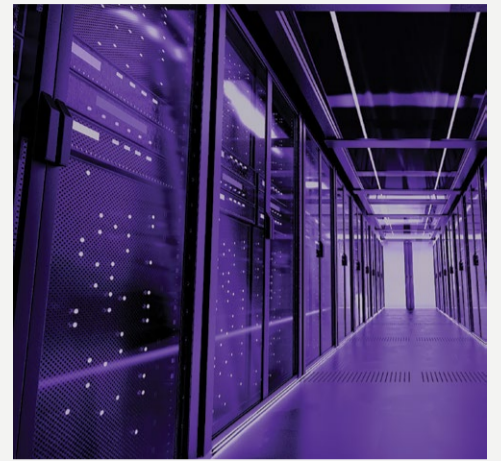
Hardy Pemhiwa, President and Group CEO of Cassava Technologies, commented on this milestone, stating, "This funding is a significant milestone in the growth of Africa Data Centres. It underscores our commitment to growth and our confidence in the future of the South African data centre market. The additional funding will allow us to support the digital transformation journeys of our customers. Data Centres are key to delivering on our vision of a digitally connected future that leaves no African behind."

RMB played a pivotal role in this financing agreement, acting as the Coordinator, Initial

Mandated Lead Arranger, and Bookrunner. The facility was meticulously structured by RMB to align with the strategic objectives of Africa Data Centres.

Operating a network of hyperscale and edge data centres across Southern, East, and West Africa, Africa Data Centres is set to accelerate its expansion with this new funding. The ZAR2 billion financing will enable the company to increase its hyperscale data centre capacity by an additional 20MW, further solidifying its position as a leading player in the African data centre market. This expansion will enhance their ability to offer top-tier interconnected, carrier, and cloud-neutral data centre facilities.

Nana Phiri, Head of the Corporate Client Group at RMB, highlighted the significance of this development, saying, "The data centre space presents a significant digital infrastructure opportunity, as there is currently a large deficit of supply versus demand. With the exponential growth in demand for data centre capacity in Africa, we are proud to partner with Africa Data Centres as they facilitate digital



transformation across the continent. We see this funding as part of RMB's mandate of financing the development of a sustainable digital economy in South Africa."

This financing arrangement positions Africa Data Centres to meet the increasing demand for digital infrastructure and continue its mission to support the digital economy across Africa.

Enquiries: [www.africadatacentres.com](http://www.africadatacentres.com)

## How local companies can adapt to global field service management trends

Field service management is evolving rapidly. Thanks to technological advancements, things that would have been difficult even a few years ago are commonplace today. A lot of paperwork, for example, has become digitised and photographic proof of work can be sent instantly thanks to the proliferation of smartphones.

The advancements coming in the next few years will likely be even more significant. Artificial intelligence (AI) and machine learning, along with augmented reality (AR) and virtual reality (VR) will play increasingly significant roles in field service management, according to Raghav Gurumani, Chief Technology Officer at Zuper.

"We're also likely to see even more applications that leverage mobile technology, customer self-service, and automation."

As important as those technological advancements are, however, it's also critical that organisations not just chase every new trend. Instead, they should focus on the ones which are most relevant to solving their unique business challenges within the local context in which they operate.

### Upskilling for tech advancements

"Take AI and machine learning, for example. There is no doubt that these nascent technologies have significant potential when it comes to field service management, particularly when coupled with Internet of Things (IoT) sensors," explains Gurumani.

AI-powered software, for instance, is capable of handling many routine tasks, freeing up people's time so that they can focus on high-priority issues. Intelligent scheduling algorithms, meanwhile, can help

ensure that field technicians take the optimal routes to jobs based on skills and availability. Over time, those platforms will keep learning and advancing too, making things even more efficient.

IoT-connected devices, meanwhile, can provide real-time data to enhance monitoring and proactive servicing. Combine that with the ability of smart sensors to track system performance and notify technicians of any irregularities and you have the potential for a system that's much more efficient, to the point where faults can be repaired before customers even notice that there's an issue.

But organisations can't just adopt these technologies and assume that they'll see immediate benefits. They also need to ensure that employees have the necessary skills to take advantage of those technologies, something which is particularly important in a country which has as big a shortage of digital skills as South Africa.

### Understanding local contexts

The same is true for other transformative technologies. AR and VR, for example, have proven value when it comes to things like training. That's especially true when it comes to providing technicians with a low-risk environment in which they can gain experience. Again, however, you need at least some people with the right skills to set up and maintain those environments.

AR, could also give technicians overlays that highlight components, display stats, or offer step-by-step guides. Unfortunately, that is not always feasible in South Africa. Some of those applications take a lot of bandwidth. While that's not a problem

in urban areas where connections are plentiful, it can be if a technician is working in a rural area where connectivity is patchy.

Contrastingly, mobile technologies which allow field technicians access to schedules, job details, customer information, and knowledge databases while on the go will come more naturally to a country that's as mobile-first as South Africa. These technologies come with numerous benefits, including allowing technicians to do, and move between, jobs more easily, enhance their interactions with customers, and be more productive with their days. That not only translates to a better customer experience but also to a more efficient organisation.

### A considered approach

Ultimately, as with most fields, big technological advancements will impact the field service management space in big ways. While organisations must understand the trends that follow those advancements, it's just as important that they don't immediately latch on to each new one. Instead, they should look very carefully at whether a particular trend or technology works within the local context and, if not, whether it will in the future.

If it does and can seamlessly be integrated into important systems then it's worth pursuing. In the South African context, that may not always mean using the same technologies in the same ways as in other markets. The best providers, particularly of the software that helps enable those technologies, recognise that and will fit into the ways of working that best suit your organisation.

Enquiries: [www.zuper.co.za](http://www.zuper.co.za)

## WEG Africa's Ghana branch marks 15 years of serving West Africa

Set up in 2009, initially to provide parts support to the growing installed base in West Africa at the time, WEG Africa's Ghana operation has transformed into a fully-fledged branch. Through an expanded network of Value Added Resellers (VARs), the branch has boosted its capacity to deliver tailored and responsive solutions to a diverse customer base in West Africa.

In its 15 years of existence, WEG Africa's Ghana branch has placed customer success at the centre of its operations. To meet diverse customer needs, the branch offers customised solutions that speak directly to market requirements in West Africa.

Foster Yeboah Owusu, Regional Manager – West Africa – Sales at WEG Africa, says VARs play a pivotal role in ensuring customer satisfaction. To this end, the branch has a total of eight VARs in key markets such as Nigeria (two), Ghana, Côte d'Ivoire, Burkina Faso, Mali, Senegal and Mauritania.

As a commercial office for WEG Africa, the Ghana entity can offer a complete range of WEG solutions across the different product families – industrial electric and electronic equipment, power generation and transmission and commercial and appliance motors. Currently, however, the facility has a major focus on industrial electric and electronic equipment, catering largely for oil and gas, and mining markets.

The main product line includes electric motors, variable speed drives and controls, softstarters, switchgear, geared motors, distribution boards and customised E-houses, among many other products. This is complemented by a selected range of power generation and transmission products such as oil-cooled and dry-type transformers as well as mobile substations.

Owusu reiterates the importance, in a culturally diverse region of 16 countries, of understanding the unique infrastructural challenges and regulatory requirements in each market in order to develop suitable products. For example, he says, several countries in West Africa have varying levels of grid power infrastructure and voltage compatibility, which makes product customisation and adaptation a major requirement to meet unique market needs.

Armed with the globally renowned WEG product offering, coupled with a strong support regime that entails technical support, training and high spare parts availability, WEG Africa's West African business has seen substantial growth in recent years. The growth, says Owusu, has largely been driven by a thriving West African mining sector.

"We have in recent years executed some flagship projects in the region," says Owusu. "For example, between 2019 and 2020, we supplied and commissioned major electrical equipment for a large oil and gas project. This comprised six WEG electric motors – four 9.5 MW and two 7 MW units. Of note is that this project was successfully executed during the Covid-19 pandemic."

Commenting on emerging trends in the market, Owusu highlights the accelerated move towards energy efficient solutions. In Ghana, for example, the government has introduced Minimum Energy Performance Standards (MEPS) for about 20 different electrical products including transformers, electric motors and air conditioners, amongst others.

As a key industry stakeholder, WEG Africa was part of the electro-mechanical technical committee that prepared the standards on which the MEPS for electrical motors are based. Through this process, the government of Ghana has set MEPS for electric motors at

IE2, up from IE1. The industry, however, is already moving to IE3 and IE4 efficiency standards. Given that electric motors consume 50% of global energy, Owusu says the adoption of higher MEPS is a welcome development. Making electric motors more efficient not only reduces power consumption, but also minimises carbon emissions and improves sustainability.

"Governments in West Africa have a big focus on sustainability and environmental management. On the back of rapid industrialisation, there is a growing renewable

sector in the region. To cater for this market, we intend to expand our offering with WEG's other existing solutions such as solar systems, hydro and wind turbines," says Owusu.

In addition, says Owusu, there is a lot of interest in increasing partnerships and collaboration. "The plan is to have local service partners in at least every country in the region to ensure faster parts and service turnaround times for our customers," he concludes.

Enquiries: [www.weg.net](http://www.weg.net)

Motors | Automation | Transmission & Distribution | Energy Systems | Electrical Construction



# GENERATOR & ENERGY SYSTEMS

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Driving efficiency and sustainability



## Varispeed's superior solution for variable speed drives

In the competitive world of variable speed drives (VSDs), Varispeed stands out with its new Alpha Drive HV320, a cutting-edge product that surpasses industry standards. Known for its remarkable cost-to-benefit ratio, the Alpha Drive range provides both low and medium voltage solutions, making it a preferred choice for electronic motor control across diverse industries.

### Unmatched performance and speed

The Alpha Drive HV320 is the flagship of the Alpha Drive range, offering precise speed, torque, and position control functions. This versatility suits both sensor and sensor-less synchronous and asynchronous motors, ensuring top-tier performance and stability for applications in production, processing, food, chemical, metal processing, rubber, plastics, municipal infrastructure, and more.

With an impressive average delivery time of less than a month, it is rapidly becoming the go-to VSD solution.

### Operational cost-effectiveness

Varispeed drives, including the Alpha range, significantly improve energy efficiency, equipment performance, and overall operational cost-effectiveness. Each drive comes with an advanced HMI interface preprogrammed for unique environments, facilitating easy setup, monitoring, and management.

This user-friendly approach ensures seamless integration into various systems, maximising operational benefits.

### Comprehensive customer support

With over 35 years of experience in electronic motor control solutions, Varispeed is a trusted leader in the industry. Its expert teams collaborate

with clients to develop tailored solutions aimed at reducing downtime, increasing efficiencies, and controlling costs. Supported by industry-leading warranties and superior service, Varispeed's commitment to excellence is unwavering.

### A 360-degree electrical solution

Varispeed's dedication to customer satisfaction extends beyond VSDs. By partnering with reputable electrical brands such as Powermite and Three-D, Varispeed offers a comprehensive range of electrical solutions. This holistic approach ensures clients receive complete and integrated solutions for their specific needs.

### Benefits of VSDs

Variable speed drives can save money by optimising energy usage and reducing operational costs. Here are some key benefits:

- **Energy Efficiency:** Adjusting motor speed to match the required load reduces energy consumption, avoiding the waste associated with fixed-speed motors.
- **Demand-Based Operation:** Motors run only as needed, lowering energy consumption and costs.
- **Soft Starting and Stopping:** Reduces

mechanical stress, extending motor lifespan and cutting maintenance costs.

- **Reduced Wear and Tear:** Lower speeds decrease wear on mechanical components, prolonging equipment life.
- **Process Optimisation:** Precise motor control improves efficiency and reduces waste.
- **Avoiding Peak Demand Charges:** Reducing energy use during peak hours lowers electricity bills.
- **Improved Power Factor:** Enhances motor efficiency, reducing reactive power demand and avoiding additional charges.
- **Energy Recovery:** Some VSDs regenerate energy during deceleration, offering further savings.
- **Equipment Downsizing:** Smaller, more efficient motors can be used, saving on equipment costs.
- **Incentives and Rebates:** Government and utility incentives can offset installation costs.

By implementing VSDs, businesses can achieve substantial cost savings, optimise processes, and enhance equipment performance, ensuring a quick return on investment.

Enquiries: [www.varispeed.co.za](http://www.varispeed.co.za)

## Don't risk or reinvent the motor control coordination – Rockwell Automation has done it for you

Adrian van Wyk, Managing Director at Referro Systems a Level 2 B-BBEE empowered supplier of control and automation solutions for the industrial sector, warns against the risks of using untested components in motor control combinations.

"A motor control circuit is made up of numerous basic interconnected components that achieve the desired performance. The components will vary in size depending on the motor's power; however the operation principles stay the same. Therefore it's possible to design a high-performance motor control combination, using a few basic components.

"However, combining type 1 with type 2 motor control elements without testing can have huge negative effects. If one uses an untested combination, there is a high risk of causing damage within the motor control centre and there is also a risk of causing an arc flash which could cause damage and serious injury to plant personnel.

"Testing coordinated combinations is hugely expensive, but it's imperative to use these tested combinations to reduce risk, meet international standards and ensuring safe and efficient motor control combinations.

"A safer and more pragmatic approach is to rely on Rockwell Automation's Global Short-circuit Current Ratings (SCCR) Tool which provides coordinated high-fault branch circuit solutions for motor starters, soft-starters, and variable speed drives. The one-line bill of materials provides coordinated high-fault SCCR ratings for all power devices used in the circuit, which saves customers time and effort to find and determine these ratings. The data provided by the Global SCCR tool is based on compliance to IEC and UL standards, pinpointing combinations that have been tested with coordination



Adrian van Wyk, Managing Director at Referro Systems

tables from 0.5 kW – 600 kW at various voltages and fault levels. These also include South Africa's very unique and very common, mining motor control operational voltage of 525V/ 550V, which is not a global test voltage.

"There are very specific products and variations of products that work together safely within a motor control circuit – these have been tested by Rockwell Automation and are available to the public.

"The SCCR website is the easy way to select safe combinations as Rockwell Automation has already tested all the different combinations allowing companies to build their motor control combinations using complimentary elements that have been tested and are compliant according to regulations."

Customers can use tested combinations to ensure performance levels and safety is guaranteed.

Enquiries: [www.referro.co.za](http://www.referro.co.za)

## The innovation of Onesto adjustable moulded case circuit breakers

In the ever-evolving world of electrical engineering and power distribution, safety, reliability, and adaptability are key pillars supporting efficient and secure systems.

Among the many innovations in this field, the Onesto adjustable Moulded Case Circuit Breakers (MCCBs) stand out as a significant advancement. These devices not only enhance the protection of electrical circuits but also offer a level of customisation and precision that is crucial in today's dynamic electrical environments. The Onesto adjustable MCCBs offer unique features and benefits. These MCCBs are distributed in South Africa through MCB Electrical.

### Understanding Onesto MCCBs

Onesto MCCBs are designed to protect electrical circuits from overloads and short circuits, similar to traditional MCCBs.

However, what sets Onesto MCCBs apart is their exceptional adjustability. This customisation ensures that the breaker can be tailored to the exact needs of the electrical system, enhancing both safety and operational efficiency.

### The mechanics of Onesto adjustability

The core feature of Onesto adjustable MCCBs is their ability to modify the trip current settings within a wide range.

This adjustability is typically achieved through a user-friendly dial, allowing for precise fine-tuning. For example, an Onesto MCCB rated for 320-400 amps can be set to trip at any specific point within that range. This level of customisation is invaluable in environments where electrical loads vary, ensuring optimal protection without compromising performance.

### Enhancing safety and efficiency

Safety is paramount in electrical systems, and Onesto MCCBs excel in this regard. By allowing the breaker to be set to the exact current necessary to protect the circuit, the risk of electrical fires and equipment damage

is significantly reduced.

This precision is particularly critical in industrial settings, where machinery and equipment have specific power requirements and where an electrical fault can have severe consequences.

Additionally, Onesto MCCBs contribute to overall system efficiency. By optimising the protection settings, electrical systems can operate closer to their maximum capacity without the risk of nuisance tripping. This means less downtime and greater productivity, especially in manufacturing and processing industries where continuous operation is essential.

### Versatility across applications

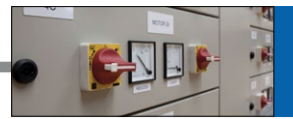
Onesto adjustable MCCBs are not limited to industrial use, they are equally valuable in commercial and residential settings. In commercial buildings, where electrical loads can fluctuate significantly based on occupancy and usage patterns.

Onesto MCCBs provide the necessary flexibility to maintain safety without sacrificing convenience. In residential settings, they offer homeowners peace of mind by ensuring that their electrical systems are protected against both minor and severe electrical faults.

Onesto adjustable moulded case circuit breakers represent a significant leap forward in electrical safety. Their ability to be set to specific circuit requirements ensures optimal protection and performance, making them indispensable in a wide range of applications. Whether in industrial, commercial, or residential settings, Onesto MCCBs provide the assurance that electrical systems are safeguarded by adjustability.



Enquiries: [www.mce.co.za](http://www.mce.co.za)



## How to measure frequency with Fluke multimeters

Circuits and equipment may be designed to operate at a fixed or variable frequency. They may perform abnormally if operated at a different frequency than specified.

For example, an AC motor designed to operate at 60 Hz operates slower if the frequency is less than 60 Hz or faster if the frequency exceeds 60 Hz. For AC motors, any change in frequency causes a proportional change in motor speed.

A five percent reduction in frequency yields a five percent reduction in motor speed.

Some digital multimeters include optional modes related to frequency measurement:

- Frequency Counter mode: It measures the frequency of AC signals. It can be used to measure frequency when troubleshooting electrical and electronic equipment.
- MIN MAX Recording mode: Permits frequency measurements to be recorded over a specific period. It provides the same function with voltage, current and resistance.
- Autorange mode: Automatically selects the frequency measurement range. If the frequency of the measured voltage is outside of the frequency measurement range, a digital multimeter cannot display

an accurate measurement. Refer to the user's manual for specific frequency measurement ranges

### Digital multimeters with a frequency symbol on the dial



- Turn the dial to Hz. It usually shares a spot on the dial with at least one other function. Some meters enter the frequency through a secondary function accessed by pushing a button and setting the rotary switch to AC or DC.
- First, insert the black test lead into the COM jack.
- Then, insert the red lead into the V Ω jack. When finished, remove the leads in reverse order: red first, then black.
- Connect the black test lead first and the

red test lead second. When finished, remove the leads in reverse order: red first, then black.

- Read the measurement in the display. The abbreviation Hz should appear to the right of the reading.

### Digital multimeters with a frequency button



Turn the dial to AC voltage (AC Voltage indicator). If the voltage in the circuit is unknown, set the range to the highest voltage setting.

Most digital multimeters power up in Autorange mode, automatically selecting the measurement range based on the voltage present.

- First, insert the black test lead into the COM jack.
- Then, insert the red lead into the V Ω jack.
- Connect the test leads to the circuit.

The position of the test leads is arbitrary. When finished, remove the leads in reverse order: red first, then black.

- Read the voltage measurement in the display.
- With the multimeter still connected to the circuit, press the Hz button.
- Read the frequency measurement in the display.

The Hz symbol should appear in the display to the right of the measurement.

### Frequency measurement considerations

In some circuits, there may be enough distortion on the line to prevent an accurate frequency measurement. For example, AC variable-frequency drives (VFDs) can produce frequency distortions.

When testing VFDs, use the low-pass filter AC V setting for accurate readings. For meters without the AC voltage indicator setting, turn the dial to DC voltage, then press the Hz button again to measure the frequency on the DC voltage setting. Change the voltage range to compensate for the noise if the meter allows for a decoupled frequency measurement.

Enquiries: [www.comtest.co.za](http://www.comtest.co.za)

## Pioneering enclosures for over four decades

Allbro started in South Africa, where the elements can be relentless and the environment unforgiving. However, since its inception in 1978, Allbro has been at the forefront of designing and building enclosures that defy nature's challenges.

Today, Allbro stands tall as a testament to excellence in enclosure design and manufacturing. With a track record spanning more than 40 years, the company has earned a reputation for delivering products that thrive in the harshest environments, whether it's scorching sun, corrosive elements, or protecting equipment from unwanted attention.

### All-guard abrasion coating

What sets Allbrox® enclosures apart is their unique All-Guard abrasion coating. This cutting-edge innovation extends the life of the enclosures, making them last longer than any other available option. The secret to Allbrox® durability lies in the SMC (Sheet Moulding Compound) that Allbro utilises, a glass-reinforced polyester thermoset material known for its exceptional strength and resilience.

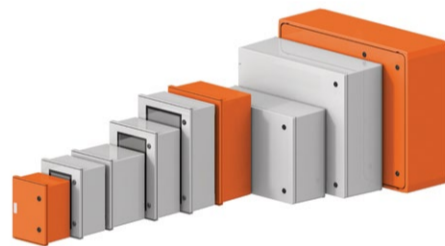
This material has stood the test of time having been used in the construction of jet skis, boats, swimming pools and wind turbines, showcasing its ability to withstand even the most demanding conditions in a variety of applications.

### Insulation and resistance to heat and fire

Allbro's SMC material offers exceptional isolation and flame-retardant properties. This makes them the ideal choice for use in large-scale solar plants, home solar distribution boards (DBs), high-voltage applications, and even the demanding conditions of mining operations. In a world that increasingly relies on clean energy and resource extraction, Allbro's enclosures play a pivotal role in safeguarding critical infrastructure.

### Customisation with standard accessories and kits

In addition to 19 sizes, Allbro provides an array of accessories to tailor its enclosures precisely to your needs. Inner doors, distribution board



(DB) kits, external mounting points, and clear window door options are just a few of the customization options available. This level of adaptability ensures that Allbro's enclosures can seamlessly integrate into most applications. Whether you need an enclosure for industrial machinery, sensitive electronics, power distribution, or mining equipment.

### In-house expertise

One of Allbro's key strengths lies in its extensive in-house capabilities. From material compounding to tooling and moulding, Allbro maintains tight control over every aspect of the manufacturing process. This level of vertical integration allows it to ensure the highest quality and reliability for its products while also offering cost-effective solutions to its customers.

With a sprawling 22,000-square-metre facility and a material processing capacity of 3.2 million kilograms per annum, Allbro is a manufacturing powerhouse. Employing over 500 skilled individuals, it has established itself as an industry leader with the capacity to meet diverse customer needs efficiently.

For over four decades, Allbro has been delivering products that thrive where others fail, all while pushing the boundaries of what's possible. As industries evolve and technology advances, Allbro remains at the forefront, ensuring that your valuable equipment remains protected, no matter the challenges it may face. With Allbro, you're not just getting an enclosure; you're getting peace of mind, whether you're in mining, energy, or any other industry that demands uncompromising reliability.

Enquiries: [www.allbro.com](http://www.allbro.com)

## Superior motor control in a smaller package

BMG, which celebrates 50 years of business this year, has recently released the new Danfoss iC2-Micro Drive into the African market.

This advanced system has been designed with new features for easy replacement of the VLT® Micro Drive FC 51.

"The new versatile iC2-Micro Drive - that delivers superior motor control and mechanical brake performance - is more intelligent and powerful than its predecessor and is easier to use, install and commission," explains David Dyce, Business Unit Manager: Electronics, BMG.

"The advanced iC2-Micro Drive, with reduced complexity and greater functionality, offers improved performance and energy efficiency over the VLT Micro Drive FC 51, ensuring a seamless retrofit for existing applications - and for complex tasks.

"This compact unit, with a small footprint and side-by-side mounting, can be installed in tight spaces and is able to withstand a wider operating temperature range, for safe use in harsh environments," he says. These drives - available in a power range for 1-phase of 200-240 V AC: 0.37-2.2 kW and for 3-phase of 380-480 V AC: 0.37-22 kW - can operate reliably at full load for ambient temperatures up to 50°C.

In addition, the drives come standard with coated circuit boards and controlled airflow movement to reduce the possibility of corrosive contaminants coming into contact with the drive's circuitry. The drive's fan system has built in on/off control to reduce noise and save energy. The fan is also removable for simplified drive maintenance.

"A key feature of the iC2-Micro is

the integrated PID controller that enables users to programme closed loop functions directly into the drive, improving its speed and process control capability. Advanced control algorithms and digital signal processing ensure more precise control over motor speed and torque, resulting in improved efficiency of the system and reduced energy consumption.

"We highly recommend iC2-Micro Drives to our customers needing to upgrade existing drives, or who are in the process of selecting drives for a new project."

Other new features include torque open loop control, locked motor detection and permanent magnet motor control.

This system, with PM motor compatibility, provides efficient permanent magnet motor control in open loop under VVC+ throughout the power range and is available in two versions, with or without the RFI filter.

Integrated energy efficiency features, including an automatic energy optimiser and sleep mode, can reduce energy consumption by up to 30%. In addition, the iC2-Micro Drive has new safety features, including enhanced overcurrent protection and short circuit detection, which protect the motor and drive from damage in the event of a fault. The iC2-Micro Drive comes standard with an intuitive, user-friendly interface with display and keypad. The local control panel also has a standard potentiometer for local speed adjustment. This drive is incorporated with spring type I/O terminals for simple external control wiring. The VSD can be quickly and easily installed and configured, saving users time and reducing the risk of errors.

Enquiries: [www.bmgworld.net](http://www.bmgworld.net)

## Efficiency with Bluevolt energy storage

Frequent power challenges due to unplanned outages, continue to significantly impact homes and businesses in South Africa, causing operational disruptions, financial losses, and compromised security. In this environment, Uninterruptible Power Supply (UPS) systems equipped with high-quality batteries are essential to ensure continuity and reliability.

Bluevolt and the Probe Group, known for its extensive experience in energy storage and alternative energy sector, are designing and assembling Bluevolt batteries and UPS systems locally, helping South Africans energise with reliable, affordable lithium power systems. These batteries form part of the Probenenergy stable of cost-effective, reliable energy solutions.

Frank Rovelli of the Probe Group spotted the potential in Bluevolt in 2019, and the companies have collaborated closely to design and assemble Bluevolt batteries and UPS systems using lithium iron phosphate cells.

Producing these batteries locally reduces dependency on imported energy storage solutions, enhancing supply chain stability and ensuring quicker delivery times, says Rovelli. "By leveraging regional resources and expertise, Bluevolt can more effectively tailor its products to meet the specific needs and conditions of the South African market, providing robust and reliable energy solutions. Customers can get genuine

technical support from our local South African team, the same minds behind the design and assembly of Bluevolt batteries."

Bluevolt's Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries are designed with a focus on safety, longevity, efficiency, and environmental friendliness. These batteries offer superior thermal and chemical stability, which significantly reduces the risks of overheating and combustion. They boast a long cycle life, typically lasting between 2000 to 5000 cycles, with minimal capacity loss over time. Furthermore, they deliver high discharge rates and round-trip efficiencies of 95% or more, ensuring that more stored energy can be effectively used. The batteries are made from non-toxic materials and are fully repairable and recyclable, contributing to a lower overall carbon footprint.

Bluevolt has further launched a range of robust UPS solutions designed for reliable backup power during outages, ensuring that all essentials stay on. The range includes six models, the Leopard, Rhino, Lion, Cheetah, Springbok and Hippo, each with variations in power but built around the reliable Bluevolt LiFePO<sub>4</sub> batteries.

These UPS Power Systems are engineered for simplicity and resilience, featuring a plug-and-play design that ensures ease of installation and immediate usability. They offer superior battery life, making it an ideal solution for households and businesses requiring energy reliability.



The Leopard LiFePO<sub>4</sub> UPS offers a battery capacity of 3 kWh. Capable of supporting a two-kilowatt load, its transformer-based inverter can also handle thermal stresses from overload effectively. This allows it to power up motors with considerable startup surges. It incorporates a built-in mains distribution board connection point, adding versatility and seamless integration into the building electrical system. Designed to cater to both residential and commercial applications, the Leopard UPS delivers reliable performance and uninterrupted power supply, ensuring that critical systems and essential devices remain operational even during extended power outages.

Founder Tom Utermark explains that one of the standout features of the Bluevolt Leopard UPS is quiet operation. "It can charge and run completely silently on the slow charge setting and when the required power output is lower than 500 Watts. This makes it an ideal choice for people living in apartments. Its special mains DB connection makes it ideal for renters, as it can be easily disconnected from the mains."

For business users, these batteries and UPS systems provide critical support, ensuring uninterrupted operations and safeguarding against productivity losses during power outages.

"At Bluevolt, we are committed to providing energy solutions that go beyond the norm," says Utermark. "Our expertise spans software, hardware, and materials science, allowing us to create reliable backup power systems tailored for both residential and commercial applications. By combining innovation with practical implementation, we ensure that every battery we produce is a testament to both theory and practicality. Our goal is to deliver robust and dependable energy solutions that meet the unique needs of the South African market while moving us toward a greener and more resilient energy future."

Enquiries: [www.probegroup.co.za](http://www.probegroup.co.za)

## Trinasolar powers the future at Africa Energy Forum 2024

Trinasolar, a global leader in smart PV and energy storage solutions, participated in the Africa Energy Forum held in Barcelona, Spain, last month.

This premier event brought together industry leaders, policymakers, and innovators to discuss the future of energy in Africa.

Trinasolar's sponsorship underscores its commitment to supporting sustainable energy development across the continent.

Zaheer Khan, Trinasolar's Regional Director for South Africa, was a distinguished speaker at the exclusive Corporate Leadership Roundtable titled "Energy Systems of the Future – Balancing Africa's Needs with Global Goals."

This pivotal discussion, attended by over 40 industry experts, addressed critical topics such as increasing the scale and pace of projects and investment in Africa, the role of decarbonisation policies in enhancing private sector participation in energy-intensive industries, and the impact of global climate goals on Africa's investment capabilities for its future.

Trinasolar's comprehensive solar solutions are designed to meet these

challenges head-on. The company's portfolio includes industry-leading Vertex N modules with advanced n-type i-TOPCon technology and 210mm product technology platform, the state-of-the-art TrinaTracker system, and cutting-edge energy storage solutions.

These innovations ensure optimal performance and adaptability to varying project requirements, providing reliable, cost-effective, and scalable solar solutions. Trinasolar aims to significantly advance the solar energy sector in Africa, facilitating the continent's transition to renewable energy and supporting sustainable economic growth.

"Trinasolar is thrilled to participate in this influential forum and contribute to the dialogue on Africa's energy future. South Africa is a key market for Trinasolar, and the company is dedicated to advancing solar energy solutions that not only meet the growing energy demands but also align with global sustainability goals. Trinasolar's latest innovations in solar technology are designed to increase efficiency, reduce costs, and support the continent's transition to renewable energy," says Khan.

With abundant solar resources and

a strong need for sustainable energy solutions, South Africa is poised to be a leader in solar energy deployment. Trinasolar's advanced photovoltaic (PV) technologies and comprehensive energy solutions are tailored to meet the unique energy challenges and opportunities in South Africa. Trinasolar's participation at the Africa Energy Forum will provide a platform to showcase the company's latest products, foster partnerships, and engage with stakeholders to drive the renewable energy agenda forward.

Enquiries: [www.trinasolar.com](http://www.trinasolar.com)



Zaheer Khan, Trinasolar's Regional Director for South Africa.

## Experts to help navigate JET and ESG balancing act

As the world faces an unprecedented energy crisis requiring technical expertise, creativity, and collaboration, advisory firm Zutari supports clients in achieving responsible growth across the energy project lifecycle.

Zutari's Generation, Transmission, Distribution, System Studies, and Industrial Energy teams combine technical and digital skills to create extraordinary value for clients.

"We combine our deep technical expertise with creative and digital skillsets to create extraordinary value for our clients," explains Heskin Mzungu, Client Director: Energy.

He believes that meeting Environmental, Social and Governance (ESG), Just Energy Transition (JET), and long-term climate resilience and decarbonisation targets is a fine balancing act. However, Zutari is ideally positioned and resourced to tackle these challenges.

"It looks more positive now as we have received tenders for transmission projects," reveals Mzungu. Here Zutari becomes a single point of contact for clients in this space. Apart from its technical engineering capabilities, it can supply a single solution as Owner's Engineer, an independent representative for the project owner. It provides a critical support role throughout all stages of the asset lifecycle, in addition to project management and quality assurance support.

The JET plan, spanning 2023–2037, aims for decarbonisation and energy security, outlined in South Africa's Integrated Resource Plan (IRP) 2023. Zutari assists clients in navigating complex policies, such as the Renewable Energy Independent Power Producer Procurement Programme (REIPPP) and the Gas IPP Procurement Programme.

With the unbundling of Eskom and the creation of the National Transmission Company of South Africa (NTCSA), Zutari anticipates significant investment in the transmission network. Mzungu emphasises the importance of financial viability in energy projects and Zutari's role in guiding clients through technical, financial, and legal challenges.

The private sector's investment in renewable energy, alongside coal as a baseload source, provides a more positive energy outlook. Mzungu notes the affordability and scalability of renewable technologies and Zutari's extensive experience in the sector. While municipalities lag, opportunities exist at the local government level.

Looking ahead, Mzungu foresees increased private sector uptake of solar energy, with coal remaining a key energy source. Despite challenges, the energy transition is progressing, with Zutari's stakeholder engagement enhancing public participation and job creation.

Its capability in this regard allows it to assist communities and enormously increase public participation on projects, generating jobs on the ground, and then obviously ensuring that all the necessary permitting is in place. "It is a complex process with many factors to consider, which is why clients really need the single point of contact we can provide," concludes Mzungu.

Enquiries: [www.zutari.com](http://www.zutari.com)

## Demand Response puts the power back in your hands

**D**emand Response (DR) has been available for quite some time, however, in light of South Africa's continued energy challenge, it stepped firmly into the limelight, enabling both consumers and businesses to gain some control over their power usage.

According to Dwibin Thomas, Cluster Automation Leader at Schneider Electric it enables consumers and businesses to shape their energy consumption patterns; adjusting their energy consumption patterns in response to real-time demand and supply conditions. It has put the proverbial power back in the hands of the people, evolving from passive energy users to active participants.

In South Africa, Eskom launched the Demand Response and Distribution Demand Management Programme just over a year ago. The programme followed the successful industrial Demand Response Programme, which is now in its 11th year.

The programme includes three elements: Distribution Demand Management Programmes (DDMPs), the Residential Load Management (RLM), Energy Efficiency and Load

Management Programme all in effort to assist with the energy constraints challenges.

For example, the RLM aims to shift evening peak demand to standard and off-peak periods. This plays a key role in reducing the demand during Eskom's defined evening peak periods in residential households.

### The technology behind DR

The technology behind DR is mature and exciting. Smart load switches and advanced software ensure uninterrupted power during critical periods like load shedding when alternative energy sources such as solar are used.

For instance, during load shedding, the software can automatically reduce the power drawn from energy-hungry devices like pool pumps and geysers, safeguarding essential appliances from disruption.

Smart load switches play an important role by communicating with utility-end software, facilitating real-time control and adjustment of energy consumption. This seamless communication enhances

energy management capabilities, allowing for efficient utilisation of resources and minimising wastage.

To further assist consumers, user-friendly portals offer monitoring and management of energy use in real-time. These portals provide insights into energy consumption patterns, identify cost-saving opportunities, and offer customisation options to align with individual preferences.

The advancements in DR technology continue to push the boundaries of energy management. One exciting development on the horizon is the integration of Artificial Intelligence (AI) and machine learning (ML) algorithms into DR systems.

These intelligent systems can analyse vast amounts of data in real-time, predicting energy demand patterns with unprecedented accuracy. By leveraging AI, DR solutions can anticipate peak demand periods more effectively, allowing for proactive energy adjustments and optimisation.

This predictive capability not only enhances energy efficiency but also maximises cost savings for consumers and businesses alike. As AI-driven DR becomes more prevalent, it promises to revolutionise how we manage energy consumption, paving the way for a more resilient and sustainable energy future.

Eskom has already rolled out successful DR programmes to industrial sites. From a commercial perspective, DR can reduce electricity costs by adjusting HVAC and lighting systems during peak hours. Similarly, industrial sites can participate by curtailing non-essential processes during high-demand periods, thereby optimising energy usage and reducing operational expenses.

DR offers a multitude of benefits for both consumers and businesses, taking charge of their energy consumption which lead to lowered energy costs, uninterrupted power supply whilst support grid stability.

Moreover, by reducing peak demand, DR can lower the need for additional power generation, consequently reducing environmental impact and fostering a more sustainable and efficient energy ecosystem.

Schneider Electric has been actively involved in optimising distributed energy resources (DERs) with their Grid to Prosumer approach including DR, which manages the lifecycle of DERs and distributed loads across energy market needs, grid constraints, and prosumer priorities.

Enquiries: [www.se.com/za/en/](http://www.se.com/za/en/)

## Hitachi Energy and SP Energy Networks shows how to boost renewable energy flow

**Hitachi Energy** has won an order from SP Energy Networks to design and deliver a first-of-its-kind power quality solution to balance the grid and boost the flow of renewable energy across the UK. The solution will enable SP Energy Networks, the electricity network operator for Central & South-ern Scotland and Merseyside, Cheshire, North & Mid-Wales and North Shropshire to add more renewables into the grid and facilitate the phase-out of fossil fuels.

The project, located at SP Energy Networks' substation at Eccles, consists of two sets of an SVC Light® STATCOM1 and a synchronous condenser controlled centrally by the MACH™ control system, connected at a common electrical node. This unique combination of technologies will maximise the future power system's potential while also providing increased system resilience, thus supporting the increasing integration of renewables into the electricity grid.

Each STATCOM installation uses Hitachi Energy's advanced power electronics and technology-leading MACH2 control and protection solution to provide system strength, instantaneous voltage control and enable maximum power flow. This technology, which entrusts a STATCOM to control a local synchronous condenser, is market leading. It builds on an earlier collaboration between SP Energy Networks and Hitachi Energy on the network innovation competition project Phoenix supported by Ofgem, the energy regulator for the UK.

"The innovative power quality solution will increase the transfer capacity across the UK by up to 280 MW by improving the transmission network's strength as more renewable generation is connected in Scotland," said Billy Moore, Senior Project Manager at SP Energy Networks. "The



criticality of technology such as this will become more important as we reduce the usage of fossil fuels."

"We are delighted to have co-created this innovative solution with SP Energy Networks, which will maintain grid stability and enable more clean electricity to flow through the system in the UK," said Marco Berardi, Head of Grid & Power Quality Solutions and Service business at Hitachi Energy.

"This pioneering innovation is yet another addition to our ever-evolving portfolio of power quality solutions that help grid operators overcome the immediate and long-term challenges of the energy transition."

With the integration of more renewable energy into the grid and the move away from conventional power plants, transmission system operators face a number of challenges. In this project, the SVC Light STATCOM and synchronous condenser with combined control generates or absorbs reactive power to adjust the grid voltage and maintain system resilience.

Enquiries: [www.hitachienergy.com](http://www.hitachienergy.com)

## Solar on pergolas – an innovative solution

**SolarSaver** has completed an innovative solar installation at the Marriott Hotel Melrose Arch and the African Pride Hotel in the prestigious Melrose Arch precinct. Faced with the challenge of limited available roof space for panel installation, SolarSaver collaborated with Melrose Arch developer, The Amdec Group, to find a solution.

Robust pergola structures designed to carry the load and accommodate the specific size parameters of the panels were built above the roof structure of each hotel.

Commissioned in October 2023, this project shows flexibility and creativity in renewable energy application for urban developments, demonstrating SolarSaver's capability to deliver customised solar energy solutions in complex environments.

Lance Green of SolarSaver says, "We're committed to delivering bespoke solar solutions that cater to our clients' unique needs. By using the purpose-built pergola structures built by Melrose Arch, we've found a practical way to overcome space constraints while retaining the aesthetic appeal of the hotel's outdoor spaces."

With 1 231.80 kWp, the systems installed on the African Pride and Marriott buildings are expected to significantly reduce the operational costs of the hotels by lowering electricity bills and minimising their carbon footprint.

The project aligns with the broader sustainability goals of both the Marriott Hotel Group and the Amdec Group, reinforcing their status as leaders in environmental stewardship within the hospitality and commercial sectors.

Built on sustainable principles and eco-friendly innovation, including refuse recycling, energy-efficient appliances, water-saving devices, a centralised district cooling facility and advanced building management systems, Melrose Arch's innovation in sustainability is widely recognised. Maximising alternative energy forms a critical part of the development's sustainability plans.

The installation at the Marriott Hotel forms part of SolarSaver's impressive portfolio of 16 systems totalling over 3 281.80 kWp within Melrose Arch.

These installations are managed through SolarSaver's distinctive 'rent-to-own' model, where SolarSaver retains ownership and responsibility for the operation and maintenance of the solar PV systems.

Clients like Melrose Arch benefit from this arrangement through a 20-year power purchase agreement (PPA), paying only for the green energy produced.

The successful completion of this project at Melrose Arch is a testament to SolarSaver's innovative approach to overcoming obstacles related to space and aesthetics, further establishing the company as a leader in the renewable energy sector in Southern Africa. "We are proud to contribute to the precinct's renowned sustainability initiatives, further cementing our role in promoting renewable energy adoption across South Africa," says Green.

With grid power prices increasing and load shedding causing major disruption, forward-thinking commercial property developers, landlords and retailers are increasingly turning to solar energy. SolarSaver remains at the forefront of the business shift to solar in Southern Africa, providing innovative, cost-effective, managed energy solutions for over 700 operations to date. Customers include companies in the commercial property, retail, hospitality, tourism, manufacturing and petroleum sectors.

"Growing energy demand, a lack of grid reliability and spiralling costs make energy efficiency and a consistent power supply a real priority as a critical component of overall business profitability," says Green. "With all our available sunshine, South African businesses can easily be on par with the greenest, most energy efficient buildings around the world."

Enquiries: [www.solar-saver.net](http://www.solar-saver.net)

## Advancing solar energy with LEDVANCE Renewables

LEDVANCE, renowned for its innovative lighting solutions, is making significant strides in the renewable energy sector with LEDVANCE Renewables. Globally, this initiative reflects LEDVANCE's commitment to advancing solar energy, driven by a passion for harnessing sunlight to fuel sustainable living.

### A vision for a greener future

LEDVANCE's mission is to bring light into people's lives and contribute to Net Zero goals. By enabling private and business customers to generate their own clean energy, LEDVANCE aims to reduce dependence on traditional energy sources and minimise environmental impact.

This vision is realised through a unique vertically integrated solution for the building sector, encompassing energy supply, storage, usage, and integration with power systems.

### Efficient and sustainable photovoltaic panels

LEDVANCE Renewables offers a range of



photovoltaic panels designed to meet diverse needs, from private households to industrial applications. Customers can choose from power ratings between 405W and 660W, in both monofacial and bifacial constructions, available in various designs. These panels are built to deliver high efficiency and sustainability, making them ideal for any energy requirement.

### Easy to Use

The string and hybrid inverters from LEDVANCE are robust, efficient, and smart, compatible with a variety of photovoltaic system components. They meet all technical and safety standards, ensuring ease of installation, operation, and handling. These inverters are designed to optimise energy conversion and management, enhancing the overall performance of the solar energy system.

### Smart battery storage systems

LEDVANCE's battery storage systems offer reliability and intelligence, with various types available to ensure optimal performance. These batteries can be expanded modularly, accommodating low-voltage batteries from 5.12 to 20.48 kWh and high-voltage batteries from 8.19 to 20.48 kWh. This flexibility allows for tailored energy storage solutions that grow with users' needs.

### Smart control centre

The smart solutions provided by LEDVANCE include a control centre that allows users to manage the entire Renewables photovoltaic system. Through the LEDVANCE app, users can access important data from their energy management system, including status reports on their system, batteries, and inverters.

The app also enables users to monitor electricity prices online and decide the most profitable times to sell electricity back to the grid, maximising the benefits of their photovoltaic system.

### Competent Service

LEDVANCE ensures that the Renewable System is not only high-performing but also easy to install and operate. The company guarantees trouble-free installation, seamless integration, and error-free operation.

LEDVANCE's team of experts is available to provide quick and efficient service, offering advice and assistance to ensure customers have a smooth experience with their renewable energy systems.

With LEDVANCE Renewables, the company stands ready to drive positive change and contribute to a brighter, greener future. For more information on how LEDVANCE can empower your next electrical project, visit their website and explore the innovative solutions that advance both light and solar energy.

Enquiries: [ledvanceza@ledvance.com](mailto:ledvanceza@ledvance.com)



# FUTURE-PROOF SOLUTIONS SUSTAINABLE, SMART, QUALITY LIGHTING

### ARE YOU INTERESTED IN MODERN AND ENERGY-EFFICIENT LED LIGHTING?

LEDVANCE offers smart lighting products that you can control via smartphone or voice, stylish and functional LED luminaires, our trendy Vintage Edition 1906 and state-of-the-art LED lamps. Exciting and sustainable LED lighting individually for your home.



## GILE 2024 praised for driving the development of the lighting industry

The 29<sup>th</sup> edition of the Guangzhou International Lighting Exhibition (GILE) concluded at the China Import and Export Complex in Guangzhou last month.

Running under the theme of "Light – The Power of Infinity" GILE 2024 gathered industry players to explore the diverse applications of light and was met with positive feedback from participants.

Lucia Wong, General Manager of Messe Frankfurt (HK) Ltd, conveyed her gratitude for the unwavering support from the industry towards the event: "In the era of 'Light +', the lighting industry is poised to expand its horizons with an array of new applications. The theme of this year's show, 'Light – The Power of Infinity' symbolises the boundless possibilities of light, encompassing AIoT, optical communication, big data, healthcare, lifestyle, low carbon and new energy solutions, aquaculture, new media arts, extended reality,

and countless other domains."

"It is at events like GILE where this can be made into reality, and the huge number of participants at this year's show along with the incredibly positive feedback we've received proves that we are indeed succeeding in this effort. I would therefore like to extend my heartfelt thanks to the industry for their invaluable contribution in making GILE possible and helping the show to reach new heights."

The 2024 edition of the fair stands as one of its most substantial to date, with 26 halls and 260,000 sqm of exhibition space hosting 3,383 exhibitors from diverse industries.

The next editions of Guangzhou International Lighting Exhibition and Guangzhou Electrical Building Technology will be held from 9 to 12 June 2025.

Messe Frankfurt expanded its portfolio with LightFair at the start of the year. Lightfair



## ACDC Dynamics will be showcasing at Electra Mining Africa

Visitors to Electra Mining 2024 will be able to step into the vibrant world of ACDC Dynamics and immerse themselves in the essence of ingenuity through the exclusive lineup of pillar brands that will be showcased at the event.

From 2 to 6 September ACDC Dynamics aims to showcase the innovation and reliability that define their presence in the South African electrical and lighting industry, and by visiting them at Hall 6, Stand C18, the electrical giant will showcase how its range of products can elevate projects and operations across various sectors.

### Perfect components and lighting

ACDC Dynamics is dedicated to excellence, transcending expectations with robust drives, cutting-edge switchgear, and efficient industrial lighting. ACDC Dynamics products set new standards in performance for the industrial and mining sectors, meticulously crafted to deliver not just functionality but reliability that businesses can depend on. Some of these product families include:

### Palazzoli

Earmarked as the paragon of precision and advancement in electrical engineering, Palazzoli's electrical components ensure unparalleled performance and longevity. Whether in harsh industrial environments or critical infrastructure, Palazzoli's products are engineered to withstand the toughest conditions, guaranteeing safety and efficiency.

### Terasaki

Next in our family is Terasaki, an innovator in circuit breaker technology. Renowned for its revolutionary designs, Terasaki focuses on

protecting electrical systems from overloads and faults. Its products ensure uninterrupted operation, showcasing advanced engineering and a commitment to safety.

### Gewiss

Introducing Gewiss, the brand that integrates technology with elegant design. Offering seamless solutions that redefine functionality in electrical installations, Gewiss products blend style with performance. From smart home systems to advanced lighting solutions, Gewiss ensures that every installation is both efficient and aesthetically pleasing.

### C&S

C&S is known as the expert in manufacturing circuit breakers, switches, industrial plugs, sockets, and automation products. Catering to diverse industrial needs, C&S provides robust and dependable solutions that businesses can trust. Its products enhance operational efficiency and ensure safety across various applications.

### Quadratalia

Quadratalia, the innovator in cable management solutions, optimizes efficiency and organization in electrical installations. Quadratalia's products ensure that cables are managed effectively to prevent hazards and improve accessibility, maintaining orderly and safe environments.

At ACDC Dynamics, these pillar brands symbolise their commitment to quality, innovation, and customer satisfaction. Electra Mining Africa is one more way ACDC Dynamics aims to illuminate visitors' path to success, showcasing their stellar range of products.

Enquiries: [www.acdc.co.za](http://www.acdc.co.za)

is now part of the international network of Light + Building, and it is earmarked as one of the major lighting events taking place next year. The next edition of the architectural and commercial lighting trade fair will take place at the Las Vegas Convention Center from 4 to 8 May 2025.

Enquiries: [www.brand.light-building.com](http://www.brand.light-building.com)

## Apology for errors in the July issue of Sparks Electrical News

In the July issue of *Sparks Electrical News*, we made an error in an article titled "New Philips Hue aimed at enhancing sleep and personalising homes" on page 13. Unfortunately, this article featured products that are not available in South Africa.

Additionally, on page 14, we published an editorial titled "Signify wants the world to use LEDs" that was not approved by Signify in South Africa.

We sincerely regret these mistakes and any confusion or inconvenience they may have caused.

Enquiries: [www.signify.com/en-za](http://www.signify.com/en-za)

### Project completion

- Antley Lights is proud to announce the completion of a 7 x 30 metre high-mast project in the Chief Albert Luthuli Local Municipality, using our Rhino 200W LED Floodlights. Having built a reputation of being a highly dependable supplier of quality products, we were more than up to the task of supplying the fittings and masts to a very short deadline. From start to finish, Antley was there to assist with advice on all technical and designing aspects. Contact Antley Lights for your next project.

027 880 0030  
[www.antley.co.za](http://www.antley.co.za)

Plot 73, Ewelme Rd,  
 Henley-On-Klip, Midvaal,  
 1961



## Decorex Joburg to feature entire hall for lighting and design

Decorex Joburg is set to shine at the Sandton Convention Centre this month. Always a much-anticipated highlight of the décor and design calendar, this event runs simultaneously with 100% Design Africa, making it the definitive showcase of contemporary design on the African continent. Visitors will have the opportunity to experience two shows, plus daily live talks and demonstrations, all for the price of one

entry ticket.

Looking for homeware and interior décor solutions? The Décor, Lighting and Design Hall on Level 5 of the Sandton Convention Centre is where you'll find endless inspiration and the chance to connect with top brands, designers, and artists. Dive into a sensory experience of colour, texture, and light, and discover how these elements can transform your interiors into a haven of

design and elegance.

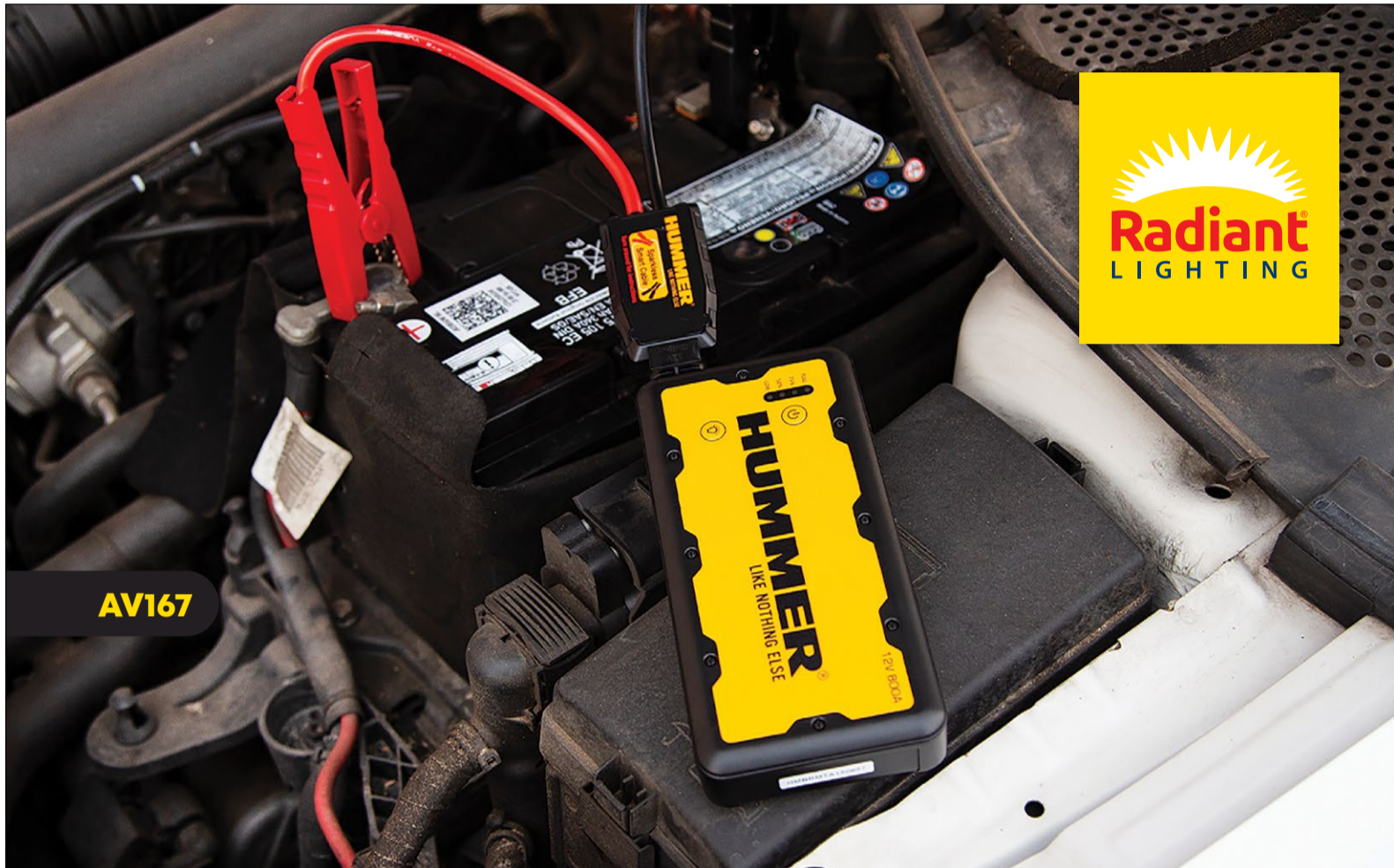
For more lighting innovation the Decorex Smart House will display the latest and highest quality construction elements in a conceptual house installation in the Renovate and Build Hall on Level 2 of the Sandton Convention Centre. Top products and brands have been carefully selected by the Decorex Africa team to present construction elements such as windows,

doors, lighting, floors, surfaces and home automation that will contribute to the overall aesthetic of the house. Another major highlight this year's edition of Decorex Joburg is the focus on African design:

### 100% Design Africa

This curated product showcase includes a stylish café created by Wolkberg Casting Studios, a new set of Future Talks in the Future of Design area, a dedicated display by Designer of the Year Tristan du Plessis, 100% Hospitality by Belgotex X Hesse Kleinloog, and a host of new product launches by local stars such as Joe Paine.

Enquiries: [www.decorex.co.za](http://www.decorex.co.za)



AV167



## BEKA Schröder's retrofit lighting solution along picturesque Kingfisher Drive

Sedgefield is a coastal town on the Garden Route, between George and Knysna, in the Western Cape province of South Africa. When the Knysna Municipality needed an LED lighting solution with high vandal resistance along Kingfisher Drive to replace the 70W HPS installation. BEKA Schröder's VERTICE-R 36W version provided the perfect solution.

Versatile decorative LED post top solution The VERTICE has been designed and manufactured in South Africa, taking the harsh environmental condition of the continent into account, ensuring a long lifetime.

The classic yet modern look of the VERTICE is designed around the efficient light distribution, with effective illumination for various urban areas. This luminaire provides all the benefits of LED technology, such as sustainable energy reduction and improved visual comfort. The VERTICE is designed for easy installation, with virtually no maintenance required and a full 5-year warranty.

The versatility of the VERTICE is in a class of its own as it not only offers a variety of light distributions, but also four different LED engine configurations, providing an aesthetic look and feel to suit your application. Furthermore, Schröder EXEDRA and Schröder ITERRA control options with external surge protection are available.

The optional battery back-up version is the perfect solution for power supply interruptions. It provides up to four hours of back up lighting, and utilizes a fast-charging inverter, hence it charges up in time for the next power supply interruption cycle.

Enquiries: [za.schreder.com/en](http://za.schreder.com/en)



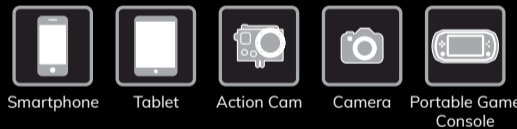
### Jump Starter

Jump Start Vehicles (gas / diesel)



### Power Bank

USB Rapid Charging for Portable Devices



**AV167**  
**H1 POWER BANK**  
15000mAh POWER BANK WITH JUMP STARTER

Up to **20 X** jump starts per charge for engines up to 7.0l gas and diesel



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Up to **10 X** jump starts per charge for engines up to 3.5l gas and 2.0l diesel



**AV743**  
**HX POWER BANK**  
10000mAh POWER BANK WITH JUMP STARTER

Up to **30 X** jump starts per charge for engines up to 8.0l gas and 7.0l diesel



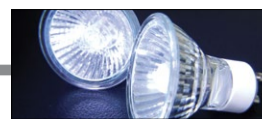
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Up to **60 X** jump starts per charge. Suitable for all 24V & 12V Vehicles

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## Vossloh-Schwabe lights up Guangzhou International Lighting Exhibition (GILE)

From 9 to 12 June, the Vossloh-Schwabe (VS) team participated in the 2024 Guangzhou International Lighting Exhibition (GILE), successfully showcasing the brand's professionalism through various prime segments and acclaimed lighting innovations. The event occupied a total of 26 halls and 260,000 square metres of exhibition space, hosting 3,383 exhibitors from 20 countries.

This event provided VS with a valuable opportunity to strengthen partnerships with existing customers and meet potential clients from around the world, thereby expanding its market presence in Asia.

Colleagues from the offices in Korea, Singapore, Thailand, Taiwan, Hong Kong, Germany, and Zhuhai collaborated in Guangzhou, achieving a positive outcome at the exhibition. Excluding the final day, which was designated for dismantling, over 1,000 people registered on the visiting list during the three exhibition days.

The VS booth, located in Hall 9.2, collaborated with various brands to highlight strengths in intelligent lighting solutions. As a participant in the intelligent lighting exhibition hall, the VS team unreservedly displayed the latest and most advanced intelligent technologies. The "Design Plus Winner" signage hanging on the wall served as powerful evidence of VS's independent research orientation.

Many visitors who were previously unfamiliar with the brand took an interest and spent time learning about our intelligent lighting solutions. Notably, the VS intelligent smart system, Blu2Light, was the most popular, attracting significant interest from visitors. Thanks to the efforts of our PM and Marketing teams, all products showcased were meticulously adjusted to meet local market demands, reflecting trends of efficiency, individualism, and expanded possibilities for the Asian market.

### VS booth continues to impress

The design of the VS booth at the 2024 Guangzhou Fair continued the concept presented in March at Light + Building in Frankfurt. The theme aimed to convey nature and human-friendliness. The final presentation combined real plants, natural wood-coloured furnishings, and a white backdrop to showcase VS's intelligent illumination with an approachable image.

To create an interactive communication environment at the booth, our PM, Marketing, and Sales teams made a great effort in its arrangement. From large structures to small details, everything was constructed with purpose. For instance, a wide coffee bar offered various types of coffee throughout the day, featuring the distinctive VS logo in latte art; and snacks were thoughtfully prepared to reflect our German brand identity.

The VS team not only meticulously prepared the booth facilities but also undertook significant efforts to enhance the visitor experience. On the day before the exhibition officially began, the sales team from around the world gathered and participated in a training session. This training coincided with the Strategic Meeting Asia, aiming to review past experiences and optimise future sales strategies.

During the exhibition, the VS booth was the focus of two major interviews. The first interview was conducted by an Overseas Media Team, mainly targeting an international audience outside China. Joan Presas, the Global Sales Director of VS, represented the brand, providing insights into its history and showcasing special products that highlight the brand's



strengths in international reach, global connections, and customisation. The second interview featured a team of lighting designers who visited the booth on the third day of the exhibition. Paul Peng, the Sales Manager for South China, guided the design team through the intricate details of VS's product designs. This engaging interview was broadcast live, attracting an audience of approximately 2,800 viewers.

Enquiries: [www.vossloh-schwabe.com](http://www.vossloh-schwabe.com)

## The ULTIMATE UFO LED HIGHBAY

Durable, High-Quality, Professionally Designed  
for Industrial and Commercial Use

**6500K**  
DAYLIGHT

**5 YEAR**  
WARRANTY

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**IP65**

Designed to illuminate large-volume areas, these compact UFO highbays provide bright and even lighting. With surge protection and a 5 year warranty, these versatile fittings are perfect for various applications, from school halls and gyms to retail stores and warehouses.

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### LED UFO HIGHBAY 150W - 22500 LUMENS

Die-Cast Aluminium Housing and PC Lens  
150Lm/w | 6KV Surge Protection  
IK Rating: IK08 | PF: 0,95  
Dimensions: 310mm (d) x 90mm (h)



### LED UFO HIGHBAY 200W - 30000 LUMENS

Die-Cast Aluminium Housing and PC Lens  
150Lm/w | 6KV Surge Protection  
IK Rating: IK08 | PF: 0,95  
Dimensions: 345mm (d) x 95mm (h)

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CPT 021 521 2500

[www.radiant.co.za](http://www.radiant.co.za)



## Micro-credentials offer bite-sized skills to boost youth employability

At 45,4%, South Africa's youth unemployment rate dwarfs the national average (32.9%), highlighting the struggle many young people face entering the workforce. While a traditional university degree can increase job prospects, factors like cost, time commitment, and location often make it inaccessible.

"A means to reducing this is through online micro-credentials, which are compact courses certifying specific skills and knowledge that can overcome these barriers by providing young people with access to learning, thereby improving their chances of employability," says Dr Andrew

Dickson, Engineering Executive at CBI-electric: low voltage.

"These could expedite the journey from learning to earning, particularly in sectors where specific industry skills are lacking, such as those required for South Africa's energy transition, and where employers are looking to address talent shortages. Additionally, online micro-credentials could provide older people with opportunities to upskill themselves."

He explains that unlike university degrees with their broad curriculum, micro-credentials focus on specific skills and knowledge, delivered through short, personalised, and often on-demand learning experiences, catering to learners seeking

flexible and affordable learning opportunities.

"A quick skills upgrade in a specific area can enable learners to develop competencies that are in-demand, potentially making them stronger candidates in today's competitive job market."

"Along with being a more cost-effective way to upskill in a shorter time, micro-credentials can be stacked to create a unique skills-based CV showcasing a candidate's evolving skillset," adds Dr Dickson.

"Stacking micro-credentials allows learners to progressively build their proficiencies, keeping them relevant in a changing job market. These portable skills empower them to consider lateral career moves and demonstrate their current capabilities to potential employers."

South Africa faces a R1.6 trillion loss in unrealised economic potential due to the skills gap. "Micro-credentials offer a solution for employers seeking to bridge this gap and nurture talent," he shares.

"By offering micro-credential opportunities, companies can attract individuals invested in continuous learning and retain valuable employees. This ongoing development allows employees to gain niche skills quickly, enabling them to adapt within the company and contribute to overall productivity.

"Unfortunately, micro-credentials are still viewed as non-credit bearing in South Africa, yet policies are slowly being introduced to recognise their value. While formal recognition is underway, there's an opportunity for businesses across the board to take the lead. Our young people are the key lever in growing our economy, but it is our collective responsibility to give them the tools to do this. By empowering our youth with micro-credentials, we can enable them to adapt to the ever-changing business environment and unlock their potential. In doing so, we pave the way for a brighter economic future for all," concludes Dr Dickson.

Enquiries: [www.cbi-lowvoltage.co.za](http://www.cbi-lowvoltage.co.za)

### SEPTEMBER 2024 FEATURES

- DBs, switches, sockets and protection
- Industry 4.0 and Automation
- Lighting

### OCTOBER 2024 FEATURES

- MCCs and motor protection
- Energy measurement and supply
- Lighting

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**VS LIGHTING SOLUTIONS**

WE THINK **LIGHT** FOR YOU

# BRAVE

## Modular built-in LED engine for outdoor applications with glass



Single (12 LEDs)

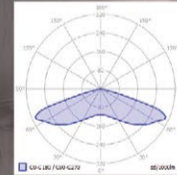
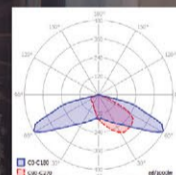
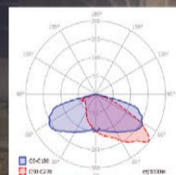


Double (24 LEDs)

Highly efficiency: Up to 152 lm/W

Degree of protection: IP66

Colour temperatures: 2200K - 5000K



Energy Efficiency  
Safety  
Preserved Aesthetics  
Easy Installation  
Configurable product  
Sustainable product

### Typical applications:

Integration in luminaires  
Street lighting  
Public parks, squares & public areas  
Flood lighting  
Industrial lighting for production halls & warehouses

Be one step forward...  
Be green...  
Be BRAVE

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