

## ENGINEERING CONFIDENCE: ACDC DYNAMICS PANEL WORKSHOP SETS NEW BENCHMARK FOR CUSTOM SOLUTIONS



CONTINUED ON PAGE 3

### WE BUILD PANELS

Electrical panels are the control centre of a building, receiving power from the grid and distributing it efficiently to individual circuits for lighting, machinery, and essential operations.



THINK ELECTRICAL

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

In an environment where precision, reliability, and compliance are critical, ACDC Dynamics leads with engineering excellence. Its dedicated panel workshop has become a trusted partner in delivering turnkey, custom-built panel solutions for industrial, commercial, and utility clients across South Africa and internationally.

Over the past year, the panel workshop has completed several high-profile builds that showcase ACDC Dynamics's technical capability and manufacturing scale. The following projects illustrate the depth of its capability and expertise...

One standout project was a 400 VAC, 4,000 A main distribution board for a biogas facility in Limpopo. Built to IEC 61439 standards, the board meets strict requirements for temperature rise, dielectric strength, and a short-circuit fault rating of 65 kA. It features modular construction, a heavy-duty busbar support system, arc flash mitigation, and Form-3b separation with integrated metering for real-time power quality monitoring.

Another flagship build was a 2,500 A, 50 kA low-voltage switchboard for an industrial refrigeration plant. This panel featured advanced protection relays, power factor correction (PFC) equipment, and an automatic transfer switch (ATS) to ensure uninterrupted power supply during grid fluctuations. Thermal management, control gear, and component layout were carefully engineered using ACDC Dynamics's own CAD modelling capabilities. This allowed for precise planning and efficient heat dissipation. The panel then underwent rigorous in-house testing to ensure full compliance with both SANS standards and client specifications.

ACDC Dynamics also recently completed a 1,600 A motor control centre (MCC) for a mining client. Featuring variable speed drives (VSD), direct online (DOL) starters, soft-starters (S-S), and programmable logic controller (PLC) integration, the MCC uses fully withdrawable modules for operational flexibility and maintenance safety. It was thoroughly tested to guarantee performance under harsh environmental conditions.

Each project reflects the workshop's ability to exceed client expectations. Every panel is manufactured and tested under strict quality control to meet both design requirements and compliance standards. ACDC Dynamics's qualified team of wiremen, technicians, and engineers work collaboratively to deliver robust, tailored solutions.

In parallel, its transformer workshop continues to

deliver exceptional results.

ACDC Dynamics offers a wide range of standard and custom-built transformers. Starting from PCB transformers (1.5 VA to 40 VA) through to bespoke printed PCB designs, its team is equipped to meet even the most specific requirements.

If you need to step down voltage for a compact project or a larger installation, it offers a versatile range of transformers and power supplies to suit your needs. ACDC Dynamics's power supply units range from 10 VA to 25 VA for low-voltage equipment, while its direct current transformers span from 50 VA to 1,500 VA, delivering up to 525 VAC and 110 VDC.

It also supplies air-cooled, dry-type power transformers up to 1,000 VAC, and stocks single-phase transformers from 10 VA to 50,000 VA. Custom tapping is available, and ACDC Dynamics's technical team is ready to assist with expert advice and specialised voltage solutions.

## TRIO COMBOS

Your first step to long-term energy independence.

6 X 455W Canadian Solar Panels +  
1 X 5KW Luxpower Solar Inverter +  
1 X Greenrich 1.5C Lithium Battery U-P5000

6 X 455W Canadian Solar Panels +  
1 X 5KW Luxpower Solar Inverter +  
1 X Greenrich 1.5C Lithium Battery WM5000

6 X 455W Canadian Solar Panels +  
1 X 5KW Luxpower Solar Inverter +  
1 X Greenrich 1.5C Lithium Battery U-P6100

6 X 455W Canadian Solar Panels +  
1 X 5KW Luxpower Solar Inverter +  
1 X HINAESS HI-5 1C BATTERY LFP

Terms & Conditions Apply. While Stock Lasts.

SHOP NOW ONLINE | IN-STORE  
[WWW.VOLTEx.CO.ZA](http://WWW.VOLTEx.CO.ZA)



## Driving performance and efficiency with MCCs and smart motor protection

As industries in South Africa advance toward energy and operational efficiency, the importance of reliable motor control and protection solutions has never been more evident. Voltex understands that Motor Control Centres (MCCs) and intelligent motor protection systems form the backbone of efficient, sustainable operations across a wide range of applications.

MCCs are centralised systems that manage the operation of multiple electric motors through a single, organised enclosure. Typically housing starters, contactors, circuit breakers, metering equipment, and programmable devices, MCCs offer a modular and scalable architecture. This means easy installation, minimal downtime during maintenance, and the ability to expand as operational demands evolve,

making them a vital component in any industrial setting.

However, the benefits of an MCC are only maximised when paired with effective motor protection. Traditional thermal overloads are being replaced or complemented by advanced digital solutions, such as smart relays and variable frequency drives (VFDs). These devices provide real-time monitoring, early fault detection, and diagnostic data,



# Your Way of Lighting

**voltex**<sup>®</sup>  
your electrical connection<sup>®</sup>

Voltex supplies a wide range of residential, commercial and industrial light fittings, lamps and accessories.



Mesmerize Cooper  
Ropelight 10W



Mesmerize Nero LED Track  
Spot 35W White/Black



Mesmerize Lamp  
5.5W LED GU10



Waco Criss Cross Ceiling  
Light 2x60W E27



Mesmerize Connector for  
220V Cooper Tape Light



K.Light Ring Table  
Lamp LED 12W



Bright Star Pendant 1x32W LED Metal and  
Plastic with Remote Control Grey



Genstar Tube LED T8 22W

allowing engineers to respond proactively to potential issues before they escalate into failures.

Motor protection is no longer just about safety – it's also about performance and sustainability. Overheating, voltage imbalances, phase loss, and inrush currents can significantly reduce motor lifespan and lead to costly downtime. Modern protection technologies help mitigate these risks while ensuring motors operate at peak efficiency.

This brings us to another key consideration: energy efficiency. In today's high-cost energy environment, every kilowatt counts. Smart MCC systems and motor protection devices are designed not only to control and protect but also to optimise energy use. By regulating motor loads and enabling condition-based maintenance, businesses can significantly reduce unnecessary power consumption and avoid waste.

Voltex is committed to helping its customers meet these challenges head-on. The company offers a comprehensive selection of MCCs and motor protection devices from leading local and international manufacturers. Whether implementing a new system or upgrading existing infrastructure, Voltex's solutions are engineered to deliver enhanced safety, extended equipment lifespan, and measurable energy savings.

"Energy and operational efficiency are no longer optional; they're essential for long-term sustainability and competitiveness," the company said. "Partner with Voltex to access the technologies and expertise that drive smarter, safer, and more energy-efficient motor operations."

Enquiries: <https://www.voltex.co.za/>



SHOP NOW  
ONLINE | IN-STORE  
[WWW.VOLTEx.CO.ZA](http://WWW.VOLTEx.CO.ZA)





## A reason for optimism this month



Ilana Koegelenberg

With so much negative news surrounding our country's depressing unemployment rate, it's refreshing when hope appears on the horizon. For that, I have to thank the Institute of Energy Professionals Africa (IEPA).

Youth employment rates in South Africa are particularly bleak, even for graduates. A degree no longer guarantees employment, and each year, universities produce more hopefuls destined to endlessly revise their CVs and reapply for the same small pool of available jobs, hoping to win the employment lottery.

This should come as no surprise to anyone reading this. We know youth unemployment in South Africa sits at a dismal 38%, with those aged 15-24 particularly affected. That's why the recent demonstration day at IEPA's training facility in Johannesburg left me feeling considerably more hopeful about our

future and the difference our industry can make in job creation.

IEPA's pilot Energy Performance Certificate programme is creating jobs and opportunities for learners while tackling the country's mounting energy crisis. With fewer than 270 energy services companies currently operating in South Africa, IEPA estimates the country needs around 5,000 such companies to meet demand. That's where the opportunity lies – not only in sustainable job creation, though, but also in improving energy efficiency and reducing demand.

This approach also sidesteps the mounting global problem of solar panel waste, as panels avoided today won't need disposal in landfills 15 years from now when they reach the end of their life cycle. Read more about IEPA and its partners' work on page 6.

In this edition, we also examine the risk of installing solar without issuing proper certificates of compliance (COCs). Read Joe Sanzul's contributed article on page 4, where he explores this issue and discusses how South Africa's electrical licensing gap poses a threat to the safety of the local solar industry.

On page 11, Revov discusses how the country stands on the precipice of another self-induced energy crisis, with rooftop solar and battery backup systems failing. Then, on page 12, Pratley shares a simple guide to understanding the importance of IP ratings.

In our Lighting section, we preview the upcoming Illumination Engineering Society of South Africa (IESSA) conference this month (page 13), examine how Aurora Lighting Africa's purpose-driven LED solutions are transforming project outcomes across sectors (page 13), and showcase Eurolux's ceiling light range (page 14).

What are you, or your company, doing to make a difference? Let me know – I'm always delighted to hear from readers.

For now, happy reading. Stay warm out there.

*Ilana Koegelenberg*

sparks@crowm.co.za

CONTINUED FROM PAGE 1

## Engineering confidence: ACDC Dynamics panel workshop sets new benchmark for custom solutions

For larger applications, it offers three-phase transformers from 100 VA to 100 KVA, with various connection types and voltage. If a standard option won't do, ACDC can build to your exact needs using quality materials and trusted engineering practices.

"No matter the application, our solutions are built for performance, compliance, and long-term reliability," said Mario Maio, CEO of ACDC Dynamics.

"Together, our panel and transformer

workshops form an integrated solutions hub," Maio said. "We are capable of delivering end-to-end electrical solutions with technical assurance and reduced lead times."

For custom-built control panels, MCCs, switchboards, or transformer solutions, contact the ACDC Dynamics panel workshop.

"Think Panels. Think Electrical."

Enquiries: panels@acdc.co.za



## GoodApp named Start-Up of the Year

In May, GoodApp, a South African-born home services platform, was named "Start-Up of the Year" at the prestigious Intelligent ICT Awards, an honour that recognises technical achievement and affirms the growing momentum behind purpose-driven African innovation.

Founded with a bold vision to reimagine how communities access essential services, GoodApp is quickly becoming a case study in what's possible when local talent meets global ambition. More than just a service marketplace, it is a digital infrastructure layer that connects customers with vetted professionals ranging from electricians and plumbers to handymen and more, all with the tap of a button.

At the helm of the company's technological evolution is Prakhar Srivastava, chief executive officer, whose product leadership has enabled the platform to scale rapidly across South Africa's urban hubs.

"We believe technology should be transformational, not just functional," says Srivastava. "GoodApp was created to remove friction from everyday life and unlock opportunity for both users and service providers."

The team's journey from a bootstrapped concept to an award-winning platform underscores the broader need for more investment in African tech ecosystems. While recognition is valuable, Srivastava

emphasises that startups need more than applause; they need capital, infrastructure, mentorship, and regulatory environments that allow innovation to thrive.

Across the continent, a new generation of techpreneurs is building solutions that are locally grounded yet globally scalable. African founders are no longer just responding to problems; they're anticipating them.

"It takes an ecosystem," notes Srivastava. "Investors, regulators, customers, and collaborators must come together with a shared belief that tech is not just an industry, but a vehicle for inclusive growth."

GoodApp's rise is a testament to that philosophy. Its platform prioritises trust, quality, and community upliftment, with every service provider undergoing rigorous vetting, background checks, and performance monitoring. Srivastava concludes: "As African digital economies continue to expand, platforms like GoodApp show what's possible when ambition meets support – and when startups are given the resources to scale. Because the next global tech success story won't just come from Silicon Valley. It will come from Soweto, Nairobi, Lagos, or Khayelitsha. And when it does, it will be because someone chose to back an idea that mattered."

Enquiries: <https://goodapp.co.za/>

## Landmark electricity expo coming to Joburg this month



Electricity Expo Africa 2025 will be hosted at the Johannesburg Expo Centre from 19 to 21 August 2025. This inaugural, installer-led event aims to become the premier platform for industry professionals, innovators, and stakeholders to showcase and explore cutting-edge solutions tackling Africa's most pressing energy challenges.

Organised by the Electrical Contractors Association (SA) and the South African Electrical Workers Association (SAEWA), and endorsed by the National Bargaining Council for the Electrical Industry (NBCEI), the expo underscores a collaborative effort to drive sustainable energy solutions across the continent.

The three-day event will spotlight the latest advancements in electrical technologies, renewable energy, smart grids, and clean power generation.

"Electricity is the pulse of Africa's

future. It is the engine of innovation, development, and prosperity," says Jimmy Turner, chairperson of Electricity Expo Africa. "This expo goes beyond being an exhibition. It is a call to action to help transform Africa's energy landscape."

### Who should attend

Installers, EPC contractors, manufacturers, innovators, government officials, NGOs, technology providers, academics, and anyone committed to Africa's energy future should attend this event.

"We will gather and network for three days, but the impact will last long after the expo is packed away. From students to manufacturers, from startups to policymakers, Electricity Expo Africa delivers value across the ecosystem," concludes Turner.

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



## South Africa's electrical licensing gap threatens solar industry safety

By: Joe Sanzul of Lewis & de Kroon Consulting Engineers

South Africa's electrical compliance system is failing to keep pace with the solar boom, creating legal and safety risks that could invalidate insurance claims.

In this article, we'll unpack what it means to be a qualified registered electrician in South Africa and how to make sure you are not putting yourself – or others – at risk.

But before proceeding with this article, we need to remind ourselves that the cornerstone of the electrical industry in South Africa is the South African National Standard (SANS) 10142-1. This local safety standard, enshrined in the laws of South Africa, requires that every electrical installation (in every homeowner's, business, and government building) shall have a legally issued Certificate of Compliance (COC). This COC document may only be issued by a qualified registered electrician, and this is where the problems start.

Very few laymen or even professionals, such as doctors, scientists, lawyers, or accountants, have a clear understanding of what a COC should look like or what tests should be carried out before this legally binding document can be issued; it has been reduced to a commodity that can be bought and sold.

Before continuing, let us again remind everyone that there needs to be a COC for every distribution board (DB). Keep this in mind as we will refer to it later.

### The minimum requirements

Let's take a step back and look at the South African Education system. It consists of three major parallel education systems (there are others too), namely the:

- University-issued BSc degree;
- Technicon-issued BTech degree; and

- Technical and Vocational Education and Training (TVET)-issued National Technical Certificate (NTC).

By pursuing further studies and submitting proof of academic success, a person can easily advance to "the upper levels" of education, but that is not the focus of this article.

But where does an electrician come in, and how do they get their certification? Every candidate electrician needs to have, as a minimum, a N3-level NTC, obtained by completing courses at a technical college.

They also need to complete a four- to five-year apprenticeship, in addition to completing an exam on the SAN10142-1 standards.

The candidate electrician submits all this proof to the Department of Labour, which will then issue an electrical license to the now-qualified electrician. And herein lies the challenge...

There is no public way to check who has been issued an electrical licence to practise legally as an electrician.

Also, and key to this whole problem, is the issue of "who is checking the checkers?"

Historically, there used to be electrical inspectors who were employed by the government and would come and check on the "status" of the work being performed. For reasons unknown to this author, this process fell away. The electricians of the day were petrified of these inspectors, as they could invalidate their electrical installations.

### A safety concern

So, your electrician has issued you with a COC. Has he done the safety checks, or (as is often the case today) is he simply an "armchair electrician" who sits at home and signs legal documents without ever having been to the job or having actually seen the

work performed? This is very dangerous because a fault could cause a fire, or worse – kill someone.

### What about the solar industry?

This challenge also extends to the solar industry. Usually, the solar installer has installed only the solar but has not worked on the rest of the electrical installation, and it is not within their "frame of reference to check the rest of the installation, as is often heard on site.

Now, the installer has worked on your main DB in the house and has installed another DB by the inverter but has only issued you with one COC. This is wrong as you need at least two COCs in this instance. One for the new DB that is at the inverter, and one where the installer connected to your existing DB. This is a huge challenge and many of the "fly-by-nights" and corporate companies simply ignore this requirement.

The installation of a solar system encompasses a range of specialised disciplines, from structural engineering to lightning protection engineering to electrical engineering. However, some players in the solar industry aim to commoditise the installation of equipment at the lowest possible price, without acknowledging the significant role that properly qualified and registered professionals play.

### What should be done

The national government has proven itself incapable of keeping pace with the rapid technological change. It is time for private industry to step up and create its own set of regulations. The most significant driver of this will be the Insurance industry. There is currently an attempt to do this, and some private institutions have started emerging, but no one is obligated to use the members

of these institutions, and they currently lack legislative authority.

The author wants to advise you to make sure you have received a correctly filled-in COC for every DB that the solar company has worked on – that is the law. Furthermore, ensure that you obtain a copy of the electrician's license, along with a copy of their ID, and make it a condition of the contract to get that information before the solar installation even starts.

Be very aware that if the name signed on the COC does not match the name of the person who performed the work, there is something wrong, and in the worst possible outcome, your insurance company may invalidate your claim.

### \*About the author

Joe Sanzul is a registered Pr. Techni. Eng. He studied Electrical Engineering at the old Cape Technicon, after which he spent 20 years in the UPS industry (working with DC from 48 V DC at 100 A to 800 V DC at 100 A). In 2002, Joe joined a private electrical consulting company where he still works today, designing electrical systems for a range of projects, including hospitals, schools, retirement homes, and shopping centres.



## New staff joining the Antley Lights team

Antley Lights, a professional design service for every lighting requirement, has appointed two new team members.

Clive Long has joined as Antley's new technical manager, while Selo Senoko is the new sales representative on the team.

Enquiries: <https://antley.co.za/>



Clive Long, technical manager.



Selo Senoko, sales representative.



## STEMulator.org tackles local STEM crisis

South Africa is facing a national crisis: a growing shortage of science, technology, engineering and mathematics (STEM) professionals and practitioners. In response, STEMulator.org, a groundbreaking, free, online platform, is stepping up to transform how young learners experience maths and science, and to reignite passion for STEM subjects, study fields and careers.

Born from the vision of the National

Science and Technology Forum of South Africa (NSTF), the STEMulator encourages children of all ages to pursue STEM-related subjects and careers. It is designed to operate on several platforms and devices to reach even the most remote areas – and the most sophisticated.

Packed with vibrant visuals, revealing animations, and informative diagrams, STEMulator.org is not just another educational tool; it's a dynamic, immersive, virtual landscape where learners can explore, discover, learn, and uncover the hidden world of STEM using its simple, unique visual

navigation system.

Launched as a gift to the youth of SA, STEMulator.org is designed to engage learners where they are – curious, digitally engaged, and eager to learn – and prepare them for making life-changing subject choices that could define their futures.

"The future of our country depends on a skilled, STEM-literate generation," said NSTF. "With your help, we can inspire tomorrow's scientists, engineers, technologists, innovators, and problem-solvers – today."

Enquiries: [www.stemulator.org](http://www.stemulator.org)



**Flash LED Backlit Panel Light**  
40W · 3000 lumen · 6000K Daylight  
600mm x 600mm · Aluminium, PC

**R251,90**



**Flash LED A60 Lamp**  
9W · 945 lumen · 105 lm/W  
220° Beam Angle · E27 / B22

**R11,99**



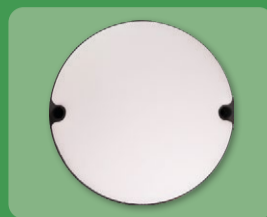
**Flash 5ft LED Battens**  
45W · 1500mm · 6000K Daylight  
1 Year Guarantee

**R85,25**



**100W Flash LED Floodlight**  
7500lm · 120° Beam Angle · Outdoor IP65  
6000K Daylight · 4kV Surge Protection

**R329,00**



**Flash LED Bulkhead**  
15W · 1125lm · 6500K Daylight  
205mm · Outdoor IP65

**R149,50**

**Lifestyle Mica Home Warehouse Polokwane**  
Cnr Landros Marais and Market Street,  
**Polokwane, Limpopo**, T: 015 297-1590

**Lighthouse Mica**  
Cnr Jorissen and Church Streets, **Polokwane, Limpopo**, T: 015 295-9901/4

**Heqlen Mega Mica**  
89 Sealen Road, **Phalaborwa, Limpopo**,  
T: 015 781-3691

**Xpress Mica Build Paledi**  
On R71 (Next to Paledi Mall Robot), Mankweng,  
**Paledi, Limpopo**, T: 078 644-1111

**Eazy Build Mica**  
36 Scheepers Street, **Hendrina, Limpopo**,  
T: 013 293-0029

**Central Mica Hardware**  
Vallyland Shopping Centre, Recreation Road,  
**Fishhoek, Western Cape**, T: 021 782-1131

**Xpress Mica Build**  
242 Main Road, 1/3 Milner Street, Strand,  
**Cape Town, Western Cape**, T: 021 854-1640

**Kendal Mica**  
Shop 31, Cristy Corner, New Kendal Road, **Diep River, Western Cape**, T: 027 718-1878

**Millside Mica Paint & Hardware**  
Unit B2, Millside Park, 1 Old Mill Road, Ndabeni,  
**Cape Town, Western Cape**, T: 021 493-7400

**Paarl Mica**  
395 Main Road, **Paarl, Western Cape**,  
T: 021 871-1929

**Reid's Mica**  
28 Retief Street, **Ceres, Western Cape**,  
T: 023 312-1053

**Spiro's Mega Mica**  
31 Main Road, **Durbanville, Western Cape**,  
T: 021 976-3110

**Woodlands Mica**  
194 Imam Haron Road, **Claremont, Western Cape**, T: 021 683-7821

**Dick And Allsop Mica**  
43 Church Street, **Wellington, Western Cape**, T: 021 873-1051

**Jadas Mica Build**  
Cnr Elias Motsoaledi Road & Main Reef Road,  
Dobsonville, **Soweto, Gauteng**, T: 010 065-0953

**Three Rivers Mica**  
94 General Hertzog Road, Three Rivers,  
**Vereeniging, Gauteng**, T: 016 004-0110

**Ridge Mica**  
Cnr Cliff and Muskejaat Street, Waterkloof Ridge,  
Extension 2, **Pretoria, Gauteng**, T: 012 347-4748

**Morningside Mica**  
127 11th Street, **Parkmore, Gauteng**,  
T: 011 783-1917 / 011 783-6220

**Middelburg Mica**  
18 Laver Street, **Middelburg, Gauteng**,  
T: 013 590-0670

**Meyerspark Mica**  
13 Ahleen Centre, 134 Margaritha Street,  
**Meyerspark, Gauteng**, T: 012 065-0139

**Meyerton Mica Hardware**  
22 Loch Street, **Meyerton, Gauteng**,  
T: 016 362-0322

**Parkrand Mica**  
Shop 24 Park Rand Piazza, 44 Van Wyk Louw Drive,  
**Boksburg East, Gauteng**, T: 011 913-1488

**Celtis Ridge Mica**  
Shop 20 Celtisridge Shopping Centre, Cnr Ruimte  
and Seedcracker Street, **Celtisdal, Gauteng**,  
T: 012 656-0509

**Hekpoort Mica**  
100 Main Road, **Hekpoort, Gauteng**,  
T: 014 576 2383

**Centurion Mica**  
Shop 63 Doringkloof Mall, Botha Ave,  
Cnr Aster and Protea Streets, Doringkloof,  
**Centurion, Gauteng**, T: 012 944-8666

**Petit Mica**  
Corner Orchards Street & Pretoria Road, Fairleads,  
**Benoni, Gauteng**, T: 010 591-3990

**Lifestyle Mica**  
Cnr Beyers Naude Drive and Ysterhout Avenue,  
**Randpark Ridge, Gauteng**, T: 011 792-5616

**Lenasia Mega Mica**  
Shop 4, Signet Terrace, Robin Ave, **Lenasia, Gauteng**, T: 011 852-0797

**Avant Mica Paint Centre**  
Broederstroom Shopping Centre,  
Church Street, **West Broederstroom, Gauteng**, T: 082 753-8860

**Morning Glen Mica**  
Shop 39, Morning Glen Mally Bowling Ave,  
Gallo Manor, **Sandton, Gauteng**,  
T: 010 880-7210

**Mica Lenasia**  
R558 Unit 4, **Lenasia, Gauteng**, T: 011 857-1033

**Jayen Mica**  
Primrose Rd, Primrose, **Germiston, Gauteng**, T: 011 852-0797

**Benoni Mega Mica**  
69 Elston Avenue, **Benoni, Gauteng**,  
T: 011 845-2986

**WG Mica**  
4 Zeiler Street, **Queenstown, KwaZulu-Natal**, T: 045 839-3611

**Roy's Mica Paint and Hardware**  
Shop 1 Home Centre, 18 Biyela Street, **Empangeni, KwaZulu-Natal**, T: 035 772-7760/9

**Parlock Mica**  
771 Inanda Road, **Parlock, KwaZulu-Natal**, T: 031 574-5100

**Estcourt Mica**  
104 Connor Street, **Estcourt, KwaZulu-Natal**, T: 036 352-1165/71

**Durban North Mica**  
Shop 16 Arcadia Centre, 87 Umhlanga  
Rocks Drive, **Durban North, KwaZulu-Natal**,  
T: 031 563-6766

**Ace Mica Dundee**  
52 Smith Street, **Dundee, KwaZulu-Natal**,  
T: 034 212-1379 / 034 212-1615

**BBS Mica Ballito**  
Shop 18A Lifestyle Centre, Douglas Crowe Road,  
**Ballito, KwaZulu-Natal**, T: 032 946-8400

**BBS Mica Build Richards Bay**  
14 Dollar Drive, **Richards Bay, KwaZulu-Natal**, T: 035 789-7645

**BBS Mica Build Eshowe**  
37 Osborne Road, **Eshowe, KwaZulu-Natal**, T: 032 946-2014

**BBS Mica Build**  
Erf 3737, 10 Moffat Drive, Ballito Business Park,  
**Ballito, KwaZulu-Natal**,  
T: 032 946-2014

**Spargo Mica Hardware**  
Sasolburg Boulevard, President Fouche Road,  
**Sasolburg, Free State**, T: 016 976-1981

**Parys Mica Paint & Hardware**  
Corner Loop and Phillip Street, **Parys, Free State**, T: 056 811-5070/1

**Honolulu Mica Build**  
13 Van Riebeeck Street, **Springbok, Free State**, T: 027-718-1878

**Piet Retief Mica**  
34A Market Street, **Piet Retief, Free State**, T: 017 826-0799

**Riverside Mega Mica**  
Cnr Frikkie Meyer and Chopin Street, Riverside,  
**Vanderbijlpark, Mpumalanga**,  
T: 016 932-3131

**Eazy Build Mica**  
36 Scheepers Street, **Hendrina, Mpumalanga**, T: 013 293-0029

**Barberton Mica Build**  
13 Crown Street, **Barberton, Mpumalanga**,  
T: 013 712-2626

**Oranje Mica**  
10 Scott Street, **Upington, Northern Cape**, T: 054-332-5010

# MICA EXCLUSIVE OFFER!

## Don't miss out on these unbeatable deals from Flash

Available for a limited time only at selected Mica locations.

\* All prices displayed are only recommended retail prices & are inclusive of VAT.  
Offer expires 31 August 2025 · Product info & image may vary · While Stocks Last

Let us show you how.

## How SA's energy skills revolution is creating jobs – and hope

By: Ilana Koegelenberg

A recent visit to the Institute of Energy Professionals Africa (IEPA) revealed the transformative power of youth-focused training programmes in tackling unemployment while addressing the country's energy challenges.

In a modest training facility in Johannesburg, something remarkable is happening. Young South Africans who once faced bleak employment prospects are now becoming certified energy auditors, signing off on building performance certificates, and finding meaningful work in a sector that barely existed for them just a few years ago.

To showcase this remarkable transformation, IEPA hosted a significant gathering on 18 June that brought together senior government officials, international development partners, and industry stakeholders to witness firsthand the tangible impact of their energy efficiency training programmes.

Following the formal presentations on the day, attendees were treated to a guided tour of IEPA's facilities, designed to showcase student involvement and hands-on experience with energy efficiency equipment and techniques. What emerged was a compelling story of how targeted skills development can simultaneously address South Africa's twin crises of youth unemployment and energy constraints.

### From uncertainty to employment

The national statistics paint a sobering picture: youth unemployment in South Africa sits at 38%, with those aged 15-24 particularly affected. Yet at IEPA's demonstration day, the narrative was decidedly different. Of 50 learners who completed their pilot Energy Performance Certificate (EPC) programme, 64% are now employed, while another 8% are pursuing further studies.

"I didn't think that you could take energy and make it a career," testified Beauty Tau at the event, a student from Nkangala College in Mpumalanga studying the EPC Practitioner programme. Her sentiment reflects a broader shift in awareness about opportunities within the energy efficiency sector.

Tonic Nemathithi, now employed as an energy auditor with Energy Cost Savers, echoed this transformation in his heartwarming testimonial. Having switched from mechanical engineering studies, he credited the programme not just with technical skills but with crucial "social skills" needed when working across different sites and provinces, communicating with employees to extract information that is vital for energy reports.

### The EPC Revolution

At the heart of this success story lies South Africa's new EPC regulation, which requires certain buildings to undergo energy audits. IEPA's executive director, Yolanda de Lange, painted the scale of opportunity: 250,000 buildings need EPCs, creating a market worth approximately R5 billion every five years for just four of the 16 building categories.

"This regulation creates jobs together with supporting energy efficiency," de Lange explained to the gathered officials. With the first compliance deadline set for 7 December 2025, there's mounting urgency to train qualified professionals. With fewer than 270 energy services companies currently operating in South Africa, she estimates the country needs around 5,000 such companies to meet demand.

The institute has been working strategically to address this gap, inviting electrical contracting companies into their programmes and training electricians who become indispensable to their employers. De Lange explained how, when projects conclude, employers often recognise they cannot afford to lose these newly skilled workers, asking them where they think they're going and acknowledging that only the trained electricians truly understand the energy efficiency systems. This dynamic effectively allows participants to create their own job security within existing companies.

### Partnership-driven success

The programme's success stems from a carefully

orchestrated partnership model. The Energy and Water Sector Education and Training Authority (EWSETA) provides foundational funding and oversight, while international partners, such as the German International Cooperation (GIZ), the United Nations Development Programme (UNDP), and the Swiss State Secretariat for Economic Affairs (SECO), support with infrastructure and technical funding.

At the event, Robyn Vilakazi, skills delivery and quality assurance executive at EWSETA, emphasised the long-term vision behind these investments: "It's really an investment in our future, in our country's future." This perspective reflects the programme's focus on building sustainable capacity rather than simply achieving short-term training targets.

At the event, Mpho Mookapele, CEO of EWSETA, reflected on this collaborative approach: "Skills development is not a desktop exercise. It's not the receiving of the service level agreement from DHET and running with it so that at the end of the year, we submit 100% attendance, but we can't tell a story."

Mookapele was frank about the broader challenge facing South Africa: "Economic growth in our country is on its knees, and the biggest challenge is the number of people that we train that are unemployed." This stark assessment underscores why programmes like IEPA's, with their focus on employment outcomes rather than just training numbers, represent such a crucial shift in approach.

The European Union's recent commitment of an additional €15 million to GIZ's Career Path Development for Employment project signals strong international confidence in this model. Kirsten Freimann, project director for GIZ's Just Transition programme, emphasised their focus on "skills development for employment" rather than training for its own sake.

### Beyond individual success

The ripple effects extend far beyond individual employment outcomes. Agenda Khoza, a lecturer who underwent the programme, described becoming not just an educator but "a mentor in the energy efficiency field". Her experience training other Technical and Vocational Education and Training (TVET) college lecturers demonstrates how the programme builds systemic capacity across South Africa's education infrastructure.

This systemic approach addresses a critical challenge identified by all partners: the need to strengthen public TVET colleges. Rather than allowing private providers to dominate the market, the programme deliberately builds capacity within public institutions to ensure long-term sustainability and accessibility.

### The bigger picture

The energy efficiency focus serves a dual purpose. Whilst creating employment opportunities, these skills directly address South Africa's energy constraints. De Lange illustrated the potential impact: if 250,000 buildings each reduced their energy demand by 30% through efficiency measures, "we will avoid building a power station of 400 megawatts" whilst saving the equivalent of 1.25 million solar panels. This approach also sidesteps the mounting global problem of solar panel waste, as panels avoided today won't need to be disposed of in landfills 15 years from now when they reach the end of their life cycle.

This approach of "demand-side management" – becoming more efficient with existing energy rather than simply generating more – represents a pragmatic solution to South Africa's energy challenges, whilst creating sustainable employment.

### Government recognition

Mabuza Ngubane, chief director for SETA Coordination at DHET, recognised the programme's alignment with national priorities. Speaking about the shift from access-focused to impact-focused skills development, he noted that programmes like this demonstrate tangible results beyond mere participation numbers.

"In an ever-changing environment, we must adapt to change so that we remain relevant and be responsive to the needs of the labour market," Ngubane observed, highlighting the programme's responsiveness to both employment needs and economic challenges.



### Looking forward

IEPA's success story offers a blueprint for addressing multiple challenges simultaneously. By focusing on practical, industry-aligned training with strong work placement components, the programme creates a pipeline of skilled professionals ready to meet real market demand.

The institute's 100% female workforce and strong focus on gender inclusion (targeting 70% female participation) also addresses broader transformation goals. With 18 training providers across nine African countries and expansion plans underway, IEPA's model is proving exportable beyond South Africa's borders.

The statistics that once painted such a sobering picture – 38% youth unemployment, energy constraints, limited opportunities – are being rewritten one graduate at a time in that modest training facility in Johannesburg. IEPA's success story proves that when partnerships align with purpose, when training meets real market demand, and when young people are given genuine opportunities, remarkable transformations follow.

For the next cohort of students walking through IEPA's doors, the question is no longer whether they can find work, but how they'll use their new skills to power South Africa's sustainable future.

\*The Institute of Energy Professionals Africa has been operating for 23 years across sub-Saharan Africa, working with 34 subject matter experts and implementing approximately 60 projects annually.

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

## Powering South Africa's renewable future: Electrahertz's solar strategy

South Africa's energy landscape is undergoing a fundamental transformation. With renewable energy becoming essential rather than optional, electrical contractors are increasingly being called upon to deliver solar installations. For many, this represents both a significant opportunity and a considerable challenge.

Ian Greyling, managing director of Electrahertz, sees this shift as more than just market demand. "The growing demand for solar installations in South Africa is more than a trend – it's a necessary shift in response to our evolving energy landscape, and rising costs," he explains.

### Supporting the solar transition

Recognising that many contractors face a steep learning curve when entering renewable energy work, Electrahertz has positioned itself as more than just a supplier. "We understand that for many contractors, transitioning into solar work involves new technologies, compliance challenges, and a steep learning curve," says Greyling.

The company provides comprehensive guidance through expert advice and product training, helping contractors understand critical elements from photovoltaic (PV) panel configurations and inverters to surge protection, battery selection, and safe distribution board design.

Electrahertz has significantly expanded its product range to include solar-specific solutions.

"Our strength lies in our ability to deliver fit-for-purpose, brand-agnostic solutions – tailored to each project's scope and budget," Greyling notes. "Whether a contractor is doing their first solar install or managing a commercial-scale system, we're here to support them every step of the way."

### Meeting market demands

The solar surge has driven demand for specific innovations. Portable trolley inverters for residential and light commercial use have proven particularly valuable, alongside the company's focus on fast-turnaround custom panel builds tailored to project specifications.

Greyling emphasises the psychological aspect of this market shift: "In today's climate, contractors need more than just products – they need confidence. That's what Electrahertz delivers."

### Future-focused strategy

Looking ahead, Greyling identifies several key trends that will reshape the electrical contracting landscape over the next three to five years. Growth in renewable energy and storage systems will see solar, wind, and battery storage becoming standard, requiring greater access to specialised components and technical support.

Smart infrastructure and IoT present another significant opportunity. "Demand for intelligent lighting, automation, and energy monitoring systems is rising. That calls for new skills and trusted advice on integration and compatibility," he explains.

Electric vehicle infrastructure represents a major emerging market as electric vehicle (EV) adoption accelerates, creating substantial opportunities for contractors willing to embrace charging solutions.

Greyling also anticipates increased regulatory complexity, with contractors

needing support to navigate evolving standards and source compliant products. Digital jobsite tools, from Building Information Modelling (BIM) to connected equipment, are becoming essential for maintaining a competitive advantage.

### Preparing for tomorrow

Electrahertz is actively preparing for these changes through several strategic initiatives.

The company is expanding its product range to include emerging technologies and renewable solutions, whilst partnering with leading manufacturers in EV, automation, and energy systems.

Investment in team development ensures they can provide relevant, field-tested advice. "We're investing in upskilling our team to provide smarter, field-relevant advice," Greyling confirms.

Crucially, their commitment to brand independence remains central to their strategy. "We're staying brand-independent so we can always offer what's right, not just what's on the shelf," he states.

As Greyling concludes: "We're not just adapting to change, we're helping our customers lead it."

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



## Power - Protect - Perform

Your Trusted partner in Motor Control Centre, Energy-Efficient Solutions & Lighting Innovation

At **Electrahertz**, we specialise in providing cutting-edge MCCs and motor protection systems designed to safeguard your operations and extend the life of your equipment. Our expertly engineered solutions ensure optimal performance while prioritising energy efficiency.

Whether you're upgrading an industrial installation or designing a new build, we offer:

- ✓ Reliable Motor Control Centre's (MCCs)
- ✓ Comprehensive motor protection gear
- ✓ High-efficiency lighting systems for every application
- ✓ Expert advice tailored to your needs



Illuminate smarter. Operate safer. Perform better.

Powering Solutions since 1982.

### Branches in:

**Johannesburg**  
Tel: 011 397 - 1750  
Email: [salesjp@electrahertz.co.za](mailto:salesjp@electrahertz.co.za)

**Pretoria**  
Tel: 012 804 - 0120  
Email: [salespt@electrahertz.co.za](mailto:salespt@electrahertz.co.za)

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

**43**  
Years  
1982 - 2025

# Empowering Industry through Electrification & Automation

Your Trusted Partner for 40 Years



Company was established as "Finvato"



**1984**

Distribution agreement reached with Lovato



**1986**  
Anchor reseller agreement established in Pretoria



Distribution agreement reached with Hager

**1988**

Registered name changed to ElectroMechanica



**1989**

Anchor reseller agreement established in Harare



**1990**

Branch established in Durban



**1991**

Power Factor design and assembly established



**1994**

Branch established in Cape Town



**1996**

Anchor reseller agreement established in Gqeberha



Distribution agreement reached with Scame

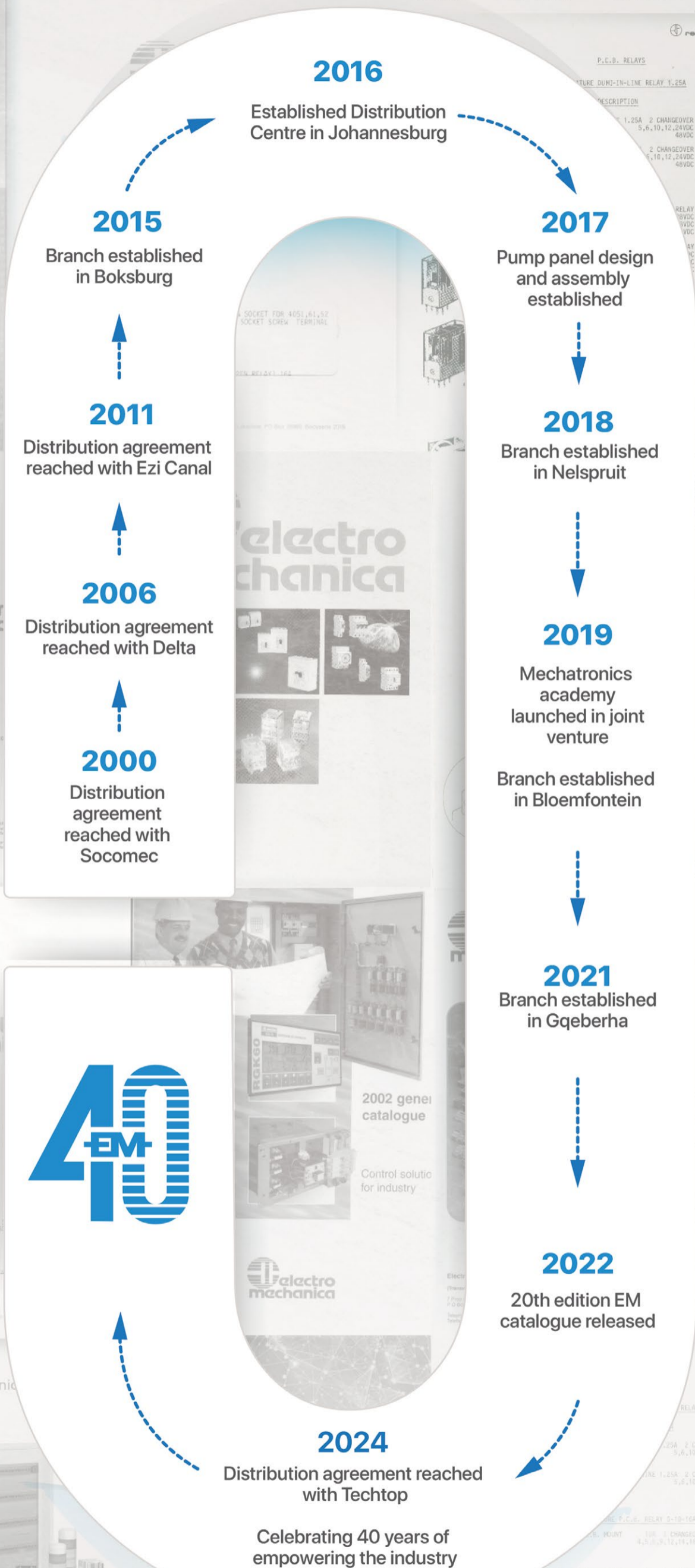


**1998**

Distribution agreement reached with DF Electric

**EM**  
ElectroMechanica

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



Scan the QR code to learn more about our 40 year journey

Specialist suppliers of Motor Control Switchgear and Electrical Automation Components

Electromechanica (Pty) Ltd

(Trompsburg) 7 Pina Street, Salfy P.O. Box 30985, Boksburg 2016 Telephone: (011) 493-2902/2910 Telex: (011) 493-2302

(Cape) 44 Frensham Park 3rd Floor, Cape Town - Bunking Rd, Matieland P.O. Box 207, Matieland 7405 Telephone: (021) 910-9000 Telex: (021) 910-9000

(Durban) 48 Cecil Street, Durban P.O. Box 17317, Conquest 4012 Telephone: (031) 30-4510/34 Telex: (031) 37-6142

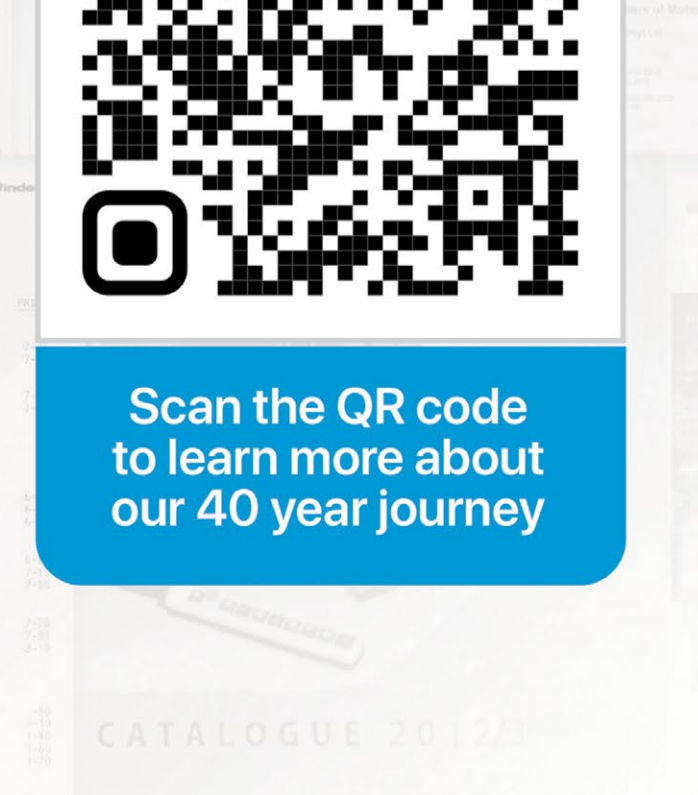
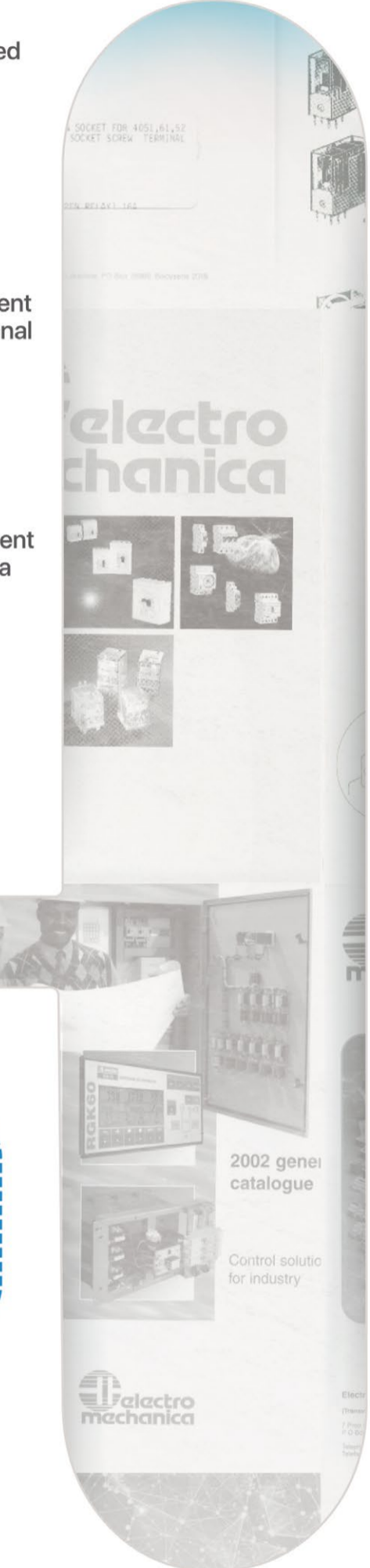
Specialist suppliers of Motor Control Switchgear and Electrical Automation Components

Electromechanica (Pty) Ltd

(Grahamstown) 7 Pina Street, Salfy P.O. Box 30985, Boksburg 2016 Telephone: (011) 493-2902/2910 Telex: (011) 493-2302

(Cape Province) 44 Frensham Park 3rd Floor, Cape Town - Bunking Rd, Matieland P.O. Box 207, Matieland 7405 Telephone: (021) 910-9000 Telex: (021) 910-9000

(KwaZulu Natal) 48 Cecil Street, Durban P.O. Box 17317, Conquest 4012 Telephone: (031) 30-4510/34 Telex: (031) 37-6142



CATALOGUE 2020

CATALOGUE 2022/3

CATALOGUE 2012/3

## The opportunity and impact of MEPS electric motor regulations

South African companies are preparing for the implementation of the new Minimum Energy Performance Standards (MEPS), part of a global trend towards energy-efficient electric motors. As of June 2025, the regulation requires most three-phase, low-voltage electric motors in South Africa to eventually switch to IE3 (International Efficiency) motors, which are more efficient than IE1 and IE2-rated motors.

This switch brings efficiency and cost benefits to businesses, suppliers, and original equipment manufacturers (OEMs). Leading industrial and energy component manufacturer WEG Africa hosted a media briefing on 5 June 2025, at its training centre in Longlake Ext 4, Johannesburg, to unpack the motivations, benefits, and requirements for MEPS.

### A financial win for businesses

According to the International Energy Agency (IEA), electric motor-driven systems consume more than 40% of global electricity, which new regulations can reduce by at least 5%.

The difference between IE1 and IE3 motors is 4-8%. However, electric motors can consume the energy equivalent of their acquisition costs in the first few weeks of operation. When comparing cumulative running costs, IE3 savings typically return investments within one to five years. Premium IE3 motors that run continuously can recoup their costs in months.

IE3 motors also significantly improve a company's environmental impact and market competitiveness, while offsetting rising energy costs.

"Global energy consumption has doubled in the last 20 years, spurring an international trend towards a more energy-secure and energy-efficient future," said Harvest-Time Obadire, Power and Renewables analyst, BMI. "In the South African context, the market is at risk of experiencing an energy deficit by the end of the decade, while electricity prices also continue to place growing pressures on consumers across all sectors. When you look at these numbers, the MEPS regulation makes enormous business and societal sense."

### Exceptions and responsibilities

The new IE3 efficiency standard, officially called the Compulsory Specification VC 9113, is mandatory from June 2025. The specification applies to a broad range of three-phase, low-voltage electric motors, specifically motors with two, four, six, or eight poles with a rated power output ranging from 0.75 kW to 375 kW. It includes motors with non-standard mechanical dimensions and geared motors.

It excludes certain categories, such as single-speed motors with ten or more poles, multi-speed motors, motors that use mechanical commutators, and motors designed to operate entirely while immersed in a liquid.

Businesses can continue to run operational IE1 and IE2 motors, replacing these upon failure. Existing IE1 and IE2 motor stock can still be sold until May 2026. WEG Africa has already established local IE3 motor assembly lines.

In most cases, OEMs and equipment suppliers must certify their motors. End-user businesses can request to see a

supplier's Letter of Authority for the motors, issued by the National Regulator for Compulsory Specifications (NRCS).

"South Africa and our African peers are playing a growing role in the global energy story. We are prolific adopters of renewable energy and new energy blends, and support global energy market trends. But it's not just about new energy sources. Improving what we have by pursuing greater energy efficiency is a crucial strategy. MEPS regulations enable local businesses and utilities to improve their efficiency, and they also create new employment and market opportunities through local manufacturing and skills development," said Zadok Olinga, past president of the Southern Africa Energy Efficiency Confederation (SAEEC).

### Steps to align with the MEPS transition

The affected category of motors is very common, including industrial applications, mining, agriculture, cold chain systems, and HVAC units. The MEPS transition will impact many different businesses; here are steps to prepare for the transition and gain its benefits: Conduct a thorough electric motor inventory audit to accurately identify all motors that fall within the scope of the MEPS regulations.

Consult with equipment suppliers to understand the impact on the equipment used in operations and how the supplier will address MEPS requirements.

Develop a comprehensive, long-term strategy for replacing older motors, prioritising those that operate for extended periods to maximise potential energy savings.

Update procurement policies and technical specifications to explicitly mandate that all applicable new electric motor purchases must meet the IE3 efficiency.

Train relevant staff members (including procurement, maintenance, and operations) on the new MEPS regulations and compliance.

Undertake a cost-benefit analysis for replacing older, less efficient motors even before they fail, taking into account the potential for significant energy savings and the projected increases in the cost of electricity.

Equipment suppliers and end-user businesses can also engage with WEG Africa to learn more about the new standard. "Regions such as the US, Europe, and China have already started switching to MEPS. As a major electrical motor OEM, WEG Africa is helping spearhead and guide this process in the interest of our customers. We're here to help and make the transition as beneficial as possible. Talk to us and see how your business can gain the most from MEPS," said Fanie Steyn, LV&HV executive of Electric Motors at WEG Africa.

Enquiries: <https://www.weg.net/>



## Local cable industry faces import invasion

South Africa's cable manufacturing sector is under siege as a flood of cheap, substandard imports from China and Zambia threatens to dismantle a vital industry, putting thousands of jobs at risk and compromising public safety. Local manufacturers, including South Ocean Electric Wire (SOEW), are sounding the alarm after a disastrous Q1 2025, with import volumes soaring and domestic production plummeting.

Data from January to April 2025 reveals a staggering influx. According to the latest Commodity Trade Observer statistics:

- Low-voltage cable imports surged to 5,805,897 units (up from 4,910,492 in 2024), medium/high-voltage imports hit 3,055,269 units (from 1,361,312),
- Overhead conductor cables dropped to 438,763 units (from 628,570), and
- Optical fibre imports increased to 891,520 units (from 839,590).

Yet prices plummeted, with China and Zambia dumping cables at suspiciously low rates such as R73.48 and R64.83 per unit for low-voltage.

"This mirrors the unethical tactics seen in the local tyre industry, prompting urgent calls for SARS to impose anti-dumping duties, as it did on tyres from Vietnam, Thailand, and Cambodia on 3 June 2025," says SOEW COO Tertius Ness.

He adds that the crisis is exacerbated by companies allegedly buying into local businesses with the option of shutting down factories and flooding the market with imports. Ness warns, "Q1 2025 was a disaster for local manufacturers with volumes evaporating as imports poured in. Q2 continues this trend, forcing most firms onto short

time. The future of our industry hangs by a thread, and as a result, jobs as well."

Ness says that South Africa's cable industry boasts ample capacity to meet local demand, but this import surge, driven by prices as low as R40.76 per unit for Chinese low-voltage cables, undercut quality and safety. Substandard cables, failing standards like SANS IEC 62930, have already sparked fires, including a 2023 Cape Town blaze and a 2024 Durban explosion, echoing concerns raised in SOEW's previous press releases on solar cable risks.

He notes that the statistics paint a grim picture: low-voltage imports from China alone reached 1,769,802 units, while Zambia contributed 283,711 units, both at prices needing investigation. Medium/high-voltage imports from China soared to 2,255,091 units at R74.15, and overhead conductor cables were almost entirely sourced from China

at 438,413 units for R44.67.

"Optical fibre imports still saw China dominate under tariff 9001.10. These low-cost imports, often bypassing thermal endurance and UV resistance tests, degrade rapidly, risking arcing and efficiency losses. These are threats SOEW has long highlighted. The economic toll is severe, with local manufacturers like SOEW, producing high-quality tinned copper cables, losing ground to price-driven imports that can jeopardise numerous projects, including solar projects."

He says that this unethical behaviour not only endangers cable safety but also sabotages South Africa's economy, slashing both jobs and tax revenue. "We urge authorities to act swiftly, mirroring the tyre import crackdown, to investigate dumping and protect local industry. Failure to act risks irreparable damage, as illicit trade flagged across all cable types undermines a sector capable of self-sufficiency."

Enquiries: <https://soew.co.za/>



## ABB unveils latest innovation for energy efficiency and sustainability

At the Enlit Africa 2025 event in May, ABB highlighted its advanced low-voltage offering – the Tmax XT moulded case circuit breaker (MCCB) – featuring a range of integrated technologies that significantly contribute to energy efficiency and environmental responsibility.

### Medium-voltage solutions

Sensor and digital technologies, used in conjunction with ABB's switchgear, assist customers in running their operations more efficiently, thereby reducing their carbon footprint, explains

Egon Worthmann, business manager – Commercial and Operations in the Distribution Solutions Business at ABB. This enables African customers, in particular, to be less reliant on coal-fired power stations.

"ABB has long championed energy efficiency and sustainable operations. We have invested a huge portion of our revenue into research and development," comments Worthmann. At Enlit, ABB presented its digital substation architectures with CPC/VPAC (SSC600) to enable centralised protection and control.

"We are also using the opportunity to showcase and present our medium voltage (MV) secondary switchgear, which is SF<sub>6</sub>-free, to assist our customers in achieving their sustainability goals," adds Worthmann.

ABB's SafePlus Air 24 kV is an innovative, eco-efficient medium-voltage gas-insulated switchgear (GIS) that eliminates the use of sulphur hexafluoride (SF<sub>6</sub>), a potent greenhouse gas. Instead, it utilises dry air as the insulation medium, offering a sustainable alternative for secondary distribution networks.

By replacing SF<sub>6</sub> with dry air, SafePlus Air significantly reduces environmental impact. Dry air has a Global Warming Potential (GWP) of zero, compared to a GWP of 25,200 for SF<sub>6</sub>. The switchgear complies with IEC standards and the European Union's F-gas regulation (EU) 2024/573, aligning with global

efforts to phase out SF<sub>6</sub> in electrical equipment.

ABB's SafePlus Air switchgear has been successfully implemented in pilot programmes aimed at reducing carbon emissions. For instance, Northern Powergrid in the UK adopted SafePlus Air for substations in County Durham, contributing to its goal of decarbonising its network by 2040. The switchgear's compatibility with existing systems allowed for seamless integration and significant reductions in SF<sub>6</sub> emissions.

### Low-voltage solutions

Building on the sustainable innovations demonstrated in its MV portfolio, ABB is also advancing low-voltage (LV) solutions with the same focus on energy efficiency and environmental responsibility. This highlights ABB's holistic approach to reducing emissions and improving operational efficiency across the power distribution value chain.

Features include the Ekip power controller, which facilitates dynamic load management and peak shaving. This capability can reduce energy consumption by up to 20%, helping users avoid penalties for surpassing contracted limits and managing peak demand more cost-effectively. The Tmax XT also delivers high-precision metering with 1% energy measurement accuracy, enabling detailed monitoring and optimisation of energy use.

Through ABB Ability connectivity, the MCCBs allow for real-time data analysis and remote energy management via the cloud. Its Ekip Touch trip units support comprehensive power quality assessments, including voltage, energy, power and harmonics, allowing for more

proactive maintenance and system optimisation.

In line with global green building initiatives, the Tmax XT supports compliance with environmental certification standards such as Green Mark Platinum, thanks to its precise energy monitoring and reporting capabilities. Its modular and upgradeable design ensures that customers can easily enhance system functionality without complete hardware replacement, reducing electronic waste and lowering lifecycle environmental impact.

In addition, safety and reliability have been enhanced with features such as arc fault protection and adaptive protections, which reduce the risk of system failures and maintenance interventions, further contributing to operational sustainability.

"ABB has been driving sustainability across the entire value chain of its circuit breaker product line. Our goal is not only limited to the sustainable production of circuit breakers, but also to ensure that the end users of our products in Africa get access to technologies that help reduce energy consumption," explains Veron Maharaj, product marketing specialist in the Smart Buildings Division at ABB.

He adds that circuit breakers, once used purely as protective devices, have now evolved into multifunctional tools thanks to ABB's innovation. The Tmax XT MCCBs have been engineered to reduce power losses over their operational lifespan, lowering the total cost of ownership. With integrated digital communication across eight industrial network protocols, the devices offer seamless data sharing and control within complex electrical systems.

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



## SA's looming self-induced energy crisis

South Africa may be on the precipice of another self-induced energy crisis, but no one is talking about it openly, according to Lance Dickerson, MD, Revov. "We may be in the early throes of a silent crisis of rooftop solar and battery backup systems failing," he explains.

The billions spent on renewable and backup energy during the rush to escape Eskom's inability to keep the lights on may be under threat due to suboptimal components, inadequately trained installation crews, incorrect configurations of inverters and batteries, and a dearth of local, long-term warranty and maintenance strategies.

### Market growth and quality concerns

As of June 2023, installed rooftop solar capacity had reached 4,412 MW (4.41 GW), representing a 349% increase from 983 MW in March 2022. By July 2024, rooftop solar capacity reached 5,791 MW, with the 2024 market size estimated at 2.12 GW.

However, the boom also saw every 'Tom, Dick, and Harry' opening solar or battery supply businesses, proliferating suboptimal batteries and inverters. Coinciding with a global dip in lithium prices, containers were imported from China and sold below cost for many established brands. These imports came without support and engineering expertise.

Distribution companies without experience or long-term vision began importing components purely to move units. Fast-Moving Consumer Goods (FMCG) distributors treated solar components like consumer goods, buying, selling, and moving on. Unfortunately, end-users pay the ultimate price when components fail and product lines are discontinued.

### US precedent signals warning

The situation mirrors challenges in the US, where Cesar Barbosa, founder of NuLife Power Services and industry expert, describes a "silent crisis" of failing rooftop solar systems. A significant portion of commercial solar

systems installed in the US before 2016 are expected to be underperforming or non-operational by 2030.

Despite promises of 25 years of performance, many US systems are failing within ten years due to dying inverters without available replacements, wiring and electrical infrastructure not designed for long lifespans, poor installation quality from barely trained crews during the initial boom, and a lack of adequate maintenance plans and reliable contracts.

This has increased the risks of electrical faults, fires, hazards, and insurance claims. Addressing issues through repowering, remediation, or decommissioning is proving more complex and expensive than initially expected.

### South African reality check

During the last bout of loadshedding, social media filled with households and businesses complaining that their systems didn't fire up as expected. Many systems are simply dead – likely due to suboptimal components and customers having installations set up, then being left on their own.

What's needed is an energy partner with an on-the-ground presence providing technical support and proper warranties, explains Dickerson. Responsible industry players must educate end users on maintaining battery performance to prevent degraded capacity. A 'man in a van' who brought in a container won't provide this support, complete with off-site telematics and proactive monitoring.

### Industry call to action

As this crisis unfolds, Dickerson advises households and businesses to seek reputable installers working only with proven brands and battery chemistries. Installations are complex engineering feats that should never be left to unqualified people – aside from not lasting, they can be extremely dangerous.

"We have the opportunity to fix what may well be a mess

in the market, but it requires an industry-wide commitment to best practice, and an acknowledgement that long-term, on-the-ground support is not a nice-to-have luxury; it should be an absolute essential must-have," Dickerson concludes.

Read more: <https://revov.co.za/>


## Smarter Energy Starts Here

### With Power Factor Correction

- Maximise system reliability and efficiency
- Lower electricity costs and improve power stability
- Deliver modular, future-proof designs for evolving operational demands







Scan to Learn More

## Schneider Electric launches contactor solution to revolutionise motor management

Schneider Electric South Africa has launched the TeSys Deca Advanced, an advanced contactor solution designed to revolutionise motor management with unparalleled efficiency, reliability, simplicity and sustainability.

The TeSys Deca Advanced stands out with its wide-band coil technology, which controls 24 V to 500 V AC/DC voltage inputs. This innovative feature not only withstands voltage fluctuations but also minimises energy consumption, resulting in reduced CO<sub>2</sub> emissions and lower operational costs.

Thapelo Manthata, offer manager Power Products (PPCTR) at Schneider Electric South Africa, says that the TeSys Deca Advanced contactor is built for a range of industrial applications. By combining digital capabilities, reduced energy consumption and a more simplified installation, the unit is engineered to help optimise motor management while supporting sustainability and operational resilience.

### Ideal applications

"The ideal applications for the TeSys Deca

Advanced are robust, high industrial environments...it can be used for hoisting, pumps, HVAC systems, elevators and packaging applications," says Manthata.

"So, it was designed for diverse industrial applications and simplifies installation and maintenance processes. Its ergonomic three-layer setup organises wiring for optimal visibility and accessibility, streamlining operations and minimising the need for specialised skills in the workforce."

He adds that with one-click connection technology, installation efforts are reduced by up to 75%, allowing for rapid deployment in critical environments where uptime is essential. Additionally, direct PLC control capability reduces complexity in selection and inventory

management by 80%, facilitating smoother operations.

### Built for reliability

"TeSys Deca Advanced is built for reliability, having gone through comprehensive testing to guarantee peak performance. It supports predictive maintenance by offering real-time diagnostics, allowing users to foresee and address potential problems before they cause any downtime," says Manthata.

"The TeSys Deca Advanced unit is designed to improve operational efficiency in various sectors. By integrating advanced technology with a strong emphasis on sustainability, we remain committed to maximising uptime and providing exceptional value."

Enquiries: <https://www.se.com/za/en/>

## Introducing the Fluke clamp meter for advanced troubleshooting

Fluke, locally represented by Comtest, offers the Fluke 376 FC True-RMS clamp meter with iFlex, the most advanced troubleshooting tool for industrial and commercial electricians.

The 376 FC is part of the Fluke Connect family of wireless test tools that enables users to log, trend, and monitor measurements while remaining safely away from the arc flash zone through Bluetooth connectivity.

### Solving complex electrical issues

The 376 FC clamp meter uses an integrated low-pass filter to accurately measure non-linear signals, such as adjustable speed drives, electronic ballasts, and other non-linear loads. The clamp also uses proprietary inrush measurement technology to filter out noise, capturing the motor starting current exactly as the circuit protection sees it.

### The clamp meter measures:

- Voltage to 1,000 V AC or DC;
- Resistance to 60 kΩ with continuity detection;
- Min, max, average, and inrush recording to capture variations automatically;
- 500 mV DC measurement range to interface with other accessories; and
- 1,000 μF capacitance measurement.

The included 18-inch or 36-inch iFlex flexible current probe provides easier access to large conductors in tight spaces. The flexible probe:

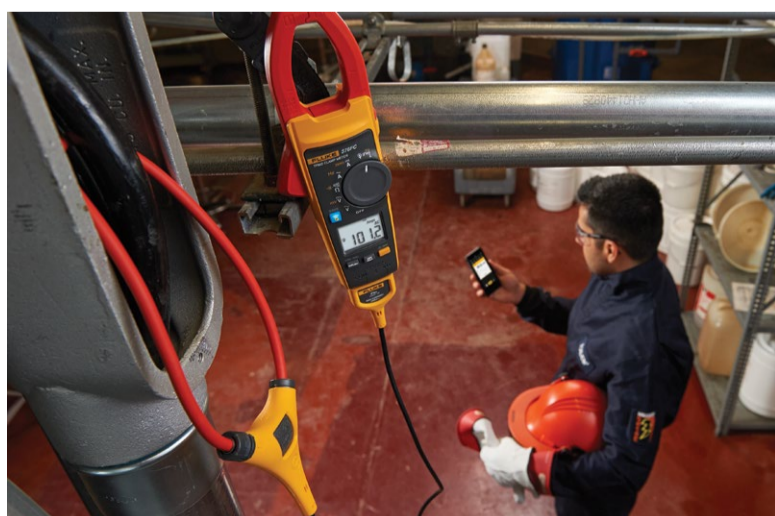
- Expands the measurement range to 2,500 A AC; and
- Allows frequency measurement to 500 Hz with body jaw and iFlex.

Work safely and conveniently: the 376 FC clamp features a CAT III 1000 V and CAT IV 600 V safety rating, designed to provide the highest possible protection in a test tool.

### What's in the box:

- Fluke 376 FC True-RMS clamp meter;
- 18-inch or 36-inch iFlex flexible current probe;
- TPAK magnetic hanging strap;
- TL75 test leads;
- Two AA batteries (installed); and
- Soft carrying case.

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



## A simple guide to understanding the importance of IP ratings

When selecting electrical products for industrial, commercial, or even domestic use, it is crucial to consider how well they can withstand environmental factors like dust and water. This is where Ingress Protection (IP) ratings come into play. "However, despite their importance, many users of electrical equipment are unfamiliar with what IP ratings truly mean," according to Tristan Blades, technical projects manager, Pratley.

An IP rating is a globally recognised standard that indicates the level of protection that an electrical enclosure provides against the intrusion of solid objects and liquids. It is denoted by two digits. For example, in IP68, the first digit (ranging from 0 to 6) represents the level of protection against solid particles like dust, while the second digit (ranging from 0 to 9) signifies the protection against water. A higher number indicates a higher degree of protection.

Understanding IP ratings is essential to ensuring the longevity and safety of electrical equipment, particularly in demanding industrial environments. "An appropriate IP rating ensures that the product can safely operate in specific environmental conditions without risk of damage or failure due to dust or water ingress," explains Blades.

This is especially important in sectors such as mining, construction, and manufacturing, where components are regularly exposed to harsh elements. Without the appropriate IP rating, electrical enclosures and fittings can fail, leading to safety hazards, system malfunctions, and costly downtime. An IP rating gives both professionals and DIY users peace of mind, knowing the product is built to last and function reliably in the conditions it was designed for.

Pratley's approach to ingress protection goes beyond industry norms. All IP-rated Pratley products, such as cable glands and junction boxes, are subjected to rigorous third-party testing, in addition to being tested continuously at the company's advanced in-house laboratory. "This ensures that they do not just meet the required standards but exceed them," highlights Blades.

Pratley's junction boxes and cable glands, including those designed for hazardous areas, are often certified with a dual IP66/68 rating. This means they are completely dust-tight (IP6X), resists powerful water jets (IPX6), and can also withstand continuous submersion in water up to 2 m deep (IPX8).

Blades notes that Pratley's IP-rated junction boxes and cable glands are specifically engineered for use in extreme environments. The company's compression glands for unarmoured cable, along with its Ex e and Ex d glands for armoured and unarmoured cable, deliver dependable performance where failure is not an option.

In addition to high-performance design, Pratley also considers the longevity of its products. Rubber sealing components can degrade over time, potentially compromising their effectiveness. To address this, Pratley specially formulates its rubbers in-house to ensure maximum longevity.

Replacement gaskets for all junction boxes and cable glands are also available, enabling customers to maintain the integrity of the seals without replacing the entire unit. This not only extends the product's lifespan but also provides a cost-effective solution for long-term reliability.

Choosing the correct IP-rated product is vital for safety and operational continuity, especially in environments where exposure to dust and moisture is unavoidable. "Our range of IP-rated electrical termination products offers the level of protection needed to meet the demands of industrial and hazardous area installations. In addition, our commitment to quality and innovation places Pratley products in a class of their own," says Blades.

"When it comes to electrical installations, selecting products with the appropriate IP rating is not just a technical decision; it is a safety imperative. Our friendly team of technical sales specialists is always on standby for any customer advice or technical queries," concludes Blades.

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



## Lighting beyond illumination: how purpose-driven LED solutions by Aurora Lighting Africa are transforming project outcomes across sectors

In today's fast-evolving built environment, lighting is no longer just about illumination; it's about impact. Whether it's influencing shopper behaviour in a retail store, creating mood in a boutique hotel, enhancing productivity in commercial offices, or ensuring safety in industrial facilities, lighting plays a pivotal role in shaping experiences and outcomes.

Aurora Lighting Africa believes that every project deserves more than just a lighting solution; it deserves a lighting strategy. As a trusted manufacturer working across the Retail, Commercial, Industrial, Hospitality, and Residential sectors, Aurora has seen how well-specified, purpose-driven LED lighting

can deliver measurable performance and aesthetic value.

### Retail: lighting that sells

In retail, lighting is a silent salesperson. It draws attention to displays, enhances product presentation, and influences purchasing behaviour. Aurora's tailored retail LED solutions are designed to highlight merchandise in the most flattering way while maintaining energy efficiency. From colour rendering to adjustable beam angles and integrated control systems, Aurora offers complete solutions that support both ambience and conversion rates.

### Commercial: lighting for wellness and efficiency

In commercial environments, especially office spaces, lighting quality directly affects employee well-being, productivity, and alertness. With rising awareness of standards such as WELL Building and LEED, project teams are seeking lighting systems that support circadian rhythms and reduce visual fatigue. Aurora's daylight-responsive controls help businesses meet these goals while reducing energy consumption and meeting stringent compliance requirements.

### Industrial: built for safety and longevity

Industrial spaces demand lighting that works as hard as the people within them. Here, it's about durability, uniformity, and reliability. Poor lighting can lead to accidents, slow workflows, and high maintenance costs. Aurora's industrial-grade LED high bays, anti-corrosive luminaires, and IP-rated fixtures are engineered to perform in the harshest environments, while offering exceptional lifespans and minimal maintenance. Smart sensor integration enables energy savings and real-time monitoring, an essential component of modern industrial automation.

### Hospitality: lighting that elevates the experience

In hospitality, lighting helps tell a brand

story from a guest's first impression in the lobby to the relaxing atmosphere of their room. Aurora's architectural LED range includes dim-to-warm, RGBW LED strips, and glare-free solutions that can be adapted to mood and setting. Whether it's a luxury hotel, boutique lodge, or vibrant restaurant, Aurora's lighting enhances comfort, style, and guest satisfaction.

### Lighting as a strategic asset

Too often in the project lifecycle, lighting is treated as a late-stage procurement item. But in truth, it belongs at the table from day one. By collaborating early with consultants, architects, and developers, Aurora Lighting Africa helps shape lighting solutions that align with design intent, budget, and long-term goals.

"We're more than a product provider; we are a project partner," says the company. "And in a world where every watt, lumen, and impression matters, we are here to deliver lighting that goes beyond illumination; lighting with purpose, precision, and performance."

"Lighting is one of the few elements that affects how a space looks, feels, and functions all at once," says Scylgh Clunnie, managing director of Aurora Lighting Africa. "Our role is to guide project stakeholders toward solutions that don't just meet technical specs but also enhance human experience and long-term value."

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



## Annual IESSA conference taking place this month

By Ilana Koegelenberg

The Illumination Engineering Society of South Africa (IESSA) is preparing to host its 19th annual conference, positioning itself once again as the premier gathering for lighting professionals. Scheduled for 13-14 August at Phahama Lodge in Johannesburg, this year's event promises to deliver essential insights under the theme "Empowering Africa through innovative lighting solutions."

The conference serves as the cornerstone event for the lighting industry, providing professional networking and development opportunities for attendees. They can connect with sector peers, explore business opportunities, and receive crucial updates on the transformative changes shaping the lighting landscape. Organisers have placed particular emphasis on three critical areas: regulatory developments, technological progress, and environmental implications.

### Continuing Professional Development (CPD)

IESSA's mission centres on advancing lighting knowledge, and the conference delivers essential updates on industry innovations and emerging developments in research, technology, and lighting methodology. The organisation's role extends beyond education, as it represents South Africa's lighting sector in government and regulatory contexts while serving as the national representative on the international CIE (*Commission Internationale de l'éclairage*) National Committee.

For professionals seeking to maintain their credentials, the conference offers significant value through its longstanding accreditation with the Engineering Council of South Africa (ECSA). Attendees will earn 1.5 CPD points, helping to address the ongoing challenge many professionals face in accumulating the required continuing professional development credits.

### Networking opportunities and industry connections

The event creates abundant opportunities for meaningful interaction, connecting attendees with sector leaders and colleagues from across South Africa and beyond. Recognising the evolving nature of professional engagement, organisers have included a hybrid attendance option, ensuring that those unable to join in person can still access the valuable insights shared by expert presenters.

The conference presents a unique opportunity for attendees to engage with both established contacts and senior leadership, including directors and CEOs who can become pivotal strategic connections. As technology continues to evolve rapidly, maintaining close relationships with suppliers who truly comprehend the lighting industry and can provide customised solutions becomes increasingly important.

### Target audience and professional impact

The conference caters to a broad spectrum of lighting professionals, welcoming anyone whose role involves lighting engineering or work within the lighting industry in



technical, commercial, institutional, educational, municipal, or public capacities. This inclusive approach ensures that the event serves as a comprehensive forum for the entire lighting ecosystem.

Beyond the technical knowledge and networking opportunities, the conference aims to address a common challenge faced by industry professionals: maintaining career motivation amid the demands of everyday business operations. The event is designed to help attendees rediscover their professional purpose by exploring innovative concepts while connecting with fellow industry professionals who share

their commitment.

Participants can expect to leave the conference revitalised, motivated, and equipped with practical insights to enhance their work environment, making it an essential date in the calendar for South Africa's lighting industry professionals.

The IESSA annual conference continues to demonstrate its value as the key industry event where lighting professionals can engage with peers, advance their knowledge, and contribute to the ongoing transformation of the lighting sector across Africa.

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



## Introducing Eurolux's ceiling light range

The new range of Eurolux Premium 3CCT Ceiling Lights (C751-C754) is built for real-world versatility and designed to make your next install quicker, smarter, and safer. One fitting, endless applications.

### Choose your colour temperature

Each fitting includes 3CCT switchable tech –

just set the light tone during installation to one of the following:

- 3,000 K Warm White for cosy residential spaces;
- 4,000 K Cool White for kitchens and shared areas; or
- 6,500 K Daylight for garages, offices, or task zones.

### Multiple options

The range is available in two sizes and two colours, each with the same solid build:

- 18 W, Ø305 mm | 1,350 lumens – C751 (black), C753 (white);
- 24 W, Ø355 mm | 1,800 lumens – C752 (black), C754 (white).

With a tough PMMA diffuser and PP housing, these fittings are impact-resistant, lightweight, and surface-mount ready.

### Where to use Eurolux new 3CCT Ceiling Lights

Thanks to its IP44 rating, they are ideal for bathrooms, kitchens, covered balconies, and other outdoor but undercover zones. Class II double insulation makes for fast, safe installation – no earth required.

### Why you'll specify them again:

- Integrated LED – no globe changes;
- 25,000-hour lifespan;
- Two-year warranty; and
- Clean, modern design – suits home or office.

"One light. Every space."

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

# Automatic On at Dusk, Off at Dawn

Save energy with **FS300BP's** built-in day/night sensor.



- ✓ Light only when it's needed
- ✓ No manual switching
- ✓ Ideal for pathways, driveways & yards
- ✓ 2 Year warranty



1600lm



IP65



4000K



Cape Town | Johannesburg  
021 528 8400 | 011 608 2970



**eurolux**  
Lighting your way





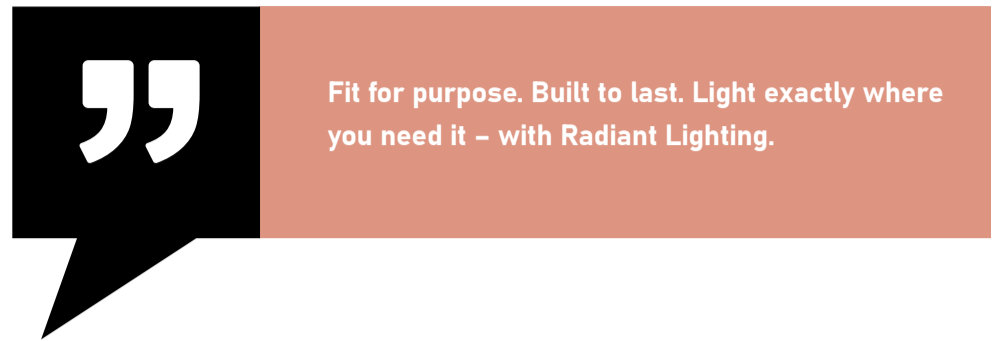
## Matching light to the job – a smarter way to specify floodlights



range is designed for quick installation at heights between 2.5 and 3 metres, with optimal beam spread and lumen output for wide, reliable coverage. Use the chart (see image) to help plan your setup based on area size, power needs, and mounting height.

“Fit for purpose. Built to last. Light exactly where you need it – with Radiant Lighting.”

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



### EFFICIENT LIGHTING ON AN INDUSTRIAL SCALE

6500K DAYLIGHT

220° BEAM ANGLE

E40 BASE

3 YEAR WARRANTY



Diameter: 189.5mm  
Height: 270mm

**RLL400**

HIGH POWERED LED 120W - 12614 LUMENS

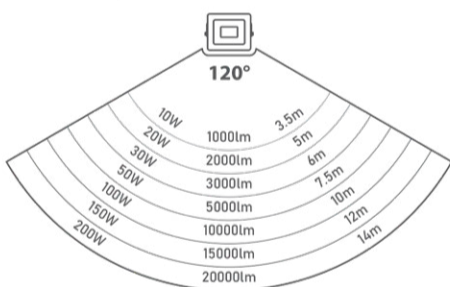


Diameter: 238mm  
Height: 282mm

**RLL401**

HIGH POWERED LED 160W - 16500 LUMENS

Suggested Installation height.  
10W, 20W, 30W & 50W Installed at 2.5m to 3m  
100W, 150W & 200W Installed at 5m to 6m



These values are estimations only, and intended as a rough guide.

With so many advances in floodlight efficiency, output, and control, choosing the right unit for the right space has become as much about know-how as it is about power ratings. Whether you're lighting up a driveway, securing a yard, or illuminating a larger worksite, finding the ideal balance of wattage, beam spread, and mounting height can make all the difference.

Here's a quick reference to help you align Radiant's floodlight options with the demands of your installation.

#### Suggested Wattage by area type

- Driveways and gardens – 10 W to 30 W
- Medium to large yards – 50 W to 100 W
- Parking areas and fields – 150 W to 200 W

From compact 10 W units ideal for residential use to powerful 200 W floodlights designed for commercial and industrial environments, Radiant Lighting delivers dependable, fit-for-purpose solutions for every setting.

Looking for convenience? Choose Radiant models with day/night sensors or PIR motion detection for added safety and automation. Prefer flexibility? Radiant's solar floodlights are perfect for off-grid or cost-saving installations.

Every floodlight in the Radiant Lighting

Give your facility's lighting an upgrade with our 120W and 160W E40-base LED solutions, each offering a wide 220° illuminating range for maximum coverage. From large-scale warehouses and manufacturing plants to open-concept offices and equipment yards, these high-efficiency options help you streamline operations while cutting costs. Enjoy uniform brightness across every corner, lower your energy bills without skimping on quality, and count on a setup that adapts to any environment. Radiant's RLL400 and RLL401 lamps are designed primarily for indoor use but are also compatible with fixtures rated IP54 and higher. They're best suited to replace traditional high bays (including HID or mercury vapour once the existing control gear is removed and the live and neutral wires are connected directly to the lamp holder). They can also work in classic post-top fixtures of suitable housing size and IP rating.

Head over to [www.radiant.co.za](http://www.radiant.co.za) for more info and discover how you can transform your facility with powerful, cost-effective LED lighting.

JHB 011 386 0000

CPT 021 521 2500



## Decorative lighting solution for shopping centre

BEKA Schröder has supplied the decorative exterior lighting solution for Optenhorst Village, a neighbourhood shopping centre located in Paarl, Western Cape.

Situated within the larger Optenhorst Estate, the Village seamlessly blends convenience with lifestyle, becoming a key part of the Paarl North community. Featuring

a mix of well-known South African brands and distinctive local boutiques, it delivers a lively shopping experience in a carefully curated environment.

BEKA Schröder has supplied the decorative exterior lighting solution, all of which have been designed and manufactured in South Africa.



We are very proud to be associated with KLS Consulting Engineers and DC Electrical Africa Cape in providing a successful exterior lighting solution for this project.

BEKA Schröder

### Parking area

The ELLEGA single and double LED luminaire and column range lights up the Optenhorst Village parking area and were selected to complement the aesthetic of the estate situated behind the centre.

The ELLEGA, available in a single or double configuration at various heights, with its simple but very elegant linear design, provides a versatile range of luminaires to light diverse landscapes. The flexibility of the LensoFlex 2 photometric engine provides multiple lighting distributions to adapt to the diverse needs of contemporary lighting applications.

This winning combination of performance, design and flexibility enables the ELLEGA range to illuminate streets, residential areas, parking areas, parks, and bicycle and pedestrian paths with a better quality of light, to generate energy savings and to reduce the ecological footprint with a perfect aesthetic integration into the environment.

### Building exterior

The QVAL, a versatile, high-performance and reliable LED wallpack, has been installed on

the shopping centre's building exterior. The QVAL was specified for its aesthetic design and high performance.

The QVAL outperforms all conventional wall mounted bulkhead luminaires by providing a bright and long-lasting light for outdoor wall mounted applications. The indirect reflector design has been specifically developed to not only provide glare-free lighting, but also a high-performing light distribution. The QVAL delivers a strong white light with a high colour rendering index to ensure perfect visibility and comfort.

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

Thanks to the QVAL's high optical performance and strong mechanical design, it can achieve substantial energy and maintenance cost savings.

"We are very proud to be associated with KLS Consulting Engineers and DC Electrical Africa Cape in providing a successful exterior lighting solution for this project," said BEKA Schröder.

Enquiries: [ct@beka-schreder.co.za](mailto:ct@beka-schreder.co.za)

## From township dreams to engineering leadership: Meet Eric Ceba

By: Ilana Koegelenberg

Eric Ceba is transforming childhood aspirations into professional reality as he leads RNA Consulting Engineers with a passion for mentoring the next generation of engineers.

### From Welkom to ownership

Born in Welkom, Free State, Eric Mbuyiselo Ceba's journey to becoming the managing director of RNA Consulting Engineers, an electrical and mechanical consulting engineering firm, exemplifies determination and strategic career building. Now 51, the professional technologist engineer has transformed a township dream of business

ownership into a thriving consulting engineering practice.

After obtaining his National Diploma in Electrical Engineering, Heavy Current from Port Elizabeth Technikon (now Nelson Mandela University) in 1998, Ceba's career trajectory began with a bursary from Carifro Consulting Engineers. His talent quickly earned him recognition, leading to a 30% shareholding in the company by 2001.

Ceba's commitment to professional development led him to pursue an Illumination Engineering Diploma with BHA School, further enhancing his expertise in lighting design and engineering, a specialisation that would prove invaluable throughout his career.

A pivotal move came in 2003 when Ceba joined Richard Nzuzza & Associates as office manager for its newly established Gqeberha branch. His leadership in expanding operations and delivering engineering solutions across infrastructure projects earned him a 7% equity stake in 2009.

The entrepreneurial leap came in 2017 when Ceba and business partner Travis Warne acquired full ownership of RNA Consulting Engineers. Today, Ceba holds 51% of the company, with Warne holding 49%.

### The collaborative approach

Ceba's professional philosophy centres on problem-solving and sustainable client solutions. "The consulting engineering industry is more than just technical work," he explains. "It's about being a reliable problem solver, someone clients can trust to make their vision a reality with sustainable, practical results."

His approach emphasises collaboration with other built environment professionals, including architects, quantity surveyors,

and civil engineers. These partnerships, he believes, not only strengthen project quality but broaden learning experiences.

Beyond technical achievements, Ceba identifies his proudest accomplishment as becoming the majority owner of a consulting engineering firm. "Growing up in the township, it was a lifelong dream to one day own a business," he reflects. "Today, I am proud to not only lead a company, but to help inspire and empower others from similar backgrounds to aim high and believe in their potential."

### Mentoring the future

Mentoring young professionals has become Ceba's greatest passion. "Watching young people grow from interns into confident, skilled engineers – knowing I had a hand in their development – is an immeasurable source of pride and joy," he says.

His advice to industry newcomers emphasises humility, curiosity, and realistic expectations. "Your qualification is just the beginning; a stepping stone," he advises. "Be willing to learn from those around you, regardless of their title or background, and never stop learning."

Ceba draws inspiration from his grandfather's work ethic and former boss Richard Nzuzza's principled approach. "Richard was the most consistent and principled person I've ever worked with," he notes. "To him, something was either right or wrong; no grey areas, no compromises."

### Building for tomorrow

Looking ahead, Ceba aims to grow RNA Consulting Engineers both financially and in human capital. Despite South Africa's built environment challenges, including economic stagnation and infrastructure backlogs, he remains committed to building a resilient, sustainable company through strategic planning and continued investment in people.

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



### SEPTEMBER 2025 FEATURES

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

### OCTOBER 2025 FEATURES

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

Editor:  
Ilana Koegelenberg  
061 049 4164  
[sparks@crowns.co.za](mailto:sparks@crowns.co.za)

Advertising:  
Carin Hannay  
072 142 5330  
[carinh@crowns.co.za](mailto:carinh@crowns.co.za)

Design:  
Ano Shumba

Publisher:  
Wilhelm du Plessis

Published monthly by:  
Crown Publications (Pty) Ltd  
P O Box 140  
Bedfordview, 2008  
Tel: (011) 622-4770  
e-mail: [sparks@crowns.co.za](mailto:sparks@crowns.co.za)  
Website: [www.crowns.co.za](http://www.crowns.co.za)

Printed by: Tandy Print



Total First Quarter 2025  
14 564 per month.

The views expressed in this publication are not necessarily those of the editor or the publisher.

This publication is distributed to electrical contractors, wholesalers, distributors, OEMs, panel builders, Eskom, mining electricians and consulting engineers (electrical) as well as libraries, members of IESSA and public utilities.