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DECADE OF THE ARTISAN - MORE EMPLOYERS NEED TO GET INVOLVED











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development of a skilled workforce said Gwebinkundla Qonde, the director general for the Department of Higher Education and Training (DHET) in his address at the National Artisan Development Strategy conference, held in Benoni at the end of last year. "A good artisan training system needs to produce quality artisans who will contribute to the country's economy."

Qonde told delegates that DHET "should be able to produce 30 000 qualified artisans each year" – as required by the National Development Plan (NDP)

Qonde highlighted that the Artisan Development Strategy Framework "seeks to establish a national baseline for an integrated national artisan development system, which defines critical components of artisan development ranging from the artisan training system itself, funding regimes, quality assurance, and impact measurement issues". He stressed that "skills development needs to occur at every given opportunity \dots at a college, a university or at a workplace".

Experiential skills

"Expansion of skills development in the workplace is the fastest and most immediate mechanism that we need to utilise as that is where much of the existing skills base resides in the country and it must be leveraged. This puts a direct responsibility on public and state-owned companies and the private sector employers to open up workplaces for learners to gain experiential skills," said Qonde.

"As we grow the number of institutions such as TVET colleges as fast as resources allow, these must be correspondingly linked to workplaces as training spaces in order to expand the learning process of future artisans." Qonde stressed that the success of the proposed Artisan Development Strategy is centred "on the need to get more employers involved".

Stable employment

Qonde said that it was positive that studies have proved that learners who participate in the apprenticeship system "are easily absorbed by industry or manage to create their own employment". He added that a Human Sciences Research Council study indicated that the majority of apprenticeship and learnership participants who completed their qualifications "experienced a smooth transition into stable employment".

Qonde highlighted that the youth aged between 15 and

HAPPY HOLIDAYS PROMOTION ... A HAPPY OUTCOME!

Great fun was had by all on 19 January when the names of the lucky winners of gifts in the Sparks Happy Holidays promotion were drawn. Turn to pages six and seven to see the photos as well as the names of all the winners.



The economic development of South Africa is closely tied to the 34 "remains vulnerable in the labour market with an unemployment rate of 38.2%, which is 11.1% points about the national average".

FEBRUARY 2017

DHET warning

This vulnerability of school leavers is exacerbated by the number of 'bogus colleges'. In January, Minister of Higher Education and Training, Blade Nzimande, cautioned students to only register with accredited colleges, which are recognised by SETAs under the auspices of the Quality Council for Trades and Occupations, and to check the accredited programmes a college is permitted to offer.

According to the DHET's website, the 'Decade of the Artisan' programme will "completely remove existing bottlenecks and develop a single quality assurance system and national single trade testing system"

ERIKA VAN ZYL TO LEAVE SPARKS ELECTRICAL NEWS

Erika van Zyl, who has been editor of Sparks Electrical News for the past ten years, is leaving the publication to take up the post of National Communications Manager for the Electrical Contractors Association. "We are sad to see Erika go," says Karen Grant, Publisher of Crown Publications, "but we know this is a wonderful opportunity for her and one in which she will excel. Erika, who was Supplements and Features editor at The Citizen Newspaper prior to joining the Sparks team, has a long history of working on newspapers which, with her B2B experience and understanding of the electrical industry, makes her ideally equipped to handle her new job. We wish her all the very best". Karen Grant will be in place as acting editor.





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Raymond Nel.

Raymond Nel, general manager at Nordland Lighting for the past two years, has been in the electrical industry for the past decade. With an extensive background in electronics, the transition to the electrical industry was easy for Raymond.

His proven business acumen coupled with an egalitarian management style encourages his team to take ownership of their responsibilities and inspires loyalty and commitment.

Dynamic and forward-thinking, Raymond is excited about new LED products specifically for hazardous area and the doors that are being opened as LED technology advances.

Sparks: Where were you educated?

RN: I went to Noordheuwel High School in Krugersdorp and started my technical career at the Krugersdorp Technical College where I qualified in Electronics, Communication Electronics and Electromagnetism.

Sparks: How long have you been involved in the electrical industry? RN: Most of my career was within the electronics industry but, for the last 10 years, I have been working with electrical engineers and

electrical contractors. **Sparks:** When and where did you start your career?

RN: I started my apprenticeship as an electronic radio technician with the South African Air Force in 1986 and qualified in 1989.

Sparks: What are the greatest changes you have seen over the years? RN: I think the biggest change I've seen is that we experienced a shortage of electricity and this lead to many people becoming very conscious about saving energy. Consequently, over the last five years, we've seen the introduction of LED luminaires to the commercial and industrial markets. While LEDs have been around for some time, never before has so much money and time been spent on developing and retrofitting LED products.

Sparks: What major projects have you worked on and what is your greatest accomplishment?

RN: During 2010 I was the general manager of Lighting Structures and the company was appointed to upgrade the lighting masts on 12 training venues across the country for the Soccer World Cup. We managed to complete all these projects in a very short time with limited resources and in time for the opening of the World Cup.

My biggest accomplishment was to revamp the organisational structure of two merging companies by designing a highly effective business plan for the amalgamation of the different divisions within the companies. This initiative transformed the company from an initial R56-million annual turnover in 2008 to a substantial R195-million by 2010.

Sparks: Who has been your inspiration or have you had a mentor who has influenced your career?

RN: As a youngster, I was given an opportunity in 1993 by Barry Moore, the owner of Gastech Services to be part of the management team in his company. This was the first stepping stone in my transition from an artisan to a manager. Barry taught me so much about managing a business, staff and customers.

Sparks: What, to your mind, is one of the biggest challenges facing the industry at this time?

RN: A big concern is that too many qualified people are leaving South Africa and the education system cannot produce replacements fast enough. Due to low economic growth, the pricing of commodities remains a challenge. Unfortunately, quality is often sacrificed for better pricing.

Sparks: What do you enjoy most about your job?

RN: As manufacturers of hazardous area light fittings, we are continuously developing new products for the industry. The introduction of LEDs into the hazardous environment is very exciting.

We have developed a range of products for the commercial market and, as a traditional explosion-proof light fitting manufacturer, we are now opening new doors and markets with the latest range of products.

Sparks: How do you motivate your staff?

RN: As we spend more time at the office than at home, it is important that we as managers create an environment that is special and pleasant for employees. It's important to treat everybody equally as we are all facing the same challenges, just in our own way. With a transparent and open-door policy in place, we have created a trust relationship with the employees where they feel part of the organisation

Sparks: If you could 'do it all again', would you change anything? If so, what would that be?

RN: Over the years, I have been blessed with an exciting career and I have had wonderful mentors and leaders so, there is nothing that I would change

Sparks: Would you advise a person leaving school to enter the electrical industry? And why?

RN: Electricity and energy will never become obsolete and the human race will always need energy to manufacture, farm, live and survive. The way we generate and store energy might change but you will always need qualified people to install and maintain electricity. Humans always need more energy, stored in a smaller compact format and at a better price. Electricity will always be the future.

Sparks: What is your advice to electrical contractors and/or electrical engineers?

RN: Educate yourself regarding the specifications of different products on the market. The better you understand the capabilities and limitations of the products, the better service you can provide to your customer.

In many cases, Africa becomes the dumping ground for the rest of the world and we have to understand what products and quality we are dealing with.

Sparks: What is your favourite quote?

RN: "Always treat your employees exactly as you want them to treat

your best customers." - Steven R. Covey.

Sparks: Name three things on your 'bucket list' (things you want to do before you 'kick the bucket').

RN: To see the annual wildebeest migration in the Serengeti; ride the Dragon's Spine with friends on our mountain bikes; and to see every corner of this beautiful country.



LEAK-DETECTION IN COAL-FIRED POWER STATIONS

(where 93% of all electricity is currently generated using coal) an advanced acoustic leak detection system called Inspecta FFT, to detect boiler tube leaks in coal-fired utilities as well as in oxygen plants and gasifiers.

This technology and equipment is now in use in

nstrotech – a Comtest Group Company – has power stations worldwide, where the early detection designed and developed at the request of and, in of tube leaks to reduce down-time and prevent consultation with the South African Power Utility consequential damage is vital. According to the World Coal Association, the importance of coal to electricity generation worldwide is set to continue, with coal fuelling 44% of global electricity in 2030. (Source IEA 2010).

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REMEMBER: AN ELECTRICAL INSTALLATION MUST BE SUPERVISED BY A REGISTERED

INSTALLATION ELECTRICIAN

eaders of this column may or may not know that I am a consulting electrical engineer. This means that I have a degree in electrical engineering and I'm registered with the Engineering Council of South Africa as a professional engineer.

It so happens that, in South Africa, anybody – your local refuse collector, a nurse, a parking attendant - can call themselves an 'engineer'. But no one can call themselves a 'professional engineer' unless they are registered with the Engineering Council. Things are a bit grey as to who can call themselves a 'consulting engineer'...

Electricians are much more regulated than engineers. In the electrical business, electricians who work on commercial buildings and, in fact, on any electrical installation, have to be registered either as registered installation electricians or as master electricians. The latter are usually found in refineries.

It is a requirement of the Occupational Health and Safety Act that work on an electrical installation must be supervised by a registered installation electrician who must provide a Certificate of Compliance when the work is completed. This does not mean that the registered installation electrician has to be on site all the time - if there are a lot of labourers chasing walls, there's no need for the installation electrician to watch them do it. However, the registered installation electrician should at least exercise control

over the work - although this doesn't always happen.

Recently, I was phoned by a builder's foreman who said I had to go to site because they "couldn't understand the drawings". When I arrived at the site, I found that there was no registered installation electrician there but merely one of his staff, who did not have the ability to understand our drawing.

In fact, he had misunderstood it to the extent that he had installed three socket outlets in the wrong position. I told him: "Sorry, but these should go on that wall". The builder's foreman said that couldn't be done as the wall had already been painted so I told him that he would have to install the socket outlets in the right

place and repaint the wall.

I was a bit upset that I had to go to site and deal with somebody who wasn't a registered installation electrician and that the registered person clearly wasn't giving his workman the right instructions. That same day, I received a phone call from the architect. She said, "I understand you want the builder to repaint the wall." I replied that I wanted the electrician to put the socket outlets in the right place and then repaint that part of the wall. "Oh," she said, "That will cause the builder to claim a delay."

I explained that as it was his subcontractor, he could claim whatever he wanted to and she could just refuse his claim. "Tell them to work overtime." I said.

The following day, I received another phone call, this time from the builder's foreman, who asked me to come to site and speak to the registered installation electrician. I asked: "What about?"

"Oh," he said, "the socket outlets. He has a proposal that implies we won't have to paint the wall." Then the architect phoned to say that she was going to meet me on site to discuss an alternative proposal for the socket outlets that were in the wrong place.

So, I went to site and told the registered installation electrician, in effect, to put the socket outlets wherever the architect wanted them.

This was a costly waste of time and all because the registered installation electrician was trying to supervise four sites all at the same time and was doing a bad job of it. Also, the registered installation electrician took a chance - when there is poor site supervision, there is no assurance that the electrical contracting staff are working safely.

What I've described is by no means uncommon and I urge anyone who is a registered installation electrician to look carefully at the way they work. The way the Law of Delict works is that the person who is responsible for anyone who is injured can be sued - and sued for a great deal of money.

You may have insurance but do not think that an insurer will pay a claim if you have been neglectful.

Think about it.



Terry Mackenzie Hoy



Silvertondale Ext 2

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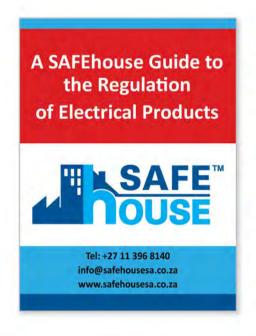
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IGNORANCE CAN BE COSTLY



There is a good deal of confusion and misunderstanding about:

- Which regulations are applicable to which electrical products and services
- The roles of authorities such as the National Regulator for Compulsory Specifications (NRCS), the SABS and the Department of Labour.

The SAFEhouse Association has produced a guide to help specifiers, suppliers and users determine the standards and regulatory requirements applicable to electrical products and services covered by legislation.

Download a free copy of the SAFEhouse Guide to the Regulation of Electrical Products from www.safehousesa.co.za



To find out what you can do to avoid or reduce the risks that result from using sub-standard, dangerous electrical products, consult SAFEhouse guides or visit www.safehousesa.co.za for some recommendations.

The SAFEhouse Association is a non-profit, industry organisation committed to the fight against sub-standard, unsafe electrical products.

For more information contact:

Barry O'Leary: Tel: 011 396 8251 Email: barry.oleary@safehousesa.co.za

Pierre Nothard: Tel: 011 396 8140 Email: pierren@safehousesa.co.za

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Online entries and email entries poured in from readers across South Africa, all hoping to win one of the fabulous prizes in this year's *Sparks Electrical News* 'Happy Holidays' lucky draw. All the generous sponsors of prizes joined the Sparks team for lunch under the Oaks at the Royal Johannesburg Golf Club and to draw the names of the lucky winners. Aberdare Cables added a second Fitboosta activity tracker, Eurolux gave away another solar post light and Three-D Agencies sponsored an additional UT50A multimeter - thank you!.

Thanks to everyone who entered and congratulations to all the winners!



Sparks Electrical News editor, Erika van Zyl with Jyoshtie Dhunes of Aberdare Cables.

ABERDARE CABLES

Two Fitboosta 14-function activity trackers

- Wouter Matthee (Robertville)
- Peter Willers (Cape Town)



Leanne Cole (Comtest) and Wilhelm du Plessis (deputy publisher, Crown Publications).

COMTEST

One Fluke 17B+ digital multimeter

• Willem Anton Hugo (Kimberley)



Gavin Wilkinson (ARB Electrical Wholesalers), Karen Grant (publisher, Crown Publications) and Vahesh Anghar (ARB Electrical Wholesalers).

ARB ELECTRICAL WHOLESALERS

One ARB cooler bag with products

Gerhard Pool (Bellville)



One 24" HD LED televisionGreg Bridger (Randburg)





Wilhelm du Plessis (deputy publisher, Crown Publications) and Aletta Olivier (CBI-electric : low voltage).

CBI-ELECTRIC

One prewired 12-way distribution board

Jacobus Petrus Kloppers (Brits)



Anthony Lloyd (Eurolux) with Erika van Zyl (editor, Sparks Electrical News).

EUROLUX

Two solar post lights

- David Charles Levin (Kempton Park)
- Lawrence Thysse (Vereeniging)

Garry Lumpe with Carin Hannay (advertising manager, Sparks Electrical News).
GARRY LUMPE IMPORTS

Two Knipex seven-in-one plier sets VDE 1 000 V

- Brendan Wilbraham (Knysna)
- Gareth Stanford (Cape Town)

Two Wiha Slimfix six-piece screwdriver sets VDE 1 000 V

- Etienne Mitton (Midrand)
- Michael Human (Lichtenburg)



0

Claude Middleton (HellermannTyton), Karen Grant (publisher, Crown Publications) and Ingrid Nicolaus (HellermannTyton).

One 13-piece bi-metal holesaw kit with spare drill bit

• Francois Hendrik van der Westhuizen (Riviersonderend)



Ian Downard (Three-D Agencies), Carin Hannay (advertising manager, Sparks Electrical News) and Mark Jenkins (Three-D Agencies).

THREE-D AGENCIES

Four UT50A multimeters

- Shafieqa Ismail (Cape Town)
- Koert Engelbrecht (Pretoria)
- Andrew Sweet (Durban)
- Saviour Mukomberanwa (Midrand)



Jessica Hitchcock (Voltex) and Karen Grant (publisher, Crown Publications).

One braai light; one Whizzy power bank; one Kennede LED rechargeable lantern

• Robert Aitchison (Edenvale)



Wilhelm du Plessis (deputy publisher, Crown Publications) with Stacey Conradie and Jan Anderson from MCE Global Supplies.

MCE GLOBAL SUPPLIERS

One portable O-lite 10W rechargeable work light

Joss Gordon (Germiston)

Mark Talbot (Stone Stamcor) with Carin Hannay (advertising manager, Sparks Electrical News).

STONE STAMCOR

Three SU16A crimp tools

- Wayne Oliver (Germiston)
- Steven de Villiers (Woodmead) Andre van Rensburg (George)

One HX1208 Crimp Tool

Giel Faber (Kleinbrakrivier)

One KH120 Crimp Tool

Manivasen Naidoo (Briardene)





Jaco Coetzee (Waco) with Erika van Zyl (editor, Sparks Electrical News).

WACO

One tripod with two floodlights

John Dal Lago (Sandton)



THE 'RECOGNITION OF PRIOR LEARNING' PROCESS FOR MASTER INSTALLATION ELECTRICIANS

DO you have many years of experience working on electrical installations in hazardous areas? Have you previously considered the criteria for registration as set out by the Department of Labour but you don't have an N6 Certificate? Then Option 4 of the Recognition of Prior Learning (RPL) process is a possible route that you could follow in order to become registered as a Master Installation Electrician (MIE).

The RPL is a process where a person who does not have a 'formal certificate' is assessed in order to establish whether they have the relevant skills, knowledge and practical abilities required for a particular occupation. If they are found to be competent they will receive the formal recognition. However, if the RPL assessment identifies gaps in the applicant's knowledge, skills or experience,

they will be advised to attend programmes, courses or interventions that would close those gaps. Once the applicant has 'closed the gaps' they can apply for another assessment.

RPL in not a new activity – we've been doing it for many years and, in the past, experienced persons were allowed to write a trade test under section 28 of the Manpower Training Act when this Act was in force.

Registration criteria

Before we review the criteria for Option 4, it must be emphasised that we have not 'lost' Options 1, 2 and 3 as previously found in the registration criteria. Option 4 has been added to the master installation registration criteria.

This option was put forward by The South African Flameproof Association to the Department of Labour as a result of the petrochemical industry experiencing a decline in the available number of Master Installation Electricians (MIE) over the past number of years, particularly after the introduction of the Minimum Theoretical Qualification requirement of the National N6 Certificate.

Companies with hazardous areas and contractors working for these companies are required by legislation to appoint MIEs to ensure a safe operating environment. The OHS Act requires, under Electrical Installation Regulations Section 5.4 that "a registered person shall exercise general control over all electrical installation work being carried out, and no person may allow such work without such control". The OHS Act also requires under Electrical

Installation Regulations Section 6.4 (b) that all contractors must have a full time registered person employed in hazardous areas and that this person must be an MIE.

According to The South African Flameproof Association, the hazardous areas industry makes use of contractors to assist with new installations and to also do maintenance work in hazardous locations. The resource scarcity continues to present a serious threat to safety of personnel and is crippling the Ex industry. For this reason, The South African Flameproof Association approached the Department of Labour and, after many months and numerous discussions, Option 4 was developed.

Below is an extract from the Department of Labour brochure (OHS 3/1/5/7/9 Revised March 2014):

Option 4

3.4 A candidate must:

- 3.4.1 Practical Qualification
- a. Be registered as an Installation Electrician for two years.
- b. Submit proof of five year's practical experience in hazardous locations.
- c. Submit documentary proof of successful completed unit standards on inspection, testing and certification of specialised electrical installations in hazardous locations as prescribed by the EWSETA.
- d. Submit documentary proof of the RPL competence declaration from the South African Flameproof Association (SAFA) MIE Group.

3.4.2 Minimum theoretical qualification

National N3 Certificate with the following compulsory subjects: Mathematics; engineering science or industrial electronics; electrical trade theory or electro-technology.

Or

Grade 12 (Standard 10) certificate; mathematics; science; technica – electrical or equivalent subject that may include an N3 subject.

Note 1: The candidate must pass each subject with a minimum of 40%.

Note 2: These minimum theoretical subjects could be a combination of Grade 12 and N3 subjects.

3.3.4 Knowledge of statutory requirements

Proof of knowledge on the legislation and relevant health and safety standards applicable to electrical installations by having passed the subject 'Specialised Codes' as administered by the Department of Higher Education and Training.

As previously indicated, Option 4 is an additional option for persons with five years and more experience in hazardous locations.

Regarding Section 3.4.1 (d) which requires that candidates submit documentary proof of the RPL competence declaration from the South African Flameproof Association (SAFA) MIE Group, candidates would need to visit the South African Flameproof Association website www.flp.co.za and download the application form. The process will require you to provide proof of the practical experience as well as attend an interview with the South African Flameproof Association MIE Group.

It must be noted that Option 4 is not a degrading of the other criteria; it will be used by applicants who have the knowledge, skills and years of experience and who require their experience to be recognised though a Recognition of Prior Learning process.



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YOU'D BETTER RUN FAR AND FAST WHEN SOMETHING GOES WRONG

et's continue unravelling the remainder of the Occupational Health and Safety Act (Act 85 of 1993) and, in particular, the Electrical Installation Regulations (2009). We left off with Regulation 7, the Certificate of Compliance. Now we're asked to start the job ...

Regulation 8: Commencement and permission to connect installation work

8. (1) No person shall commence installation work which requires a new supply or an increase in electricity supply capacity unless the supplier has been notified thereof in the form of Annexure 4: Provided that the supplier may waive this requirement

in respect of such types of work as it may specify.

How many unhappy consumers have been caught in the middle of this Regulation? Many electrical contractors neglect to complete 'Annexure 4: Notice Of Commencement Of Installation Work'. There can only be two reasons – he doesn't know or he is not registered. This application form assists the supplier of electricity determine what is happening in its area of supply and gives insight into the energy requirements of new or modified electrical installations, and assists with future network capacity planning.

Subregulation (2)

(2) No person shall connect or permit the connection of any completed or partially completed electrical installation to the electricity supply unless it has been inspected and tested by a registered person and a certificate of compliance for that electrical installation has been issued: Provided that the supplier may on request connect the supply to the electrical installation for the purpose of testing and the completion of the CoC by a registered person: Provided further that this subregulation shall not apply in a case where the electricity was

disconnected for the non-payment of the electricity account or where there has been a change of tenant but not of ownership.

Please read the first few words of Regulation 8 (2) again: "No person shall"... Simply put, if you connect without the paperwork in place, you'd better run far when something goes wrong.

Issuing of Certificate of Compliance (CoC)

9. (1) No person other than a registered person may issue a CoC.

Please note that the legislator assumes you and/ or the consumer knows the difference between the Single Phase Tester and Installation Electrician's signing powers.

(2) A registered person may issue a CoC accompanied by the required test report only after having satisfied himself or herself by means of an inspection and test that

(a) A new electrical installation complies with the provisions of regulation 5(1) and was carried out under his or her general control; or

(b) An electrical installation which existed prior to the publication of the current edition of the health and safety standard incorporated into these Regulations in terms of regulation 5(1), complies with the general safety principles of such standard; or

The 'test report' referred to and a comprehensive set of testing guidelines is in SANS 10142-1.

(c) An electrical installation referred to in paragraph (b), to which extensions or alterations have been effected, that

i. The existing part of the electrical installation complies with the general safety principles of such standard and is reasonably safe, and

ii. The extensions or alterations effected comply with the provisions of regulation 5(1) and were carried out under his or her general control.

This is not as simple as it seems. A large portion of SANS 10142-1 covers 'Fundamental Requirements' so go through that section in detail. The statement: "carried out under his or her general control" is not always adhered to and this is especially true when accredited persons responsible for the CoC don't visit the site.

(3) If at any time prior to the issuing of a CoC any fault or defect is detected in any part of the electrical installation, the registered person shall refuse to issue such certificate until that fault or defect has been rectified: Provided that if such fault or defect in the opinion of the registered person constitutes an immediate danger to persons in a case where electricity is already supplied, he or she shall forthwith take steps to disconnect the supply to the circuit in which the fault or defect was detected and notify the chief inspector thereof.

You can only issue a CoC if the installation complies. You can issue the test report to the owner, user of lessor of an electrical installation at any time. This will confirm the issues that prohibit the issuing of the CoC. Many owners, users or lessors of an electrical installation refuse to pay if a CoC is not issued but how can you issue a CoC for a non-compliant installation? So, hand over the test certificate with the one hand and hold out the other for the cash.

(4) Any person who undertakes to do electrical installation work shall ensure that a valid CoC is issued for that work.

There is no excuse for an installation without a CoC. The owner, user or lessor must see to it that they are in possession of one and the person who does the work must see to it one gets issued.

(5) No person may amend a Certificate of Compliance.

This is simple so there's no need for a long discussion. It's simply not done.

Till next time.

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ewiss is an international leader in the production of systems and components for low voltage electrical installations. "The fact that development is seen as a constant management feature has permitted Gewiss to assert itself as a market leader, offering an integrated electrical system with over 20 000 products for domotics, energy and lighting," says brand specialist, Nelen Govender.

He explains that the Gewiss protection system is composed of products that "have synergy and perfect integration with each other", such as the innovative 90 ReStart range (automatic reclosing devices), the 90 MCB and 90 RCD ranges (modular circuit breaker for circuit and residual current protection) and the 47 CVX range (metal distribution boards). "This integrated range of products meets every need according to the application type, from residential to the industrial and that can guarantee quality and safety in step with market requirements."

The advantages of a Gewiss system are: practical compatibility of homogenous products; simple and quick planning; installation and maintenance of the system; and modern and stylish design.

The 90 ReStart devices restore power supply quickly from automatic circuit breaker trips, but only after checking the system status. In addition, the Autotest function periodically tests the functioning of the residual current circuit breaker protection without disconnecting the system from the power supply. The range includes two-pole and four-pole versions.

The 90 miniature circuit breaker (MCB) range is made up of three types:

- MTC compact miniature circuit breakers, from 2 to 32 A in B- and C-curve and breaking capacity up to 10 kA.
- MT traditional miniature circuit breakers, from 1 to 63 A in B-, C- and D-curve and breaking capacity up to 25 kA.

MTHP – high performance miniature circuit breakers, from 20 to 125 A in C- and D-curve and breaking capacity up to 25 kA.

The 90 RCD range includes the MDC monobloc compact residual current circuit breaker with overcurrent protection; the BD and BDHP add-on modular residual current devices for MT and MTHP miniature circuit breakers; and the SD residual current circuit breaker.

The 90 AM range consists of auxiliaries for circuit breakers and many modular accessories for protection, command, programming, measurement and signalling in electric systems.

The LST surge protection range guarantees excellent protection of loads and power distribution systems. The range includes:

- LST surge protection devices.
- Disconnectable fuse holders.
- Residual current relay with separate toroid.
- Motor protection switches.

The 47 CVX range of distribution boards is available in both modular and monobloc systems from 160 A to 3 200 A. Available in surface- and flush-mounting types, these boards are available in a variety of IP ratings to suit most applications. Thanks to the extractable frame and quick connection of brackets, rails and functional profiles, the 160 A board allows quick assembly. Because the 630 A boards are based on a 'completely open structure', board wiring operations are quick and easy.

This entire range of items is available from ACDC Dynamics.

For more information, contact brand specialist, Nelen Govender at neleng@acdc.coza

Enquiries: +2710 202 3400

HIGH QUALITY DBS FOR ALL TYPES OF INSTALLATIONS

ajor Tech offers high quality flame-retardant DIN rail distribution boards, which are available in two different designs: a robust IP 65 surface-mount for outdoor usage or where strength is a pre-requirement; and an elegant IP 20 flush-mount and surface-mount for indoor usage where aesthetics and ease of use are of paramount importance. All distribution boards are supplied with a removable earth/neutral bar, an adjustable DIN rail to ensure straight installation and multiple knock-outs in different sizes located at the top, bottom, sides, and back of the board to cater for all installation types. The IP 20 flush-mount offer is available with either a sturdy ABS tray or a galvanised steel tray. The galvanised steel offer is supplied with wire mesh spot welded to the back for increased fixing support.

Enquiries +27 11 872 5500

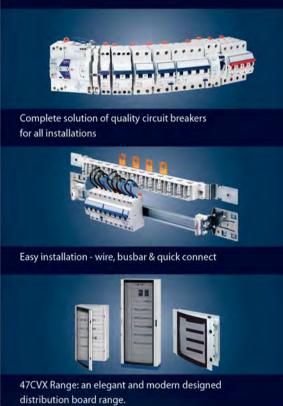


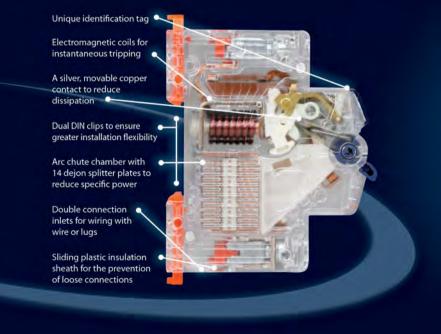












A full MCB solution from Gewiss: the 1st company to develop the Compact Miniature Circuit Breaker occupying only 50% of the space but still providing 100% of the protection.

The innovative 90 MCB range boasts a breaking capacity from 4,5 to 25kA with nominal currents from 1A to 125A all offered in a DIN rail MCB, with SABS Certification on all ranges. Residual-current devices are available, addressing all IEC required sensitivity ratings, from 10mA to 500mA combining overloads and short circuit protection.

The offer is completed by a full range of Isolators, Auxiliaries and all din rail accessories to address any requirement. These components are all complimented by a superior GEWISS Range of modern and sophisticated distribution boards. A truly world class Italian designed solution offering.



JOHANNESBURG 010 202 3300 CAPETOWN 021 510 0710 PINETOWN 031 700 4215 GERMISTON 011 418 9600 RIVERHORSE 031 492 4800

Distributors and Franchises throughout Southern Africa

GEWISS

LIGHT UP THE FUTURE



MANUFACTURERS ACDC Dynamics Brady SA Brother International SA CBI-electric: low voltage **Crabtree Electrical Accessories Denver Technical Products** HellermannTyton Legrand McWade Productions Power Process Systems Sabelco Electrical

DISTRIBUTORS

Zest WEG Group

ACDC Dynamics ACTOM Electrical Products ARB Electrical Wholesalers

Atlas Group Bellco Chint Citilec Comtest

Denver Technical Products Elen Electrical Enclosures HellermannTyton JDL Electric

Magnet Electrical Suppliers Major Tech MCE Global Suppliers **Nordland Lighting** Radiant Group **R&C** Instrumentation Stone Stamcor Voltex

CONTACT

Voltex LSis

Voltex MVLV

ABB

Dudley Bath ACDC Dynamics

ACTOM Electrical Products Russell Ramsden

ARB Electrical Wholesalers

Atlas Group

Annie Storrar/Imran Gaffoor

Bellco

Morne Louw **Brother International SA**

Brady SA

CBI-electric: low voltage

Jaco Viljoen

Chint Heather Scott

Citilec Jeff Forman Comtest

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Denver Technical Products Mervyn Stocks

Elen Electrical Enclosures

Andy Kapral HellermannTyton

Ingrid Nicolaus JDL Electric

Ashveer Lalla Legrand

Johan Bosch **Magnet Electrical Suppliers**

Kumaran Naidoo Major Tech Werner Grobbelaar MCE Global Suppliers

McWade Productions Steven Naidoo

Nordland Lighting Johann Lamprecht Phambili

Power Process Systems Joyce Toth **R&C Instrumentation**

Steve Edwards **Radiant Group**

Alfred Weldon Sabelco Electrical Industries

Marc Moreau Stone Stamcor Mark Talbot

CONTACT

Voltex Hugh Ward

Voltex LSis

Voltex MVLV

Waco

Jaco Coetzee **Zest WEG Group** Stephen Cook

CIRCUIT BREAKERS / EARTH LEAKAGE BREAKERS

Full range of circuit breakers, earth leakage breakers

ACDC Dynamics

Full range of economy breakers and high quality Gewiss

ACTOM Electrical Products

Full range of circuit breakers/earth leakage breakers

ARB Electrical Wholesalers

Full range of circuit breakers/earth leakage breakers

Atlas Group

Various brands available

Bellco

Various brands available

CBI-electric: low voltage Full range of residential, commercial, industrial, miniature circuit breakers; circuit breakers for equipment; moulded case circuit breakers; air circuit breakers and earth leakage

protection devices

Full range of circuit breakers, earth leakage devices

Citilec

Full range of circuit breakers, earth leakage devices

JDL Electric

Full range of circuit breakers, earth leakage devices

Legrand SA

Complete range of circuit breakers up to 6 300 A, MCB,

Major Tech

Full range of DBs including flush-mount Econo boards, surface-mount IP65 boards; IP65 clear/grey enclosures and IP 55 junction boxes; specialising in populated ready boards, 3 kA and 6 kA mini circuit breakers; isolator and earth leakage switches compliant to IEC 61008-1, SANS 556-2-2 and VC8035, two-pole and four-pole, 25 A - 63 A; range of DIN rail one-pole - four-pole 3 kA and 6 kA MCB, isolators and earth leakages as well as 1 p and 3 p busbar

MCE Global Suppliers

Onesto DIN rail circuit breakers and earth leakages; Schenker mini rail circuit breakers and earth leakages; Schenker 13 mm mini rail circuit breakers and earth leakage devices; Onesto dc circuit breakers

McWade Productions

Full range of circuit breakers, earth leakage breakers

Power Process Systems

Full range of circuit breakers, earth leakage breakers

Various brands available Voltex LSis

Various brands available

Waco

Various brands available

Zest WEG Group

MDW miniature circuit breaker range one- to four-pole, 6 - 125 A, 6 and 10 kA; DWM moulded case circuit breaker range one- to four-pole, 16 - 1 600 A, 16 - 80 kA; ABW air circuit breaker range one- to four-pole, 800 - 6 300 A, 65 - 120 kA; RDW range of earth leakage devices 25 - 100 A, 30 and 300 mA

PROTECTION

ABB

Full range of protection devices

ACTOM Electrical Products Full range of protection devices

ARB Electrical Wholesalers Full range of protection devices

Atlas Group Various brands available

Various brands available CBI-electric: low voltage

Full range of residential, commercial, industrial earth leakage protection devices

Comtest

IS meters Atex equipment

Chint

Full range of protection devices

HellermannTyton

TEL1TLB socket ELCB tester/polarity - identifies six wiring conditions; TEL11 ELCB/phase rotation tester - indicates phase presence and rotation; 1 000 V IEC industrial range of tools (adjustable spanner, ring spanners, screw drivers, open-ended spanners, insulated pliers, long nose pliers, diagonal pliers, reversible ratchet, mini hacksaw)

JDL Electric

Full range of protection devices

Legrand SA

Complete range of protection devices

Magnet Electrical Suppliers

EXOTHERMIC WELDING

Full range of protection devices

Major Tech

Populated ready boards 3 kA and 6 kA mini circuit breakers, IEC 60947-2 and VC 8036 compliant

McWade Productions

Full range of protection devices

Power Process Systems

Full range of protection devices

R&C Instrumentation

Infrared inspection windows 24-7 differential temperature monitors inside and outside boards

Sabelco Electrical

Full range of protection devices

Voltex Various brands available

Voltex LSis

Various brands available

Waco Various brands available

Zest WEG Group

RW range of thermal overload protection; SRW range of electronic overload protection

DISTRIBUTION BOARDS

ACDC Dynamics

Full range of DBs, plastic and steel, flush or surface mount,

also available in pre-wired options

ACTOM Electrical Products Full range of DBs

ARB Electrical Wholesalers

Full range of DBs

Atlas Group

All sizes available or manufactured to client specifications

Bellco

All sizes available or manufactured to client specifications

CBI-electric: low voltage

12- and 20-way distribution boards; ready boards; 40- and 60-way architrave boards

Citilec

Full range of DBs

Full range of residential, commercial, industrial, miniature circuit breakers, moulded case circuit breakers, air circuit breakers. Earth leakages and a full range of DB Boards Flush and Surface

Crabtree Electrical Accessories Flush mount DBs

Elen Electrical Enclosures Full range of plastic DBs with knock-out cable entries. and steel, stainless and GRP enclosures available with DB

chassis options; by ETA, IDE and Schneider Electric HellermannTyton

KV small type DBs 12- and 18-way single row DBs with IP54 and IP65 protection to IEC60439-3 with double insulated Class II protection in flame retardant an self-extinguishing thermoplastic (glow wire tests up to 750 °C) with knock-out entries, surface-mount with or without PE/N terminals

JDL Electric

Full range of DBs

Legrand SA Full range of flush- and surface-mount, waterproof DIN rail boards

Magnet Electrical Suppliers

Full range of DBs

Full range of DBs including flush-mount Econo Boards (plastic and galvanised steel tray options), surfacemount Econo boards and surface-mount IP65 boards. populated DBs; ready boards DIN rail PVC surface DB from four- to 45-way, flush DB PVC tray from two- to 45-way, weatherproof IP65 DB from four- way to 24-way, flush metal tray 12-way, 15-way and 18-way

MCE Global Suppliers

Onesto ready boards with or without bulkhead; Schenker ready boards with or without bulkhead; Onesto swimming pool distribution board; Onesto caravan distribution board; MCE multi-purpose distribution board

McWade Productions

Full range of DBs

All sizes available or manufactured to client specifications

Power Process Systems Full range of DBs

R&C Instrumentation

Infrared inspection windows 24-7 differential temperature monitors inside and outside boards

All sizes available or manufactured to client specifications

Voltex LSis All sizes available or manufactured to client specifications

All sizes available or manufactured to client specifications

LABELLING

ARB Electrical Wholesalers Full range of labelling products

Atlas Group Dymo and Brother labelling machines and accessories

Bellco

Dymo and Brother labelling machines and accessories

TELECOMS/DATA PROTECTION

Specialised labels and label printers for electrical installations

Brother International SA

Full range of labelling machines and consumables

HellermannTyton

Customised printing of panel labels with TT430 printer on

material dependent on application and industry

JDL Electric Full range of labelling products

Legrand SA

CAB3 and Memocab cable markers

Magnet Electrical Suppliers Full range of labelling products

Phambili Dymo and Brother labelling machines and accessories

Power Process Systems

Full range of labelling products

R&C Instrumentation APP-driven equipment tagging

Stone Stamcor

Brady identification systems

Dymo and Brother labelling machines and accessories **FUSES**

ACDC Dynamics Full range of fuses and fuse holders

ACTOM Electrical Products Full range of fuses

ARB Electrical Wholesalers Full range of fuses

Atlas Group Wide range of fuses available on request

Bellco Wide range of fuses available on request Chint

Full range of fuses JDL Electric

Full range of fuses Legrand SA HRC, domestic and industrial fuses

Magnet Electrical Suppliers Full range of fuses MCE Global Suppliers

MCE fuses and fuse holders; Onesto fuses and fuse holders; Onesto dc fuses and fuse holders **McWade Productions**

Full range of fuses **Power Process Systems**

Full range of fuses

Wide range of fuses available on request

Wide range of fuses available on request **Zest WEG Group**

20 - 1 000 A, size 00, 1, 2, 3 high speed fuses SWITCHES/ISOLATORS

ABB Full range of switches and isolators

ACDC Dynamics Full range of switches and isolators

ACTOM Electrical Products Full range of switches/isolators

ARB Electrical Wholesalers Full range of switches/isolators

Atlas Group Reputable brands available on request; in-house brands LSis and W-Range

Reputable brands available on request; in-house brand LSis and W-Range

CBI-electric: low voltage Full range of commercial and industrial switch disconnectors

Chint Full range of switches, isolators

Crabtree Electrical Accessories Complete range of switches and isolators

Full range of switches and isolators Legrand SA

Domestic and industrial switches and isolators **Magnet Electrical Suppliers**

Full range of switches and isolators **Major Tech** Veti complete switches in modular and assembled; Veti complete

isolator range; Veti isolator series (one-pole to four-pole) MCE Global Suppliers

Onesto DIN rail isolators; Schenker mini rail isolators; Onesto dc isolators; MCE surface-mount (IP66 and IP65) and base-mount isolators

Power Process Systems Full range of switches/isolators

McWade Productions

Full range of switches/isolators

Stone-Stamcor Chilly Toggle switches; Triton Float switches



SWITCHES/ISOLATORS

Reputable brands available on request: in-house brands LSis and W-Range

Voltex LSis

Reputable brands available on request; in-house brands LSis and W-Range

Reputable brands available on request; in-house brands LSis and W-Range

Zest WEG Group

SIW miniature isolator range 40 - 100 A; IWA moulded case isolator range 160 - 1 600 A

CONTACTORS

ABB

Full range of contactors

ACDC Dynamics

Wide range of contactors from TC, C&S and Gewiss

ACTOM Electrical Products Full range of contactors

ARB Electrical Wholesalers

Full range of contactors

Atlas Group

Reputable brands available on request; in-house brand LSis

Bellco

Reputable brands available on request; in-house brand LSis

CBI-electric: low voltage

Full range of magnetic contactors and thermal overload relays

Chint

Full range of contactors **Denver Technical Products**

GIGAVAC dc contactors p to 1 000 A 1 000 V

JDL Electric Full range of contactors

Legrand SA

Contactors up to 800 A **Magnet Electrical Suppliers**

Full range of contactors

MCE Global Suppliers

MCE ac magnetic contactors in three- and four-pole; MCE contactor accessories; S&C ac magnetic contactors in three- and four-pole; S&C contactor accessories

Power Process Systems

Full range of contactors

Reputable brands available on request; in-house brand LSis Voltex LSis Reputable brands available on request; in-house brand LSis

Reputable brands available on request; in-house brand LSis

Zest WEG Group

CWB 7 - 22 A AC3 compact range and accessories; CWB, CWM, 9 - 800 A AC3 contactor range and accessories

SURGE PROTECTION DEVICES

ABB

Full range of surge protection devices

ACDC Dynamics Wide range of surge protection devices

ACTOM Electrical Products

Full range of surge protection devices

ARB Electrical Wholesalers

Full range of surge protection devices

Atlas Group Reputable brands available on request

Reputable brands available on request

CBI-electric: low voltage

Clip-in dual mount surge protection devices Chint

Full range of surge protection devices

HellermannTyton

Surge plugs - TSP1A surge plug top (green); surge plugs TSP1AF surge plug (red) flat pin to SANS 164-0; high surge handling capacity

Full range of surge protection devices Legrand SA

Full range of surge protection devices Magnet Electrical Suppliers Full range of surge protection devices

Major Tech

MTD6 - appliance surge protector

MCE Global Suppliers

Onesto surge arresters; Schenker surge arresters; Onesto dc surge arresters

McWade Productions

Full range of surge protection devices

Power Process Systems Full range of surge protection devices

Voltex Reputable brands available on request

Voltex LSis

Reputable brands available on request

Waco

Reputable brands available on request

Zest WEG Group

Fanox surge arrester Class C Type II

TIMERS

ABB Full range of timers

ACDC Dynamics

Wide range of locally manufactured timers

ACTOM Electrical Products

Full range of timers **ARB Electrical Wholesalers**

Full range of timers

Atlas Group

Reputable brands available on request - analogue and digital

Reputable brands available on request - analogue and digital

CBI-electric: low voltage Standard electronic time switch with 24-hour reserve

Chint Full range of timers

HellermannTvton

TDDGT seven-day digital geyser timer (internal relay) max 20 A (3 500 W) resistive load such as geysers, underfloor heating and lights; TGTLC geyser time load controller Series 2 (internal relay) six pre-set timer with peak demand lock out

JDL Electric

Full range of timers

Legrand SA

Complete range of analogue and digital timers

Magnet Electrical Suppliers

Full range of timers

Major Tech

Complete range of digital and analogue DIN rail mount timers, plug-in daily, weekly and programmable digital timers MCE Global Suppliers

MCE digital and analogue time switches; MCE seven-day digital geyser time switch; Schenker mini rail seven-day digital time switch

Power Process Systems

Full range of timers

Radiant Group

Full range of timers Stone-Stamcor

SAIA-Burgess timers Voltex

Reputable brands available on request - analogue and digital

Electronic relays; RTW range timing; RPW range monitoring;

Reputable brands available on request - analogue and digital **Zest WEG Group**

METERS

RNW range level control

ABB

ACDC Dynamics Wide range of energy meters, digital multimeters, network

analysers and panel meters - digital and analogue **ARB Electrical Wholesalers**

Full range of meters

Atlas Group

Reputable brands available on request - analogue and digital

Reputable brands available on request - analogue and digital CBI-electric: low voltage

Rail mount meters

Comtest

Digital meters; clamp meters; laser distance meters

Chint

Full range of meters HellermannTyton

TMB878 insulation/combination digital multimeter - insulation resistance 50, 100, 250, 500, 1 000 V; TBM086 - 1 000 A ac AmpTip jaws, three-phase rotation for main and motors

JDL Electric Full range of meters

Legrand SA

Electrical energy and multifunction metering

Magnet Electrical Suppliers Full range of meters

Full range of professional test instruments and DIY meters

MCE Global Suppliers MCE ammeters and voltmeters

McWade Productions Full range of meters

Power Process Systems Full range of meters

Voltex

Reputable brands available on request - analogue and digital Reputable brands available on request - analogue and digital

Zest WEG Group Electronic PF01 range of power factor meters; MMW range of power meters

DISTRIBUTION BOARD ENCLOSURES

ABB

Full range of DB enclosures

ACTOM Electrical Products

Full range of DB enclosures **ARB Electrical Wholesalers**

Full range of DB enclosures

DISTRIBUTION BOARD ENCLOSURES

Standard sizes available and manufacture to client specifications

Bellco

Standard sizes available and manufacture to client

specifications CBI-electric: low voltage

Flush-mounted distribution boards Chint

Full range of DB enclosures

Elen Electrical Enclosures

Full range of plastic DBs with knock-out cable entries, and steel, stainless and GRP enclosures available with DB chassis options; by ETA, IDE and Schneider Electric

HellermannTyton

DB enclosures IP 65 to IEC 61439 available in high impact polycarbonate material with double insulated Class II safety protection, flame retardant and self-extinguishing at glowwire tests up to 960 ° C, safe current capacity from 250 A

up to 630 A JDL Electric

Full range of DB enclosures

Legrand SA

Full range of flush and surface mount, waterproof DIN rail boards

Magnet Electrical Suppliers

Full range of DB enclosures Major Tech

Full range IP 65 and IP 55 enclosures

MCE Global Suppliers MCE DBs in surface-mount and flush-mount from two-way to 36-way; Onesto DBs in surface- and flush-mount from four-way to 36-way; Schenker DBs in surface-mount and flush-mount from four-way to 20-way; adjustable flush-

mount distribution boards in 20-way and 24-way Phambili

Standard sizes available and manufacture to client specifications

Power Process Systems

Full range of DB enclosures **R&C** Instrumentation Infrared inspection windows

Full range of DB enclosures

Sabelco Electrical Industries

Voltex Standard sizes available and manufacture to client specifications

Voltex LSis Standard sizes available and manufacture to client specifications

Waco

Voltex MVLV Standard sizes available and manufacture to client specifications

Standard sizes available and manufacture to client specifications

HAZARDOUS AREAS

ARB Electrical Wholesalers Full range of products for hazardous areas

Full range of products for hazardous areas

Citilec

Comtest Digital multimeters; process calibrators; pressure calibrators;

infrared thermometers; pressure models

Elen Electrical Enclosures Eex'e (zones 1, 2, 21 and 22) junction boxes (assemble and supply);

ATEX-approved enclosures by ETA, IDE, Schneider Electric HellermannTyton

Full range of tools and instruments suitable for hazardous areas JDL Electric

Full range of products for hazardous area Magnet Electrical Suppliers

Full range of products for hazardous areas Major Tech

Comprehensive range of hazardous area lighting Nordland Lighting Lighting for hazardous areas

Power Process Systems Full range of products for hazardous areas

R&C Instrumentation IS-certified Infrared thermometers

Full range of products for hazardous areas

OTHER

Denver Technical Products

Wolf safety lighting torches

Elen Electrical Enclosures Enclosures and cabinets, compression cable glands, panel ventilation fans and cooling units, vortex tube panel coolers,

DISCLAIMER: Information will be published as

thermoelectric panel coolers, resistance heaters

supplied. Only manufacturers and suppliers who meet the buyers' guide deadline are included in the guide. The onus is on manufacturers and distributors to ensure that the editor is notified of any changes to existing listings before the deadline date. To be included in the buvers' guide, email carinh@crown.co.za



+27 10 202 3300



Electrical Wholesalers



+27 11 874 7600







+27 11 683 0641 McWade

Productions (Pty) Ltd





+27 11 879 2000



+27 11 723 6000



+27 11 314 8869

FEBRUARY 2017



FREESTANDING AND WALL MOUNTING ENCLOSURES

AND ACCESSORIES OFFER A COMPLETE SOLUTION

egrand's new freestanding and wall mounting Linkeo 19" enclosures have been designed for easy installation, high performance and optimum safety in commercial sector installations.

"Linkeo 19" enclosures are supplied with a wide range of accessories to offer a complete solution for all projects," says Sonja Leibbrandt, marketing and pricing manager, Legrand SA. "These metallic extendable freestanding and wall-mounting cabinets ensure the ordered arrangement and optimum protection of electrical components like terminal blocks, switches and sockets, fuse carriers, safety transformers and circuit breakers.

"Linkeo 19" enclosures have a textured polyester coating that provides excellent resistance to corrosion and scratching. An IP 20 Index protection rating guards against solid objects and liquids and an IKO8 rating offers protection against mechanical impacts.

"Cabinets and equipment are supplied ready-assembled or as flatpack solutions in stackable wooden cases, depending on customer requirements."

Linkeo 19" freestanding cabinets have a reversible front door with a safety glass window and removable side and rear panels. For added security, all four sides can be locked with a key

lock. These units are equipped with 2×19 " uprights, which are adjustable in depth. There are pre-cut top and bottom cable entries and a cut-out at the top for fan kits.

These freestanding enclosures, with a loading capacity of 400 kg, are equipped with levelling feet and an earthing kit. Extension cabinets are supplied with a baying kit for safely joining the cabinets. Other accessories include metal plinths and pivoting castors, as well as fixed or telescopic shelves. Linkeo fan kits have an integrated thermostat which is adjustable from -10 °C to 80 °C.

Linkeo 19" wall mounting cabinets, with a reversible flat safety glass door and integrated lock, are designed for simple, two-step wall fixing of the base and the cabinet. These enclosures are supplied with 2 x 19" uprights which are adjustable in length. Other features include an adjustable top cable entry with a foam seal and rear and bottom cable entries equipped with blanking plates. These cabinets have top perforations for natural ventilation and can also be equipped with fan kits. Earthing kits are a standard safety feature.

As an alternative to ready assembled Linkeo 19" enclosures, Legrand also offers flatpack solutions for compact transportation, easy handling, efficient storage and effortless mounting.

Linkeo 19" freestanding and wallmounting flatpack cabinets are available as a one part number, where all components are supplied in one pack, with high protection packaging. Flatpack cabinets can also be split up into four part numbers and delivered in small, light packages.

Also available are 19" metal Bati-racks for housing 19" equipment in an air-conditioned, secure, dust-free environment. For improved resistance to corrosion and scratching, these units have a textured polyester coating. Batiracks, which comprise two or four x 19" uprights, ensure full access to wiring and are supplied ready for assembly. Specially designed cable management sleeves, with a closed vertical feedthrough, are designed for fixing on the left or right of the 19" uprights, providing a perfect finish.

These units, with a 300 kg permissible load, are supplied with a roof for four upright Batiracks, a set of four castors, shelves and levelling feet.

Linkeo 19" enclosures and equipment form part of Legrand's extensive range of stainless steel and metal cabinets, which meets stringent quality and safety specifications.

Enquiries: +27 11 444 7971



Legrand's new freestanding and wall mounting Linkeo 19" enclosures have been designed for easy installation, high performance and optimum safety in commercial sector installations and are supplied with a wide range of accessories, offering a complete solution for all projects.

NEW COMPREHENSIVE RANGE OF

INNOVATIVE STAINLESS STEEL ENCLOSURES

ELEN ENCLOSURES has, from its inception in 1982, constantly sought ways to expand the level of quality, service, innovation and product selection available to their customers. The enclosure specialist of 35 years recently sourced a new and comprehensive range of 304L and 316L stainless steel enclosures from ETA S.P.a, a highly reputable European manufacturer, and at very attractive prices.

The backbone of the supply programme is the ECOR range of wall mounting enclosures, which comprises 25 sizes of single-door enclosures ranging from $300 \times 200 \times 150$ mm to $1\ 200 \times 800 \times 300$ mm and two double-door enclosures of $1\ 000\ \times 1\ 000\ \times 300$ mm and $1\ 200\ \times 1\ 000\ \times 300$ mm. The enclosures are made from 1.5 mm thick laser-welded bodies with gutter profiled opening and doors with formed corners. The enclosures are certified to IP66 sealing for single-door and IP55 for double-door.

The range introduces a major innovation in enclosure technology by means an in-situ formed two-component silicone compound door gasket. The silicone gasket is resistant to the majority of aggressive chemicals and has a temperature resistance from -50 to 200 °C, as opposed to the 120 °C of polyurethane gaskets, which is currently the industry norm. These properties greatly widen the range of environments in which the enclosures can be used, i.e. from refrigeration plants to steel works and foundries as well as in the harshest industrial environments (such as chemical plants, refineries, and water and sewage treatment, paper, pulp and textile industries).

Stainless enclosures are particularly suited for use in dairies, breweries, beverage and food processing plants, and pharmaceutical industries. The choice of grades 304L or 316L offers solutions for severe climatic conditions as encountered in in-/off-shore marine environments or desert conditions.

The 2.5 mm thick galvanised chassis plates are supplied as standard and a wide variety of accessories such as rain canopies, internal doors, distribution board chassis and plinths are available. The enclosures have a brushed satin finish and are supplied with easily removable protective plastic film to protect against scratches and scuffs during delivery or machining.

The ECOR supply programme is further expanded by a range of 20 enclosures (from 300x200x150 mm to 1 200x800x300 mm) complying with ATEX directive and conforming to Ex II 2GD, Ex e II T6 and Ex td A21 T85°C for use in applications requiring increased or intrinsic safety.

The ATEX-approved range is supplied with continuous formed-in polyurethane door gasket. Elen Enclosures has assembly facilities highly experienced in the production of junction boxes certified for use in classified hazardous areas, as well as standard applications.

The ECOR range of wall-mounted enclosures is complemented by a wide variety of other stainless steel products such as EMOX 'monobloc' floor-standing cabinets, ENUX modular suite cabinets, EGRAN terminal boxes, SHX pushbutton boxes, ECOR sloped-roof enclosures and ZBX control desks.

"It is Elen's aim is to become the number one supplier of stainless steel enclosures in South Africa," says Andy Karpral, adding that "Elen has acquired the Southern Africa agency for all ETA products, which also include mild steel enclosures, cabinets and control desks."

Enquiries: +27 11 472 2220



FAST ELECTRICAL CIRCUIT LOCKOUT





Prady's unique TAGLOCK lockout solution enables operators, mechanical engineers, maintenance and safety personnel to quickly and easily lock out electrical circuits in order to prevent accidental engagement while maintenance is ongoing. With TAGLOCK, the risk of electrocution and other accidents related to re-energising can be reduced.

Prevent accidents

TAGLOCK blocks circuit breakers in the off-position to prevent accidental re-engagement while maintenance is ongoing. By securing circuit breakers in the off-position during maintenance, the risk of electrocution and other, re-energising related, accidents with potentially severe consequences can be reduced.

Up to four workers

Up to four workers can use the circuit breaker lockout device simultaneously, each with their personal, colour-coded cable tie. When their part of the job is complete, each worker can remove his personal tie and tag. When maintenance is done, the last worker also removes the circuit breaker lockout device to allow circuit breaker re-engagement.

Easy to apply

TAGLOCK can be installed quickly and easily. Apply the circuit breaker lockout device, run a cable tie through its hole and add a tag. The TAGLOCK lockout devices are small enough to be applied on most circuit breakers that are positioned next to each other. Run a nylon cable tie through the holes of the applied circuit breaker lockout devices to block all circuit breakers involved in the off-position. A padlock can be attached for extra security when needed.

Watch the TAGLOCK video on Youtube, or email Brady at emea_request@bradycorp.com for more information.

Enquiries: +27 11 704 3295



SWITCHES AND SOCKETS FOR THE NEW BREED OF CONSUMERS

Rhodam Evans, product manager at Major Tech is a firm believer that, in today's competitive market, switches and sockets are more than just a practical solution for an everyday application. "In the past, people didn't place too much emphasis on the design of a light switch as long as it turned on the light and the switch remained reliable. Similarly, insofar as socket outlets were concerned, South Africans accepted that adaptors were necessary in order to use any products with different plug tops, such as the common two-pin. Today, customers are far more 'switched-on' and aware of the available options when it comes to decorating their homes," he says.

"With the introduction of new technology, digital platforms and the rise of the millennials, information sharing has become more accessible. Customers are now more informed than ever before and a 'new breed' of customer has emerged – and they want to be set apart from the rest, no matter the cost," says Evans. "This has resulted in a shift in the market and today's customers have come to expect more stylish and elegant options for contemporary décor styles – and one could say that consumers drive the market and, ultimately, this drives innovation. Major Tech's Veti range revolutionises the concept of what switches and sockets are able to offer and provides affordable options for one of the most commonly used applications in one's living and working areas.

"Consumers have embraced the stylish and cost-effective Veti range and are asking for it by name", says Evans. "Major Tech offers consumers customised options to suit their personal needs and lifestyles, and this is the reason the Veti range has become so popular."

Veti is available as a complete offer for fast and simpler installation as well as a modular offer for more creative preferences.

"VETI has an ultra-modern rounded design, which allows more space within the wall box for wires and connections by stepping the product slightly away from the wall thus making it easier when installing the socket and switch combinations," explains Evans.

Veti product offering and specs:

- Available in a complete and a modular offering.
- The modular range allows for over 2 000 different combinations of switch, socket, electronic and communication modules.
- Cover plates are available in six interchangeable colours (white, cream, silver, champagne, gun metal, and bronze).
- Manufactured from the highest quality raw materials ensuring a flame retardant product.

Optimum handling and electrical safety in critical applications

The Wiha SoftFinish electric slimFix screwdriver is a convenient, slim solution for electrical applications. Thanks to the printed screw symbol on the handle end makes easy the selection of the right tool for the right job.

Applications on live equipment are subject to very special requirements with the focus on absolute safety. Up to 33% reduction of the bit diameter in the critical working area allows effortless access to low-lying fastening/spring elements and, due to integrated insulation, the blades are up to 33% narrower. The high quality blade insulation is moulded directly onto the blade and therefore guarantees safety when working on live equipment up to 1 500 V dc/1 000 V ac. To maintain this safety, each screwdriver in the SoftFinish electric series is individually tested in a water bath at 10 000 V according to IEC 60900:2012. The roll-off protection and the special handle geometry offer optimum handling and electrical safety, even in critical applications.

Enquiries: +27 11 3964065



Veti switches:

- Available in black and white.
- Option of including a locator or an indicator lamp.
- Available for all applications: one-way, two-way, intermediate,
 20 A double-pole and splitter.
- Available in a single module or double module.

Veti sockets:

Veti has a full array of socket modules to fulfil any installation requirement including the standard South African 16 A; the red, blue and black dedicated; the 6 A for lighting circuits; the British square pin; the South African standard two-pin; the new compulsory three-pin spec; and the schuko with and without side earth. All of these socket modules can be assembled in different combinations to suit a specific living or working area. The modular system allows the incorporation of a switch per socket, a single switch to disconnect the power to all sockets or no switch at all to maximise the space available; and all of these options conform to wiring regulations.

Enquiries: +27 11 872 5500













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CELEBRATING 70 YEARS OF MANUFACTURING EXCELLENCE IN SA

rabtree, a leading manufacturer of low voltage switches and sockets, domestic leads and adaptors and cable management products is celebrating its 70th year on the South African electrical market landscape.

André le Roux, general manager: sales and marketing, says, "In an industry that has been invaded with cheap imported products, this is a major achievement. Crabtree remains the biggest and one of the only true local manufacturers left in the market place. From start to finish, all of our products are locally developed, designed and manufactured."

He says that every month, Crabtree manufactures more than 400 000 products and enough conduit to stretch from Musina to Cape Town. "Crabtree is still the preferred and trusted brand for electrical contractors in South Africa who see the brand as being synonymous with quality, safety and reliability," says Le Roux, adding that the company remains "fully committed to these ideals".

New range

"This will be a year of celebration for Crabtree and to mark the occasion, we will be launching the Classic Deco and RoHS compliant Hospital range into the market place and will exhibit these products at the Decorex shows in Johannesburg, Durban and Cape Town," he says, adding that details will be uploaded onto Crabtree's Facebook and Twitter pages.

Factory tours

Le Roux reveals that, starting in April, Crabtree will be hosting two factory tours per month for the electrical contractors who are interested in seeing how quality products are manufactured and tested. "Anyone who would like to join us should contact their area sales representative or wholesaler to book a tour."

Le Roux concludes: "In many ways, 2017 is a year of new beginnings for Crabtree, and we thank all our

channel partners, electrical contractors, Crabtree personnel and their families for their continued support, commitment and positive attitudes."

Enquiries: +27 11 874 7704

Three-pole contactor available in two versions

SCHNEIDER ELECTRIC has introduced to the South African market its Rollarc three-pole indoor contactor that uses sulphur hexafluoride (SF6) gas for insulation and circuit-breaking. The rollarc is available in two versions; the Rollarc R400 comes complete with magnetic holding, and the R400D that is accompanied by mechanical latching.

According to Brighton Mwarehwa, technical manager at Schneider Electric South Africa, the circuit-breaking of the Rollarc unit is based on the rotating arc principle. "The basic version is made up of three pole units installed in the same insulating enclosure. The part of the enclosure containing the active parts of the poles is filled with SF6 gas at a gauge pressure of 2.5 bars," he explains.

Mwarehwa points out that the main advantages of the Rollarc contactors include a modern and tested circuitbreaking technique featuring SF6 safety, no maintenance for the MV active parts, high mechanical and electrical endurance, low switching surges without additional devices, insensitivity to the environment and that gas pressure may be continuously monitored. The Rollarc range is ideal for the protection and control of medium voltage motors, capacitor banks, power transformers, resistors and general switching. "The unit is also insensitive to external conditions and provides a complete gas-insulated

system. It is a hermetically sealed enclosure filled with SF6 gas, housing the essential parts. Rollarc is suited to most environments, including polluted environments such as mines, cement works, and more," adds Mwarehwa.

Both the Rollarc R400 and R400D contactors are available in three versions: The basic version – contactor alone, without the cradle; the fixed version – the contactor with the control auxiliaries is mounted on a fixed cradle; and the withdrawable version – the contactor with the control auxiliaries is mounted on a withdrawable cradle.

"Fixed and withdrawable versions may be equipped with fuses when the system short-circuit current is greater than the contactor short circuit rating. The common fuses used in the Rollarc contactors are of the indoor Fusarc CF type with strikers that actuate the contactor opening mechanism," says Mwarehwa.

The Rollarc rotating arc contactor has the following benefits:

Long life: This results from high product reliability, very low wear of the active parts which require no maintenance, and the excellent sealing of the enclosure, eliminating the need for subsequent filling.

Mechanical endurance: The operating energy is reduced because the current to be interrupted, directly creates arc rotation. The Rollarc contactor can do up to

300 000 operations in R400 version and 100 000 operations in R400D version.

Electrical endurance: The long life of the Rollarc is due to the negligible degeneration of the gas and to low wear of the contacts. The energy dissipated in the arc is low due to the intrinsic properties of the gas, the short length of the arc, and the very short arcing time.

"Wear of the arcing contacts can be checked without opening the poles. The unit is capable of breaking normal load currents and short circuit currents up to its rating, even in the case of frequent operation. In the case of higher short circuit currents the Rollarc contactor can be used in a fuse-contactor assembly enabling the contactor to deliver much more," continues Mwarehwa. "The intrinsic properties of the gas and the soft break resulting from the technology in use mean that switching surges are very low. When used for motor control, the unit is free from multiple prestrike and restrike phenomena."

In addition, in the unlikely event of an accidental drop in the pressure of the SF6 gas in the Rollarc unit, there is an option for a pressure switch for alarm indications and control.

Rollarc complies with the following standards and specifications: IEC publication 60470 and IEC 62271-105.

Enquiries: +27 11 254 6400

TAILORED CONTROL AND SWITCHGEAR PACKAGES



Low Voltage Switchboards is an independent panel assembler running production lines for the complete range of industrial control and automation equipment.

Rockwell Automation Sub-Saharan Africa is marking seven years of successful collaboration with panel and cabinet assembler Low Voltage Switchboards. It is a collaboration that is leveraging increased market competitiveness by maximising the capabilities of the industrial automation specialist to package its IEC-rated drive and control equipment in tailored, fully compliant panel technology solutions to industrial markets in sub-Saharan Africa. The fruits of this collaboration are today seen in some of the largest mining and industrial projects across the region.

The association includes the assembly of Rockwell Automation switchgear and controlgear in Low Voltage Switchboards' modular panel and cabinet configurations.

"Our collaboration with Low Voltage Switchboards broadens our project delivery capabilities with synergies from both sides," explains Adrian van Wyk, business manager – Power and Components Business, Southern and Sub-Saharan Africa, Rockwell Automation.

"As Rockwell Automation, we supply a product and the technical ability to deliver solutions required from a customer perspective; which Low Voltage Switchboards then integrates into a structure so that the solution meets both customer and local specifications. It's an integral part of increasing the competitiveness of Rockwell Automation in delivering full-scale projects that meet local end user- and application-specific standards and quality requirements."

The association demonstrates Rockwell Automation Sub-Saharan Africa's continuing strategy to align with independent suppliers to facilitate attractive, competitive and innovative product solutions to industrial end users. "We seek out strategic alliances and collaborators that fit with Rockwell Automation's view of maximum quality standards through a solution with maximum compliance," Van Wyk says.

In a company such as Low Voltage Switchboards, with a track record of over 18 years, Rockwell Automation has an independent panel building agent that leverages its knowledge of regional industrial applications to supply customised solutions to the specific requirements of each industry and workspace.

Enquiries: +27 11 654 9700

SOUTH AFRICAN... AND PROUD OF IT!

- Not everyone is aware of the fact that an Olifantsfontein-based company has been supplying vital equipment to the transmission and distribution industry in South Africa and abroad for the past 55 years. McWade Productions was founded in 1965 and is now a leading supplier of locally manufactured Transmission and Distribution Line Hardware, High Voltage Sub Station Interconnecting Clamps up to 765kV, Insulators, Disconnectors, Isolators and Compression Tooling.
- Founded in 1965 and is now a leading supplier of locally manufactured Transmission and Distribution Line Hardware, High Voltage Sub Station Interconnecting Clamps up to 765kV, Insulators, Disconnectors, Isolators and Compression Tooling.
- It has a substantial manufacturing facility operating in accordance with ISO 9001, to local and international specifications.
- On site facilities include a non-ferrous, sand and gravity die-casting foundry, machine shop as well as tool and die-making facilities.
- They provide in-house design, documentation and technical back-up, local
 and international sourcing of specialised equipment, manufacture, source
 and supply of full packages for sub stations and line projects and design and
 consulting services to plan and recommend the most suitable equipment,
 connections and installation procedures to meet customer requirements.









A BEACON OF LIGHT SHINES ON TEMBISA LEARNERS

BEKA Schréder joined the Department of Science and Technology (DST) to hand over a computer research lab to Moipone Academy Science Centre (MASC) in Tembisa.

The lack of information and exposure available for school learners motivated Joseph Taetsane to campaign for a science and information centre in the township of Tembisa and, on 29 November, BEKA Schréder handed over an after-school computer research lab and became the first private entity to invest in the only science centre in the East Rand. The lab will assist with access to information for school learners and much needed computer skills for unemployed youth in the community.

BEKA Schréder general manager, Wimpie Ludwick stressed the need for access to network and connectivity and pledged extra support for MASC's connectivity, a 'second phase' to the existing project. MASC will use the computer lab for after-school programmes for computer literacy and in-house activity programmes, such as Robotics, using CAD (Computer Aided Drafting) to design car models for the Jaguar Primary School competition. School teachers will be taught modern ways of imparting knowledge, soft skills in office suite programs, and creating data sheets and presentations.

"BEKA Schréder has been honoured to be part of this initiative. It is not only in line with our



Handover of the after-school computer research lab to Moipone Academy Science Centre.



Wimpie Ludwick (GM – BEKA Schréder) and Joseph Taetsane (centre manager – Moipone Academy Science Contro)

people values but also one of the ways in which we are giving back to the local community and the economy" concluded BEKA's Sibusiso Skosana.

Enquiries: +27 11 238 0069

COST EFFECTIVE SOLUTIONS FOR LED

FOR LED FLOODLIGHTS

ecurity lighting has changed drastically in recent years, from twisty bulbs to efficient LED fittings. Major Tech has introduced a new economical range of LED floodlights, which incorporate high power LED chips capable of producing a high lumen output and that have been designed as a replacement for traditional floodlights.

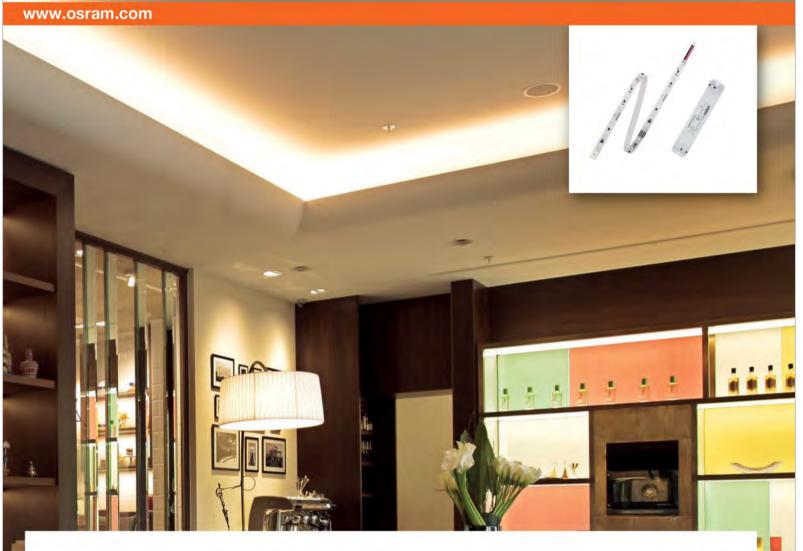
The choice of LED floodlights over traditional floodlights means energy savings and overall better lighting. Major Tech's LFB LED floodlight range is designed to ensure low heat emissions, a long lifespan (around 25 000 hours) and improved visibility.

The LFB LED floodlight range is a slimline, compact design and is designed as a replacement for traditional floodlights. The glass cover is 4 mm strengthened clear glass that is waterproof and resistant to all environmental factors such as humidity. The lighting source is made up of high power SMD LEDs that are directly connected to the aluminium shell, which ensures low heat emission and a longer lifespan.

IP65

These quality corrosion-resistant IP65 LED floodlights are available in 10 W and 20 W. Features include a 120° beam angle; >0.9 power factor; and 4 000 K daylight colour temperature.

Enquiries: +27 11 872 5500



Light is Flexible OSRAM VALUE Flex®

Product benefits:

- Energy saving low-power flexible LED strip
- Easy installation with track system
- Simple contacting due to pre-assembled wires
- Many models with IP66 protection rating
- Fine White Binning (4SDCM)
- 3-year system guarantee*
- Lifespan up to 35 000 h
- Perfectly matched with OSRAM Element 24V driver (30 000h)

Product features:

- Multiply cuttable LED strip with connectors (IP20)
- Available with light color: Warm White, Cool White
- Beam angle per module: 120°
- Dimmable
- * For conditions and detailed information, see www.osram.com/system-guarantee.

 All prices are exclusive of VAT, based on current exchange rates and excludes any airfreight charges.

Light is OSRAM

OSRAM



THE SMART WAY OF CONTROLLING LIGHT

UXeye from OSRAM is an intelligent and easy light management system to make lighting 'smart' – and it's never been simpler to connect light with a smartphone.

LUXeye is designed to adjust itself automatically and start operating the light and presence sensor immediately after mains switch-on. General basic functions, such as light level and delay time, can be easily adjusted with a screwdriver. This quick and easy way of light management saves time and requires no extra commissioning tools.

For full flexibility, all functions can be modified with the LUXeye app for customisation and analysis. A smart device can adapt every parameter of each individual controller. An integrated wizard supports the user onsite. The LUXeye can be controlled either via smart device or traditionally with a standard wall

switch. It is more than just an energy-saving tool – it is also highly flexible and convenient because you can change the light wirelessly from your desk.

LUXeye products are easy to install, easy to use and easy to maintain.

The LUXeye app is available to download free

of charge from the App Store or Google Play Store. It runs on smartphones using the operating systems iOS (8 and upwards) and Android (4.4 and upwards).

Enquiries: +27 10 221 4000

LUXeye SENSE DALI BT

All-in-one product: Light control and configuration via Smartphone app Bluetooth connection, controller with integrated light and presence sensor, DALI output channel Three ways to start: Plug-and-play, fast basic customisation via screwdriver and full flexibility via app.

LUXeye SENSE 10 A BT

Combo product: Controller with integrated light and presence sensor (on/off); 10 A output relay; configuring and controlling via a smartphone via Bluetooth interface; three ways to start: plug-and-play, fast basic adjustment screwdriver and full flexibility in my app.





BEKA Solar units with LEDlume-midi luminaires provide a welcoming environment at night at the popular Surfers' Corner in Muizenberg near Cape Town.

Enquiries: +2711 238 0069

PORTABLE LIGHTING SYSTEMS

enver Technical Products offers an extensive range of free-standing portable lighting systems optimised for construction, civil defense, railway maintenance, fire brigades, open cast mining, etc.

The TF610 Series consists of three parts, a rugged tubular steel tripod, which has adjustable feet and will stand level on surfaces sloping up to 15 degrees. The telescopic aluminium mast is extended by a hand pump

15 degrees. The telescopic aluminium mast is extended by a hand pump for heavy lamp heads or simply pulled up by hand for more modest head-loads. The lamp head can accommodate up to four luminaires each independently adjustable without tools. Various types of luminaires are available, for example, Halogen: $2 \times 500 \text{ W}$, $3 \times 500 \text{ W}$, $2 \times 1000 \text{ W}$ and $4 \times 1000 \text{ W}$ or HPS: $2 \times 250 \text{ W}/400 \text{ W}$, producing up to 83 000 lumens.

Enquiries: +27 11 626 2023



CAN DESIGNED LED LIGHTING BOOST RETAIL SALES? BY CLI

BY CLIFFORD GRAFF, DIRECTOR AT RELIGHT ENERGY

The short answer is yes and no.

Why no? Because too many retail stores in South Africa are badly illuminated. Whether it's by bad design, a lack thereof or an accumulation of different lighting technologies to combat electricity increases, store lighting remains fairly poor across the board. Throw into the mix poor quality LED luminaires and the 'woeful index' climbs exponentially.

an designed LED lighting boost retails sales?

Individuals tasked with energy reduction initiatives are unfortunately bombarded daily with the supposed latest, most efficient LED replacement tubes, lamps, floods, troffers, high bays, low bays, spots, wall washers ... you get the picture. And they're likely to take the bait and the plunge ... once.

After the promise of 50 000 light hours (the snake-oil salesman's favourite tool, they might even have believed their own talk) never materialises they say they won't go that route again until the technology is proven. Plus, they say, all they got for their energy reduction initiative was less light – that's great if you're a nightclub, less so if you're selling products.

And the quality of the light (CRI) is crucial! However, so many retailers have such poor lighting products installed that it washes out any vestiges of a colour palette and replaces it with a dystopian grey haze. Retailers seem to be convinced that they're not changing to LED until Eskom relieves them of an even greater portion of their monthly expenses.

Why yes?

You can get the full benefits of a superior lighting installation together with a substantial energy reduction by implementing a designed lighting upgrade. The first impression a customer has when seeing a store is directly influenced by the store's lighting. Good lighting, they enter. Bad lighting, they're hesitant. A properly designed lighting installation starts with an appropriate balance between ambient and accent lighting. It takes into consideration the different requirements in colour temperature required for meat, fish, bread, vegetables and so on. It understands the lux level requirements for the different retail zones. Simply put, no lumen is wasted.

There is, to the best of my knowledge, no industry study of the actual percentage increase a well-designed lighting installation achieves over a standard "put it in until its bright enough" installation. There are examples of independent studies. One UK designer changed the lighting in one of two competing stores

located diagonally opposite each other (one owner) and has empirical data from the owner that the store with the LED lighting upgrade has had a 27% increase in sales since the changeover.

Back to the question: Can designed LED lighting boost retail sales? Yes, but only if the benefit of the

reduction in energy is married to the correct light levels with five plus year warranties against failure and colour shift taken for granted.

Agree with Cliff? Connect with him through cliff@relight.co.za or find Relight Energy on Facebook, Twitter, Linked In or at www.relightenergy.co.za





LED LAMP TURNS NIGHT INTO DAY

0

urolux has boosted its comprehensive range of lighting solutions with the introduction of its latest day/night LED lamp. The Eurolux CFL day and night lamp has been around for the past 10 years and this new addition takes the range to the next level says Shaun Bouchier, director at Eurolux.

"This long-life LED lamp (G651BC and G651ES) is a must-have for the environmentally conscious home owner who wants functional light when it is dark," he says, adding, "There is no need for a separate day night sensor as it is a plug-and-play solution and is ideally suited to lighting up pathways, gate posts and to provide perimeter lighting."

No fuss

This new Eurolux LED lamp is available in a 6 W and 10 W and available in a cool white colour, which is ideal for outdoor illumination.

It has the same swivel base as its CFL counterpart and is available in E27 (screwed) and B22 (bayonet) end-connection. The LED lamp automatically switches on at dusk and then off again at sunrise – a truly economical, no-fuss lighting solution.

The day/night functionality is enabled by an integral photocell that registers the brilliance of the ambient light and activates when light levels reach the pre-set level. However, brief changes in light levels caused by clouds, car lights, lightning etc. will not activate the LED, since it is programmed to continuously check for false light levels and will not be activated by these.

Functionality

The 300°swivel base ensures optimum functionality, as Bouchier explains: "Lamp holders differ from fitting to fitting, which means

you might find that once you've fitted the LED lamp into a particular fitting, the light sensor then points towards the reflector, the wall or something else that may block the light and might result in a faulty light reading. This LED allows you to reposition the sensor once installed, which enables the lamp to function as intended."

Long life

This day/night LED offers up to a 30 000

hour life span, compared to its CFL counterpart that only provides 6 000 hours. "The benefits of a longer lamp life are obvious; this is further boosted by the electricity savings associated with LEDs,"

says Bouchier.

"This lamp can prov

"This lamp can provide users with electricity savings of up to 80%. It truly is an environmentally friendly product that offers users the greatest possible return on investment."

At up to 800 lumens, it is a bright light that will easily illuminate spaces and the A-shape lamp design is unobtrusively familiar.

Visit www.eurolux.co.za to view Eurolux's entire range of lighting solutions.

Enquiries: +27 21 528 8400



The Eurolux range of high quality LED lamps brings both energy efficiency and environmental awareness into your living and working spaces. With it's 80% energy savings, it will also help ease the burden of ever-increasing energy costs.

Why LED?







Features













Cape Town (Head Office): 9 Racecourse Road, Milnerton, 7441 **Johannesburg:** 10 Milkyway Avenue, Linbro Business Park, Sandton, 2065

www.eurolux.co.za

THE TOP THREE LIGHTING TRENDS FOR 2017 - DON'T GET STUCK IN THE DARK

ighting is a key architectural and design element in any interior space, and trends change in this fast-paced market nearly as rapidly as they do in fashion and technology. Thando Dladla, Philips Lighting South Africa: marketing and communications assistant, explains the modern lighting trends she expects to have an impact in 2017.

- 1. Cutting-edge and energy-saving LEDs are here to stay. LEDs (light-emitting diodes) are available in various sizes and can be integrated into the majority of existing lighting systems making it simple to switch. LEDs use up to 80% less energy than traditional incandescent lighting and can last for up to 15 000 hours equal to 15 incandescent lamps all while producing the same beautiful warm light you're used to. Not only will you have to change fewer bulbs, but there will be less wastage. Switching from incandescent to new LEDs is an easy home investment where massive savings are felt well into the future.
- 2.Connected lighting. The new generation of smart bulbs are the perfect place to start if you're looking to haul your home into the 'connected lighting revolution'. Through an easy-to-use mobile app, users are able to switch, dim, change colours, and much more. Connected lighting allows homeowners to personalise and control the light that works for their schedule, comfort, safety and productivity. Connected lighting will completely change the way you use light.
- 3. Light built to make you better. Lighting is directly connected to our emotions and sense of wellbeing, and new neurological and behavioural insights are transforming lighting applications in both the hospitality and health industries. This is especially important to populations that are highly sensitive to the effects of light, like the ill and the elderly. Exposure to the right light also has great implications for our circadian rhythms - with the right light we can do things like improve sleep patterns and increase alertness. "This is why we work across hospitality industries to create lighting solutions for interiors that are built to boost your well-being, in a subtle but meaningful way - and why we are always looking to create solutions that not only look stylish but improve people's lives," says, Dladla

Enquiries: +27 11 471 5000





LIGHTING MANAGEMENT SYSTEMS WITH ADVANCED FEATURES FOR

DAMP AREAS

egrand's lighting and motion management systems encompass a wide range of sensors designed to make buildings more energy efficient by automatically reducing the amount of time lighting is left on unnecessarily.

"Reduced lighting consumption not only lowers operating costs, but also reduces lamp replacement and maintenance requirements and helps decrease Green House Gas (GHG) emissions," says Sonja Leibbrandt, marketing and pricing manager, Legrand South Africa. "Motion and lighting management sensors can operate in occupancy mode where lights are automatically switched on or off according to occupancy, or in vacancy mode for additional energy saving, where lights are manually switched on and automatically switched off when the person leaves the area. These sensors can also use passive infrared technology (PIR), ultrasonic or dual technologies.

"Lighting management sensors are suitable for areas of a building with or without natural light, including passages, corridors, hallways, staircases and restrooms and also for offices, storage rooms and warehouses. These sensors are also available with advanced features for installation outdoors and in humid areas of domestic, commercial and industrial buildings.

Legrand's lighting management sensors for controlling a single circuit in outdoor and damp areas with natural light, have an IP55 index protection rating to guard against the ingress of dust and water. These sensors, with three wires and neutral, have an automatic switch on/off occupancy mode setting and switch off automatically when there is sufficient natural light in the area. There is an adjustable time delay between 5 s and 59 minutes and a light level threshold from 5 to 1 275 lux.

These PIR wall or ceiling mounted multi lens sensors have a 270° infrared detection with a 18 m range and a 0,7 W standby consumption. The recommended fixing height is 2,5 m and with the use of accessory, these units can also be mounted in a corner. (0 489 33)

Lighting sensors for controlling a single circuit in outdoor and damp areas without natural light have automatic on/off controls, manual adjustment

HIGH POWER LED FLOOD LAMP WITH HIGH LUMEN OUTPUT



enver Technical Products stocks high power LED flood lamps that are ideal for vehicles requiring considerable permanent-on white light illumination. The compact main body, weighing 1.55 kg, is a rugged aluminium casting designed to act as the heat-sink of the lamp. The locking trunnion tilt adjustment design of the base fixing point allows installers and users to modify the direction of the lamp, if required. The lamp has a voltage range of 11 V to 30 V with a low current drain at 2.3 A at 24 V. This flood lamp produces an incredible 7 000 lumens and has a five-year warranty.

Enquiries: +27 11 626 2023

of the light level threshold and time delay via a potentiometer.

PIR direct wall/surface mounting motion sensors, with a recommended 2,5 m fixing height, have 360° infrared detection and an 8 m range. These sensors have adjustable light level thresholds from 10 to 1 275 lux and an adjustable time delay between 10 s and 10 minutes. Standby consumption is 0,75 W.

PIR sensors for wall or ceiling mounting, with a directional head, have a 360° infrared detection and standby consumption of 0,9 W. The light level threshold is adjustable from 1 to 1000 lux and the

time delay is between 12 s and 16 minutes. The minimum fixing height is 1,7 m and the optimum distance between sensors is 6 m.

Legrand's lighting management solutions for outdoor areas and humid areas also includes sensors for managing multiple circuits.

PIR technology direct wall/surface mounted 180° sensors have a front-range detection of 6 x 15 m and consumption of 20 mA on standby. Connection to the controller is via a cord or RJ 45 cable.

Legrand's lighting management systems have been designed and manufactured to avoid energy



waste as the building only consumes just the amount of energy it needs, when it needs it.

Enquiries: +27 11 444 7971



Light is personal

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The new LEDVANCE® LED luminaires.

LEDVANCE® LED luminaires are the new no-frills choice whenever you simply need the right light for common applications. They have all the features necessary for a professional's everyday work: high efficacy, proven quality and easy installation.

LEDVANCE® luminaires. Success the easy way.





LIGHT WHEN AND WHERE YOU NEED IT

ert Energy, specialists in electric power generation, now distributes mobile LED lighting towers that provide dependable lighting exactly where it's needed, for optimum productivity and enhanced safety.

"The Allight range of trailer-mounted lighting towers can be easily moved from site to site in diverse applications, including mining, construction, road and railroad works, as well as in agriculture and outdoor field events," says Ryan Robertson, director, Vert Energy. "MSGEN2 LED lighting towers, which have been developed by Allight in Australia, offer over 50 000 hours of light per unit and only require re-fuelling every two weeks, on the basis of 12 hours of operation every night.

"The use of LED in mobile lighting applications in arduous environments, like construction and mining - has efficiency and economy advantages compared with towers that use gas-filled metal

halide lamps. These eco-friendly LED lighting towers have integrated fluid spillage protection bunds as standard, for environmental compliance."

The flexibility of this range includes various mast options, a specially designed high-wall overhang system and carefully selected light assemblies, for the exact lighting requirements of every project. Components, including lamps and lights, are integrated into the mast design for maximum output reach.

MSLED168K-9 lighting towers, with extra low voltage (dc) are powered by Perkins two-cylinder water-cooled diesel engines. Six 300 W LED low glare lamps produce 168 000 lumens, with no delay of warm-up or cool down time. Each LED floodlight provides 28 000 effective lumens after stabilisation. Individually adjustable lamps enable precise focusing of the light.

The total control system encompasses an

easy start/stop facility, location tracking and performance monitoring via a notepad or smart phone.

These units have been designed for low maintenance requirements, with 500-hour service intervals. Large doors enable quick and easy service access and the plug-and-play system, with no hard-wired componentry, ensures easy servicing and parts replacement.

Vert Energy's extensive range of reliable electric power generation (EPG) components also includes Leroy Somer alternators, DEIF controllers; ASCO automatic transfer switches; API Covrad radiators and Avtron and Froment load banks, as well as customised control panels.

The company offers a technical advisory, maintenance and support service throughout Africa.

Enquiries: +27 11 453 9669



MSLED168K-9 lighting towers, which offer over 50 000 hours of light per unit, only require re-fuelling every two weeks, on the basis of 12 hours of operation

NEW LIGHTING APPOINTMENTS

Nordland Lighting has made two staff changes. Johann Lamprecht, who has been with the company since 2014, was promoted to sales manager; and Jubilee Ditlhake has been appointed as customer liaison administrator.







Jubilee Ditlhake.

Creative lighting design in a linear arrangement

ERCO has developed the new Compar range of recessed luminaires with a striking linear design that delivers light distributions previously restricted to round or square ceiling apertures. As a result, Compar adds to the design options in typical recessed lighting applications such as foyers, circulation areas or conference rooms in administration buildings, restaurants or galleries whilst also meeting every ergonomic requirement for perfectly efficient lighting solutions in the office environment.

The Compar range of recessed lighting tools is able to implement differentiated lighting concepts in projects requiring a variety of functions and uses. For example, in a large office building areas such as the prestigious foyer, the lift lobby and corridors or the company restaurant need different lighting to the auditorium, conference rooms or shared offices. With its sleek linear aesthetic and integrated technology, Compar offers a wide range of lumen packages with variable distribution options and design details, providing the right lighting tool for every scenario.

Modular

The ERCO luminaire system builds on a modular concept defined by specific parameters creating a logical system that gives the designer flexibility in the combination of different ERCO luminaires. Taking the same approach, Compar is available in the three lengths 120 mm, 210 mm and 390 mm, with a width of just 62 mm, each with twice as many LED lenses - and double the luminous flux - as the previous one, and in two wattages, resulting in six outputs from 630 lm to a powerful 4 920 lm for high illuminances particularly in high rooms.

ERCO GmbH, www.erco.com







WE PROUDLY MANUFACTURE AND SUPPLY A COMPREHENSIVE RANGE OF LED LIGHTING AND ELECTRICAL PRODUCTS OF THE HIGHEST STANDARDS, FOR APPLICATIONS ACROSS THE DOMESTIC, COMMERCIAL, INDUSTRIAL AND CONSTRUCTION SECTORS.



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011 392 1757

CAPETOWN

30 Montague Drive, Montague Gardens, Milnerton, Cape Town 021 555 4463

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MAGNET GROUP

Pieter Grove, project technician, Magnet Energy.



Manoj Panikkal, general manager, Stanley Black & Decker sub-Saharan Africa (SSA)



Sishen Naidoo, regional finance manager, sub-Saharan Africa.



STANLEY BLACK AND DECKER

Tinomuvonga Gukuta, operations manager, sub-Saharan Africa.



Gavin Spark, marketing manager, sub-Saharan Africa.



Jacques Blignaut, chemist, Pinetown laboratory.



Paul Nhlapo, business development and technical support.



Jacoba Schwartz, agent, Kathu.



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BRIGHT SPARK

THE GREEDY BOOKWORM

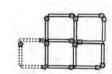
A bookworm was wriggling towards a bookcase on which there were three volumes, in order from Volume I to Volume III, of the Giant Encyclopaedic Dictionary of Everything. Each volume had a front cover that was 1 cm thick; the actual pages were 7 cm thick, and the back covers were also 1 cm thick.

If the bookworm started at the front of the front cover of the first volume and ate straight through to the end of the back cover of the third volume, how far did it eat?

JANUARY SOLUTION

WHERE IS THE EXTRA SQUARE?

Moving these three matches leaves four small squares and the large outer square.



MARCH FEATURES

- Energy measurement and supply
- Tools of the trade
- Lighting

Buyers' guide

Tools andinstruments

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Erika van Zyl

Advertising:

Carin Hannay

Design:

Anoonashe Shumba

Consultant:

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