

DIZ Doepke-Info-Zeitung

The free customer newsletter by Doepke Schaltgeräte GmbH



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Well attended, with a clear layout: our stand at Light + Building 2018 showcased our new look

New products, new look, same reliable hospitality

Successful week at Light + Building 2018

Light + Building 2018 was a very special occasion for us: the start of the world trade fair for electrical installations and lighting technology was the perfect opportunity for us to present our new brand identity with its modern design, all-new website and corporate film.

As we discovered from a whole host of conversations with trade visitors, customers, partners and prospects, the new look and website are going down very well; even the corporate film received enthusiastic applause. If you didn't

manage to catch it live at the trade fair, you can view it on our website, Doepke's Facebook page and on YouTube. We have a growing presence on social media.

As usual, Light + Building 2018 had lots in store for us too: we had a well-attended Doepke stand, which became even busier after 5 p.m. every evening, successful meetings over tea and traditional East Frisian fruit bread, a fantastic atmosphere and plenty of positive feedback about our new products.

This year, these include the stylish black DFS Audio for faultless listening pleasure, the AC-DC sensitive and space-saving DFS 2 B, our DFS 4 F EV electromobility solutions and an RCBO for charging columns and wall boxes, our slim DFA 3 remote actuator and our smart transformer for system monitoring.

We had six exciting, wonderful and successful days in Frankfurt and are looking forward to going back in 2020 – when we will be in the new hall 12. Don't miss it! ■



Company mission: safe use of electricity

Interview with Andreas Müller, Managing Director of Doepke Schaltgeräte GmbH

DIZ: Mr Müller, Doepke has been producing residual current circuit-breakers for more than 60 years. Why the focus on these products?

Andreas Müller: The company's founding fathers, Engels and Doepke, made it their mission in 1956 "to protect people and animals from dangerously high shock currents". We are still sticking to this motto today. We want to protect lives as much as we can at all times by making electrical energy safe to use. That's why we have so many different product types in our range – we want to offer the right RCCB for every application and every consumer.

DIZ: Electricity is an indispensable part of our everyday lives now – we rely on it being available. But electricity also has its hazards – are we fully aware of them?

Andreas Müller: Essentially, yes, but we do see plenty of installations which are not protected adequately or are defective. Installers have good basic knowledge, but specialist expertise is often needed depending on the consumer or installation environment. Unfortunately, availability and safety sometimes compete with each other: the system must not fail – but every fault should be identified and cut off immediately. This is where our products provide an outstanding service long term, ensuring both safety and convenience.

DIZ: What needs to change?

Andreas Müller: We should not just be discussing efficient electricity generation, but



We protect lives by making the use of electrical energy safe, says Andreas Müller.

should also be focusing publicly on handling electricity safely. More emphasis must be placed on the safe use of electricity, not least through even more extensive information and training.

DIZ: What is Doepke doing?

Andreas Müller: Doepke is actively training and advising tradespeople, wholesalers, plan-

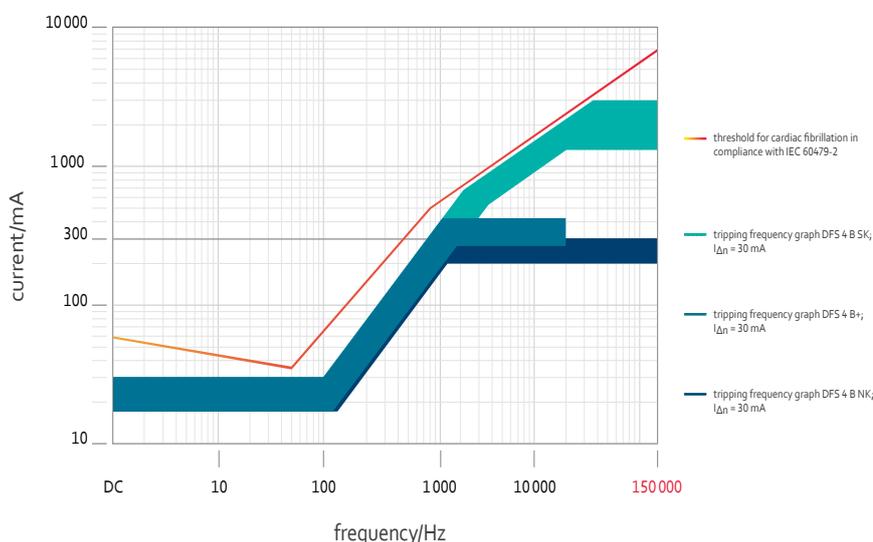
ners and system operators across Germany. We want to pass on our knowledge to our partners so that they can assess and plan systems and installations themselves. Increased committee work and involvement in various working groups and interest groups is also being undertaken with the aim of making the use of electricity even safer. There is still a great deal to do in this area. ■

New ventricular fibrillation threshold

Perfectly equipped with our type B switches

IEC 60479 deals with the effects of electricity on human beings and livestock. It defines the size and duration of the current flow which pose a risk to life and health.

Another important factor is the ventricular fibrillation threshold – in other words, the electricity level at which ventricular fibrillation can be triggered in human beings, possibly resulting in their death. It is shown in a curve.



To date, the limit curve for ventricular fibrillation ended at 100 kHz – the risk range was not defined for higher frequencies. The updated version of IEC 60479-2, which was published in October 2017, now defines this limit for frequencies of up to 150 kHz.

We have tested our type B RCDs with the NK and SK characteristic curves for the extended frequency range. They still perform their full protection function if residual currents occur with frequencies of 0 Hz to 150 kHz. They are way ahead of their device standard in terms of the definition of their tripping current frequency responses. The standard only defines trigger points for set frequency values up to a frequency of 1 kHz. The defined trip band for our switches, with an upper and lower trip limit, ensures high system availability, as faulty tripping is prevented. ■



Melanie Brandes
Head of Product
Management

Expert response to calls

“Ask more and walk less” is a proverb from Arabia, “He who asks questions is never ignorant” is a saying in Cameroon, and to quote Albert Einstein: “The important thing is never to stop questioning.” That’s why you will always get an expert response from us, regardless of whether your questions are about the company, residual current protection, our products, the right application or the next training dates. Our door is always open if you would like to discuss your individual requirements, project or preferred dates too. ■

Marcus Fries, Technical Support and your contact for all products. You can reach him by calling +49 (0)4931/1806 888 or -821 or by emailing support@doepke.de.



Friendly voices at headquarters: Tanja Heidemann and Anne Hänfler in our Managing Director’s admin office are available on +49 (0)4931/18060 or at info@doepke.de

STANDARDISATION

New edition of DIN VDE 0100-530

The new, completely revised DIN VDE 0100 Part 530 for selecting and installing electrical switching and control equipment came into force in June. The current edition, 2018-06, comprises a full 81 pages instead of the previous 33. The requirements for selecting equipment for isolation and switching, formerly part of VDE 0100-537, have been newly added in full. Among the main updates are the inclusion of type F mixed frequency sensitive RCDs. The new version now defines more precisely which RCDs may be used when the electrical systems are accessible to laypersons. Our expert on standards, Günter Grünebast, has provided further information about DIN VDE 0100-530 2018-06. You can find his article on our website: www.doepke.de/diz530. ■

*Günter Grünebast
Head of
Standardisation/
Testing/
Certification*



Detective work

When the RCCB trips:
tips for finding the cause

The residual current circuit-breaker should trip in the event of a fault in order to protect life. In order to do this, it reacts to the slightest residual currents. If trips occur more frequently, perhaps without a clear reason, the cause must be identified.

Detecting the cause can sometimes be very arduous and time-consuming, but it is essential in order to ensure unlimited system availability. After all, the residual current circuit-breaker will not get tired of tripping when a residual current occurs.

Our checks help to find and eliminate the cause.

If you have checked everything but the residual current circuit-breaker still trips sporadically, there may be operational leakage currents, particularly if you are using an AC-DC sensitive residual current circuit-breaker for systems with frequency converters. Our DRCA 1 residual current analysis system will track them down. Contact our customer support team for more information. ■

CHECKLIST FOR POSSIBLE CAUSES

1. Have changes been made to the system, e.g. have new lamps or sockets been installed?
 - If so, there may be a wiring fault or loose terminals.
2. Could the weather be a factor?
 - A lightning strike can trip the switch due to greater surge currents. A slow-blow residual current circuit-breaker (KV design or type F) will help here.
 - If there is heavy rain, damp walls together with slightly damaged cables may result in residual currents.
 - Heavy rainfall can also flood outdoor lighting.
3. Have new electrical devices been connected or put into operation?
 - High inrush currents (e.g. those of LED lighting systems) can cause the residual current circuit-breaker to trip. Type F or KV-design residual current circuit-breakers will remedy this.
4. Exactly where is the fault located?
 - Isolate the fault by switching off individual circuits via the relevant MCB. If all circuits except one work, you have localised the fault. First concentrate on individual electrical consumers and start with the last device connected. If you still can’t find the culprit, continue with checks 5-7.
5. Have cables been damaged, e.g. during renovation work?
 - Carry out a visual inspection: is there any visible damage, or are there exposed cables? Warning: This may be a fire hazard!
6. Is the insulation resistance of one or more wires too low or can residual currents be detected with the leakage current measurement clamp?
 - One or more wires are damaged. The damage must be found and repaired. In some cases, it is a good idea to re-lay the cable.

A new face

The marketing department has gained reinforcements

The marketing department has gained reinforcements in the field of communications. Katharina Silo is responsible for website, DIZ and brochure content, as well as for moderating the new Doepke Facebook page. The 37-year-old worked in marketing and PR at a property SME after studying politics and completing a radio internship. Ms Silo now lives in Leezdorf and can be found in the garden or on her bike in her spare time during summer, or with her nose in a book or brandishing a wooden spoon during winter. Social networks thrive on participation and so Doepke's 'Chief Facebooker' would welcome your questions, suggestions, reviews, tips and pictures. You can contact her at kommunikation@doepke.de or by calling +49 (0)4931/1806 822. ■



Katharina Silo at her new desk

Doepke – the host with the most

Annual LIV convention in the north

The Lower Saxony/Bremen Electrical and Information Technology Guild (Landesinnungsverband für Elektro- und Informationstechnik, LIV) held its 2018 annual convention in our lovely Borkum training facility.

The participants, who numbered more than 20, were welcomed by our Managing Director, Andreas Müller, our Head of Sales, Nicole Sikken, and our Head of Sales Promotion, Stefan Davids. As a thank you for our hospitality, the Director of the guild, Karl-Heinz Bertram, presented us with a beautiful print depicting images of Lower Saxony. ■



Participants at the convention (top), presentation of the picture (right)



First day at work



Our 'Future Day' aims to give school pupils the chance to get a taste of the world of work. We were delighted to have a large number of enthusiastic students visit us again this year. The boys and girls aged between 10 and 14 did very well after a briefing and a tour of the site. They converted a switch into a money box, soldered text onto a circuit board and built a bottle opener. ■

Pinni's travels

A seal in Tenerife



Pinni sends warm greetings from Tenerife in the Canary Islands. Doepke's little mascot visited the Las Canadas National Park, which stretches around Mount Teide. The landscape is characterised by impressive heights and bizarre rock formations. The Park has been a UNESCO World Heritage Centre since 2007. At 3718 metres, the Teide is the highest mountain in Spain. The 'Pico del Teide' summit can only be climbed with permission. The Teide is not only a mountain, but a volcano too. But Pinni posed quite fearlessly in front of it: the last eruption was over 100 years ago. ■

A show of sporting talent



Our Doepke runners defied the cool, rainy weather in this year's Norder Citylauf run. The Doepke running teams took places 16 and 18, and our colleagues can be very proud of their individual rankings too. ■

PUBLISHER

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QUOTE OF THE QUARTER

*Man cannot discover new lands
unless he has the courage
to lose sight of the shore.*

André Gide

DATES/NOTES

Doepke works holidays

16–27 July

The production areas will be closed in this period; the other departments will be available as usual.

belektro, Berlin

6–8 November 2018

Hall 1.2, stand 220

GET Nord, Hamburg

22–24 November 2018

Hall B5, stand 245

SPS IPC Drives, Nuremberg

27–29 November 2018

Hall 3, stand 232