

DIZ Doepke-Info-Zeitung

The free customer newsletter from Doepke Schaltgeräte GmbH



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light+building



2026

Light + Building in review

What an event! This year, there were two major talking points for us: the company's 70th birthday and our new innovations.

We celebrated the special anniversary every day of the trade fair at our stand, with the biggest festivities being reserved for our party on the Wednesday afternoon. We had plenty of well-wishers coming to enjoy the food, drink and great atmosphere! For a company to reach 70 years old is something truly special, and we cherished every single guest and gift. A heartfelt thank you to everyone!

We had all sorts of new innovations to present at Light + Building, some of the highlights being our products for monitoring mains conductors. Every installer knows the risks associated with moving the neutral point, so there is strong interest in protective measures for this application. At times we had several groups clustered around the information boards at our trade fair stand, and we were also lucky enough to have many visitors who shared their own experiences in this area.

We also had Max Oevermann with us for several days to talk about the dangers of

neutral conductor failure. Max is a well-known influencer on YouTube and Instagram, where he addresses electrical engineering topics in an easy-to-understand format. Many visitors took the opportunity to meet Max and discuss possible solutions to their problems.

All in all, we had another great trade fair, with engaging technical discussions and a great 70th birthday party. We are already looking forward to the next edition of Light + Building in 2028. ■

Building up the workforce of tomorrow

Doepke is a member of ABE e. V.

The Arbeitskreis Bildung Elektroberufe e. V. (working group for education in electrical trades, ABE e. V.) is committed to inspiring young people to train in industrial electronics engineering. Doepke is a founding member of the association, which was established in 2012.

Three of our employees are actively involved in ABE e. V.: Torsten Dirksen on the board of directors, Sabrina Venske as a trainer and Gerold Roofls in a number of roles, including host of the graduation ceremony that the association organises for those who have completed their training with the member companies.

The ABE e. V. is made up of thirteen companies in East Frisia, as well as vocational school teachers working on a voluntary basis. The association actively promotes training in electrical trades through various channels and supports interested parties by providing information, arranging work placements or offering tuition as needed. This is all organised by the trainers at the member companies.

Virtually unique in this form nationwide, this initiative is highly successful and makes a valuable contribution to promoting and securing the skilled workforce of tomorrow. ■



Safety for mobile applications

Temporary mobile applications pose a particular challenge in terms of electrical safety, for example during building renovation work, on short-term construction sites without a power distribution unit, at events, fairs or during emergency rescue operations.

Where an electrical appliance is needed, there is often no other option but to connect it to an existing electrical installation. This is fine as long as a protective measure against residual currents is in place and is adequate for the load in question. In practice, however, this is unfortunately often not the case.

Typical tools such as compressors, hammer drills, vibrators, pumps and fans are operated in multiple phases and are frequency-controlled. In the event of a fault, they can therefore cause smooth DC residual currents,

which can only be reliably detected by AC-DC sensitive residual current circuit-breakers (type B/B+). However, AC-DC sensitive RCCBs are rarely found in existing installations, making mobile protection absolutely critical.

The DPRCD-M is a compact module for producing a five-pole personal residual current device, thereby offering enhanced safety for all applications in which 400 V equipment is used on a mobile basis. Installed in a suitable housing, it becomes a PRCD that can be connected between three-phase socket and load.

The DPRCD-M combines an AC-DC sensitive RCCB with monitoring of the mains conductors and the protective conductor across just eight module widths. With a rated residual current of 30 mA, it offers reliable personal

protection and also ensures the protective function of upstream residual current circuit-breakers due to a 6-mA DC triggering threshold. If a fault is detected in the upstream installation, the DPRCD-M will not switch on. If it is triggered due to undervoltage, for safety reasons the DPRCD-M does not switch on again automatically when the voltage is restored. The module also features external fault current detection and rotating field detection.

A PRCD with the DPRCD-M at its core therefore meets the requirements of the BG Bau (the German Social Accident Insurance Institution for the Construction Industry) for mobile protection equipment for which occupational safety premiums can be claimed.

The DPRCD-M is available up to 63 A rated current. It offers full flexibility as the module can be used in a wide range of mobile distribution boards. ■

akademie.doepke.de

Online seminars: Full control of your installation with Doepke e.Guard



Doepke Academy



Online seminars



24 June

15:00 – 15:45

SAVE
THE DATE



Doepke e.Guard research project

Reliable operation of photovoltaic installations with residual current monitoring

Photovoltaic installations have become an integral part of the energy transition, both in economic terms and as a key technology. This makes their safe and efficient operation all the more important.

The PV-DiStAnS research series investigates how intelligent residual current monitoring (RCM) with Doepke e.Guard can improve the safety and cost-effectiveness of large-scale PV installations. Following the groundwork laid by two previous projects, PV-DiStAnS-3 is currently under way in collaboration with the DLR Institute of Networked Energy Systems (DLR-VE), Enerparc AG, Funk Consulting GmbH and our e.Guard partner twingz development GmbH, with funding from the Federal Ministry for Economic Affairs and Energy (BMWE).

As part of the project, several large-scale PV installations mounted on open ground across the country were fitted with our LEVEL 5 e.Guard systems. Further data sources were integrated, such as power quality monitoring (PQM), DC monitoring and locally available monitoring systems. With e.Guard excellence, this is no problem at all, as that is precisely what this solution – tailored specifically to each individual installation – is designed for. In addition, laboratory tests are currently being carried out at the DLR-VE site in Oldenburg.



Research is being conducted in the laboratory to investigate how interference and local conditions (cable lengths and network configurations) affect residual current behaviour. The researchers are also carrying out a comparison of fault-free and faulty components. Faults and critical conditions are analysed in the PV installations on site; in addition, typical faults are simulated in order to examine the behaviour and informative value of residual current monitoring under realistic conditions. Using the e.Guard software, both a single inverter and an entire PV farm can be simulated within one simulation



*The DLR-VE NESTEC network control centre for the simulation and analysis of electric networks.
©(BY-NC-ND): DLR e. V.*

framework. The aim is to model the installation's normal operating behaviour in order to identify deviations and potential faults at an early stage. In the field, in the laboratory and in simulations, machine learning methods are used to detect anomalies, degradation effects and potential faults early on.

The project has already yielded valuable insights into, amongst other things, the installation situation, the evaluation algorithms and the measurement ranges of the e.Guard RCM.

As a result, adjustments and enhancements were made to the hardware, and the software was optimised. Relevant insights were also gained regarding the grid configuration: solar farms in a TN-S system (with five conductors) experience fewer faults than installations in a TN-C-S system, where the neutral and protective conductors are partially combined. Furthermore, the research carried out as part of PV-DiStAnS-3 underscores the benefits of intelligent residual current monitoring for the sustainable, safe and cost-effective operation of large-scale PV installations. ■

Doepke ⁷⁰ YEARS



Product history

When Doepke was founded 70 years ago by Franz Doepke and August-Wilhelm Engels, the residual current circuit-breaker was still a relatively unknown concept, let alone a mandatory requirement. Doepke and Engels did pioneering work, both in the further development of residual current protection and in its marketing, as people still had to be convinced of its merits – something that is hard to imagine in an age when RCCBs have long been mandatory in many sectors.

Throughout its history, the company has always remained true to its mission of enabling people to use electricity with peace of mind.

One milestone in the company's product history, for example, was the development of AC-DC sensitive technology. In 2002, Doepke launched the first Type B residual current circuit-breaker for rated currents of up to 125 A with a width of just four module units – an innovation that put the company in a league of its own on the market for many years. Further products featuring different triggering characteristics, as well as selective designs, followed in the years thereafter. These were joined by the DFL 8B product range for industrial applications.

Nowadays, the Doepke product portfolio features a wide range of residual current circuit-breakers, miniature circuit-breakers and residual current monitors for a wealth of applications. And the company has evolved from pioneers to sought-after experts who help to define safety standards.

Product development continues, as the emergence of increasingly complex loads means that the requirements for their protective measures are also rising. Doepke continues to stand for a safe future. ■

Our electrical finds

Be it a mess of cables, a strange installation or even ‘chindogu’, the electrical curiosities we come across have one thing in common: they are unusual and eye-catching. Chindogu, by the way, is a Japanese word that means ‘strange device’ – in other words, inventions that the world doesn’t really need, but laughs at instead.

We want to make you marvel, shake your head or laugh out loud by sharing our favourite electrical finds with you in this regular feature.



You’ve got mail!

Thank you to Siegbert Caspers for this gem from Turkey.

Do you have an entertaining electrical find to show us? If so, please take a photo of it and send it to us at: kommunikation@doepke.de

Important: We can only consider photos that you have taken yourself.

Eddie in Erfurt

Welcome Eddie! To mark the start of his duties as trade fair mascot and on a symbolic mission of bridge-building, our Doepke mouse travelled to the home state of our Bickenriede production plant. There was also time for a spot of sightseeing in the state capital, Erfurt, including the famous Krämerbrücke (Merchants’ Bridge). It is one of the city’s most famous landmarks and the longest bridge in Europe that is lined with houses along its entire length – and is even inhabited. Of course, our city tour wouldn’t have been complete without a visit to the Domplatz with St Mary’s Cathedral, St Severi, the Old Synagogue, Petersberg Citadel, the Anger, the fish market and the Augustinian monastery.



And naturally, authentic Thuringian bratwurst made for a hearty snack.

Eddie can’t wait to come back – but he’s got a few other destinations on his bucket list first. Stay tuned! ■

ELMAR 2026 – The Oscars of the electrical sector

This year, for the 18th time, the ‘Elektromarken. Starke Partner’ initiative is presenting the ELMAR brand award to electrical trade businesses that demonstrate a particular commitment to branding. The ELMAR is presented in four categories. Attractive cash prizes and a comprehensive marketing package await all the winners. ■



Visit elektromarken.de for more details – you have until **31 July** to apply!



Doepke at the museum

Our products are by no means old enough to be in a museum – and yet there they are: not just in electrical distribution systems, but also as exhibits! Our miniature circuit-breakers were spotted at the Science Museum in London. Our investigations also revealed that a distribution board fitted with our switches, manufactured by Rubberbox, is also on display at the Science and Industry Museum in Manchester. If you ever find yourself there, send us a photo! ■

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QUOTE OF THE QUARTER

“The most important hour is always the present.”

Meister Eckhart (c. 1260 – 1328); worked in Erfurt for many years, including as prior of the Dominican monastery

DATES/NOTES

Specialist training days for electrical and information technology organised by the trade association of Saxony/Thuringia

Holger Meier will be giving a talk on how to choose the right residual current protection on 11 June in Leipzig, on 18 June in Glauchau, on 25 June in Weimar and on 2 July in Dresden

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