No 4 | October 2020

DIZ Doepke-Info-Zeitung
The free customer newsletter by Doepke Schaltgeräte GmbH

Doepke

IN THIS ISSUE

Andreas Müller (Company Management Doepke) and Werner Weihs-Sedivy (Company Management Twingz)

Electricity expertise meets software excellence

Doepke starts partnership with Vienna-based firm Twingz

Andreas Müller from Doepke and Werner Weihs-Sedivy from Twingz signed a cooperation agreement in mid-September. The focus of this cooperative venture will be an innovative monitoring system for electrical systems.

Doepke Schaltgeräte GmbH's activities have long revolved around the detection of residual currents and the switching off of the power supply in the event of dangerously high values. In addition to residual current circuit-breakers, Doepke's product portfolio also includes residual current monitors, also referred to as transformers, which do not switch off electrical circuits but instead report deviations.

The latest generation of residual current monitors (see page 2) is now capable of delivering data directly to a data network.

The analysis of this data can give the operator of an electrical system a decisive information advantage when functional and security-critical problems occur. In order to be able to use the data for prevention purposes, large quantities of data must be transmitted securely and then processed and analysed using cloud software, for example.

Doepke is an expert in safe usage of electricity and, in addition to residual direct current protective devices, it also develops hardware and software for monitoring electrical systems. The Vienna-based company Twingz brings its outstanding expertise in the development of cloud software, artificial intelligence methods and the secure transmission of data to networks to the partnership.

Twingz Development GmbH was founded in 2010 as a start-up and develops artificial intelligence (AI) methods for predictive maintenance and predictable energy consumption in industry, in facility management and at energy providers.

Twingz and Doepke are working together on their individually adjustable, intelligent and user-friendly monitoring system for electrical systems, which will represent the future of visibility and the prediction of residual currents in industry.

This innovative system is still in the very early stages of its development. So watch this space! And rest assured that DIZ will keep you updated on future developments! ■

Smart transformers in the system

DCTR B-X Hz-PoE

Up until now the reporting of residual currents by residual current monitors has been limited to a local signal in the switching cabinet at the moment when specific, usually adjustable threshold values were exceeded. The new smart DCTR residual current transformer with PoE interface can do much more. As before, it offers fire and system protection through precise monitoring with individually adjustable parameters. In addition, monitoring data can now be transmitted directly to a data network via the Ethernet interface. This not only means that a signal is possible outside the switching cabinet but also a much broader detection of the residual current, which can provide information about its cause At the same time, PoE (Power over Ethernet) enables power supply via the Ethernet.

The frequency-selective DCTR B-X Hz-PoE reliably detects and evaluates residual currents at frequencies from 0 to 100 kHz, transfers the data to a computer or a network via Ethernet and displays them via the PoE interface in the DCTR Manager software.

Constant monitoring of residual currents by the DCTR B-X Hz-PoE provides information about the system's isolation and/or leakage current status. As per DIN VDE 0105-100/A1, this can be used to avoid repeat insulation tests, which can often be expensive.
The measured values from the individual devices are recorded, thereby enabling individual machines to be monitored, even over extended periods of time.

The DCTR B-X Hz-PoE is a type-B residual current monitor and is therefore AC-DC sensitive. The protection concept can be configured for the system, depending on the application. There are also two signal contacts that can be freely configured to react as required: For certain individually adjustable threshold values, you can, for example, trigger a visual or acoustic alarm or switch off the system.

The DCTR B-X Hz-PoE and the DCTR Manager are easy to implement. For precise, error-free measurement results, Doepke offers the DCTR residual current transformer with various internal diameters depending on the system's rated current. ■

At a glance

Our red miniature circuit-breakers DLS 6i RT

According to DIN VDE 0100-560 (Equipment for safety purposes), switchgear and control gear must be clearly labelled.
This is used in final circuits such as

- safety lighting
- fire alarms
- smoke and heat ventilation systems

More info at doepke.de

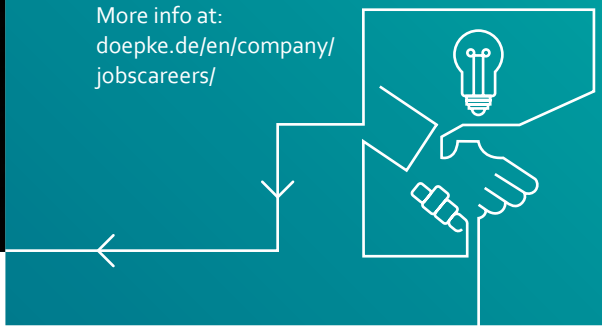
2021 training at Doepke
Applications open now!

Would you like to train and work at a long-established medium-sized company with an international focus?

Doepke is once again offering future-proof and exciting training places and work-study programmes in 2021.

We look forward to your eagerness to learn, your involvement, your enthusiasm and your ideas.

More info at:
doepke.de/en/company/jobscareers/



Much more than just fire protection

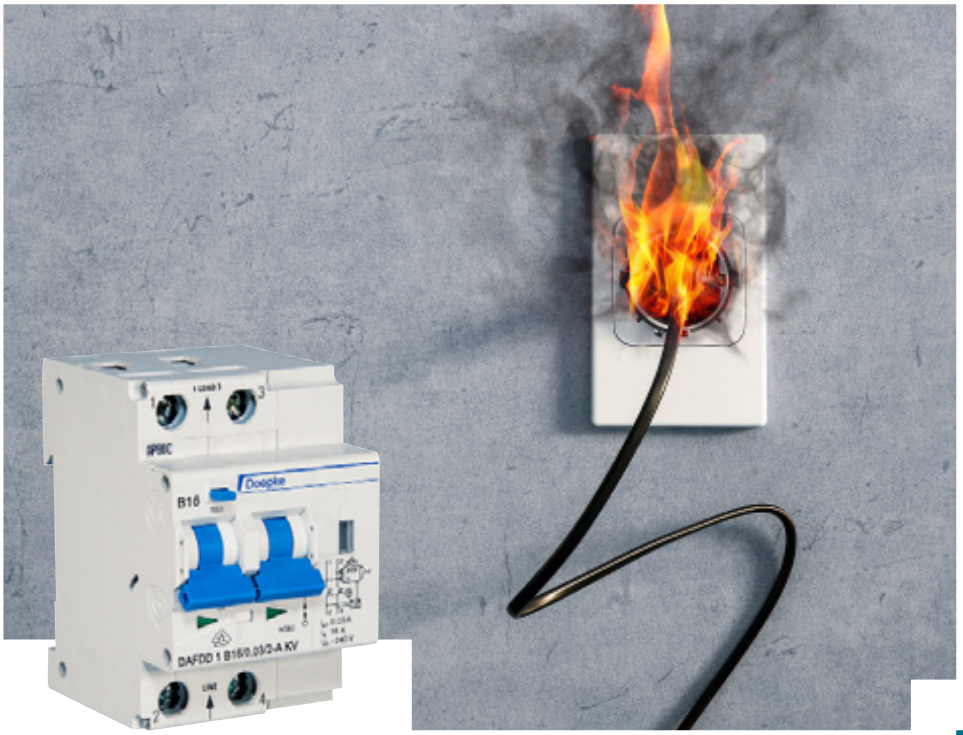
Doepke's AFDD – one device, three functions

Electric arcs can occur for operational reasons when opening or closing mechanical contacts. They do not normally present a hazard. However, minor damage or insulation defects on conducting lines, for instance as a result of the material ageing or as a result of kinks, can cause undesirable arc faults. If these go unnoticed, they can become a fire risk in the electrical installation. Parallel arc faults are detected by miniature circuit-breakers and residual current circuit-breakers but serial arc faults can go unnoticed if no AFDD (arc-fault detection device) is present and produce heat that can damage surrounding materials in the long term and, in the worst case scenario, even cause fires. This process can continue unnoticed over weeks, months and even years.

Doepke's arc-fault detection device (AFDD) provides three-way security, combining residual current protection and line protection with protection against dangerous arc faults in just three modular units. It thus protects people against dangerous residual currents, protects systems against short-circuit or overload, and reduces the risk of fire in fixed installations.

If the device detects serial or parallel arc faults, it switches off the circuit affected. When tripped, an LED shows the source of the fault. Information on the cause of the fault is stored and can be reviewed at a later date.

Arc-fault detection devices are recommended by standards for facilities at risk of fire and certain public institutions. These include premises with sleeping accommodation, rooms or places where there is a particular risk of fire, rooms or places made from flammable building materials and rooms or places where irreplaceable goods may be put at risk. The planner and/or constructor must carry out a risk and safety assessment as early as the planning phase in order to determine and document whether he use of AFDDs needs to be considered. ■



Our electrical finds

Be it cable chaos, a curious installation or even 'chindogu' – the electrical curiosities we encounter have one thing in common: they are out of the ordinary and catch our eye. Chindogu, by the way, is Japanese and means 'unusual tool'. The term refers to inventions that the world doesn't really need but finds very amusing. We want to make you stare in amazement, shake your head or laugh out loud by sharing our favourite electrical finds with you in this regular feature.

We often show things that people have come across on their holidays,
but you do not have to travel long distances to find impressive installations as Michael Krohn shows with this photo of a floor distribution in a hotel in Kiel.

Photo: Michael Krohn

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. ■

Sabiene's trip to Usedom

Our new field sales executive took one last holiday before starting work with us. As she was of course unable to venture abroad due to the coronavirus outbreak, she travelled within Germany from the western North Sea coast to the eastern Baltic Sea coast. After an exhausting flight, she finally landed near the Ahlbeck pier on the beautiful island of Usedom. She visited the Amber Spas (Bersteinbäder) and the Imperial Spas (Kaiserbäder), went for long bike rides to explore the island, took a boat trip across the Achterwasser lagoon and spent many

happy hours on the beach. After a few days (and just as many ice creams), she finally took the return flight home and is now well-rested and ready to throw herself into her new role at Doepke. ■

Final examinations in coronavirus conditions

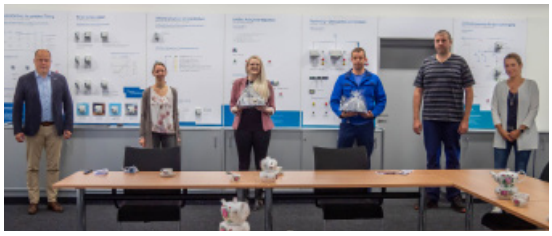
At the beginning of July, Madita Rose successfully completed her work-study programme with us and qualified as a digital and print media designer. She is now continuing to actively assist the marketing department with their work. Thomas Frodermann was also taken on after successfully retraining as a machine and equipment operator in the plastic injection moulding department.

However, their final-year classes did unfortunately not escape the impact of the coronavirus this year. First of all, the cancellation of classes and the postponed final examinations were a huge shock for everyone. Nobody knew where things would actually go from there as the schools themselves were facing enormous challenges.

This year the pupils' preparation for their exams was somewhat different. Following a two-month break, teaching resumed in mid-May via online video calls. The way the examinations was held also changed a great deal. While the apprentices did go into school on the day of their examination, they had to comply with strict hygiene measures. And the examiners came into the company in small teams to assess their practical work. The apprentices did not hear about their results until two days before their graduation ceremony.

The coronavirus has shaped the class of 2020 in a rather unusual way and has made their graduation something they will never forget. "The Doepke team supported me brilliantly throughout this period and enabled me to prepare well, despite the coronavirus situation, and successfully pass my final exam." ■

By Madita Rose



Goodbye Edgar Eichmann

After over 20 years at Doepke and 40 years overall in the electrical industry, Edgar Eichmann a character is leaving the professional stage. Edgar was responsible for the Doepke export sales for almost a quarter of a century, in which he was able to successfully expand the business almost worldwide. His focus beside Doepke´s sales figures has always been on the customer. He was the attorney of the customer and successfully taught the Doepke team to keep it like that, as this is the one of the basis of success.

We warmly congratulate Edgar Eichmann on this new phase of his life, with all the best wishes. Happy retirement! ■

PUBLISHER

Doepke

Schaltgeräte GmbH
Stellmacherstraße 11
26506 Norden

@ —— info@doepke.de
T —— +49 (0) 49 31 18 06-0
F —— +49 (0) 49 31 18 06-101

www —— doepke.de

QUOTE OF THE QUARTER

As for the future,
your task is not
to foresee it,
but to enable it.

Antoine de Saint-Exupéry

DATES/NOTES

Due to continuously changing developments concerning the coronavirus, many events are still currently cancelled or postponed.

However, we now offer webinars on various topics in our Doepke Academy.

An up-to-date training schedule and recordings of previous webinars can be found on our website: www.doepke.de

Item no 5961402 | 04/2020