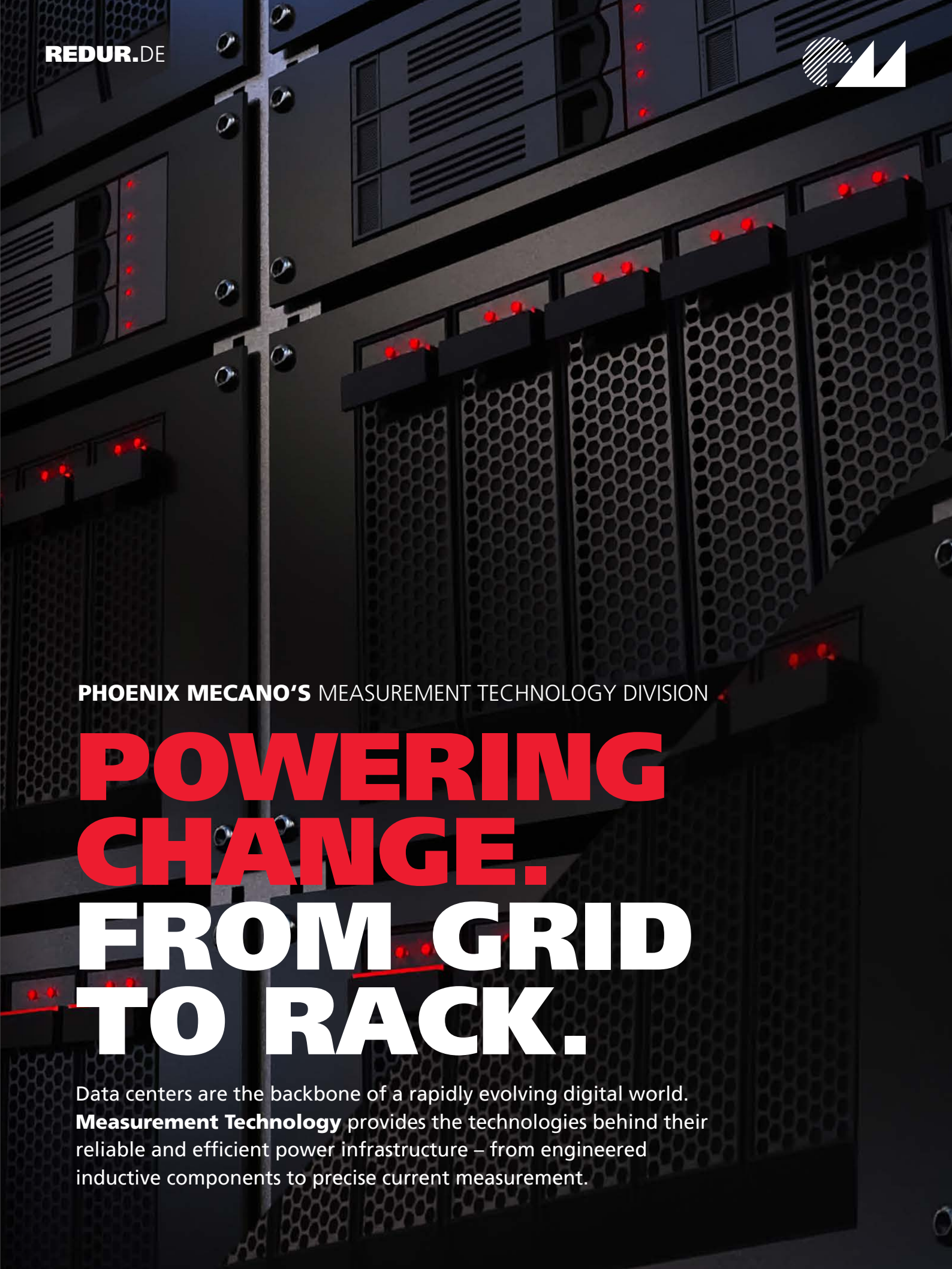


REDUR.DE

PHOENIX MECANO'S MEASUREMENT TECHNOLOGY DIVISION

POWERING CHANGE. FROM GRID TO RACK.

Data centers are the backbone of a rapidly evolving digital world. **Measurement Technology** provides the technologies behind their reliable and efficient power infrastructure – from engineered inductive components to precise current measurement.

GET IN TOUCH

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CO_2 NEUTRAL

All our printed materials are produced on sustainable paper and printed CO_2-neutral.

FOLLOW THE CHANGE
@REDUR



AT HOME IN THE WORLD'S MARKETS.

Phoenix Mecano is a global technology group and a leading manufacturer of enclosures and industrial components for a wide range of markets.

As part of the Phoenix Mecano Group, we benefit from a global network that combines innovation, precision, and engineering excellence across industries and continents. Close collaboration within our **Measurement Technology Division** creates powerful synergies – from shared research and development to combined engineering expertise, optimized sourcing, and efficient manufacturing.

These strengths enable us to deliver solutions that are more efficient, more reliable, and better prepared for the challenges of tomorrow. Together, we achieve what no single company could accomplish alone: developing technologies that create measurable value for our customers, our industries, and the world of tomorrow.

MAKE A CHANGE WHEREVER ELECTRICAL ENERGY FLOWS.

Data centers demand reliable power, precise measurement and solutions engineered for maximum efficiency. Measurement Technology combines expertise in Passive Energy Measurement, Active Energy Measurement and Inductive Conversion – bringing together transformers, inductive components, current measurement and high-precision AC/DC technologies within one division.

we do not deliver components – we deliver solutions.

PASSIVE ENERGY MEASUREMENT

Compact instrument transformers with current and voltage output for low voltage applications.

ACTIVE ENERGY MEASUREMENT

Actively compensated measurement systems for low and high voltage AC/DC measurement tasks with highest accuracy.

INDUCTIVE CONVERSION

K-Factor Transformers, Chokes and Filters for reliable power conversion - both for AC or DC Data Centers.

MAIN DISTRIBUTION
- LV Current Transformers
- Zero-Flux CT

UPS
- Chokes / Reactors
- Filters
- Current Transformers
- Zero-Flux CT

BATTERY ROOM
- Chokes / Reactors
- Filters
- Current Transformers
- Zero-Flux CT

PDU
- K-Factor Transformer
- Residual Current Monitoring
- Current Transformers
- Zero-Flux CT

RPP
- Current Sensors

RACKS
- Current Transformers

WE POWER EVERY PART.

From power entry and transformation to UPS systems, power distribution and IT infrastructure, electrical energy flows through every part of a data center. Our technologies support reliable conversion, power quality and precise measurement at key points throughout the entire power infrastructure for both – AC and DC Datacenters.

CHALLENGES FOR DATA CENTERS

UPS
- Continuous power availability
- High power quality
- Harmonic distortion & EMC
- Efficient power conversion

PDU
- Efficiency
- Harmonics
- High power density
- Precise energy monitoring
- Electrical safety & isolation

RPP
- High number of outgoing circuits
- Extremely limited installation space
- Compact current measurement
- Easy system integration

CHANGING SOLUTIONS.

UPS, PDU and RPP systems form key elements of a data center's power infrastructure. From power conditioning and uninterrupted supply to efficient distribution close to the IT load, each application comes with its own challenges.

With decades of experience, global engineering expertise and a strong international network, we turn these challenges into solutions – proven, customized and engineered for the application.

WE KNOW WHAT WORKS.

Decades of engineering experience enable us to select and develop the right cooling concepts and winding materials for each application – perfectly balanced for performance, efficiency and reliability.

K FACTOR



K-4 Rated

K-9 Rated

K-13 Rated

K-20 Rated

13 26.982 **Al** Aluminum

29 63.546 **Cu** Copper

AN Air Natural

AF Air Forced

WF Water Forced

INDUCTIVE CONVERSION

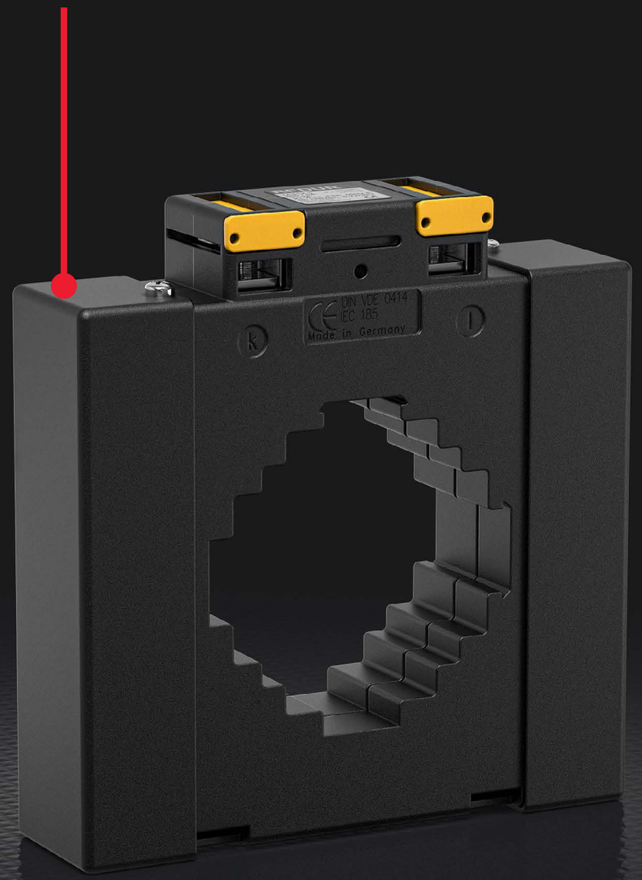
SHAPED BY YOUR NEEDS.

Every data center comes with unique requirements for power, efficiency and reliability. That’s why we develop magnetic components that fit your application instead of forcing your application to fit the product.

Whether optimized installation space, customized interfaces, specific winding materials or advanced cooling concepts – our engineering team develops solutions built around your power infrastructure.

FFP MODELS

Our **patented Flux Field Protection** (FFP) minimizes the influence of external magnetic fields on current measurement – especially important in **space-constrained installations**, where conductors and current transformers are positioned close together and stray magnetic fields can affect measurement accuracy.



PASSIVE ENERGY MEASUREMENT

MEASURING TECHNOLOGY THAT MAKES A CHANGE.

Precision in every ampere. Reliable power management starts with precise measurement. From compact current transformers for space-critical installations to advanced solutions such as REGULUS with our patented FFP technology, our portfolio combines high measurement accuracy, compact design and application-specific engineering.

LEARN MORE ABOUT FFP

Discover how our patented technology reduces the influence of external magnetic fields by more than a factor of 10.

ACTIVE ENERGY MEASUREMENT

PRECISION WITHOUT LIMITS.

From scientific research at CERN to industrial applications and High-Voltage DC, our **Zero-Flux technology** delivers exceptional accuracy and stability for **AC and DC measurement** – enabling **high-precision measurement, residual current detection for electrical safety, accurate metering for energy billing, and harmonic analysis for power quality**.

With **DualFlux**, we bring this proven technology into demanding industrial environments, while dedicated **HVDC measurement heads** extend our expertise to high-current and high-voltage applications – ready for the next generation of DC power systems.

LEARN MORE
and discover the future of precision.





CUSTOM SOLUTIONS

MILLIONS PROVEN AT HYPERSCALE.

Customer-specific **split-core current transformers** as compact as a coin and **solid-core sensors** provide precise current measurement in space-critical installations.

Both solutions are designed for use in **Remote Power Panels (RPPs)**, where a high number of measurement points must fit into extremely limited space. Millions of application-specific current transformers have already been delivered for hyperscale data center applications – demonstrating proven reliability, consistent quality and scalability in high-volume production.

TOMORROWS SOLUTIONS

READY FOR THE FUTURE.

As data center power architectures evolve towards DC, the requirements for precise and reliable current measurement are changing with them. With decades of expertise in Zero-Flux technology, AC/DC measurement and dedicated in-house R&D, Measurement Technology already provides the technological foundation to develop the solutions tomorrow's data centers will require.

