Rittal – The System.

Faster - better - everywhere.

Rittal + Eplan Innovations 2025



FRIEDHELM LOH GROUP

0

Perfectly coordinated software solutions, system technology, machinery and services deliver unique competitive advantages in panel building and switchgear manufacturing.

Discover what's possible.

Put your trust in Rittal and Eplan - your partners of choice for future-proof panel building and switchgear manufacturing - and discover solutions you can use to reduce throughput times, drive down costs and boost productivity.



Find out more about the range of solutions from Rittal:

www.rittal.com



Find out more about Eplan solutions:

www.eplan-software.com/solutions







Rittal and Eplan Your partners of choice for hardware, software and service.

The digital revolution has really taken off. With their unique combination of hardware and software, Rittal and Eplan are true pioneers in industrial automation.

The quality of products and services used to be the key success factor, but having the most efficient process is now just as important as a high-quality product in gaining a vital edge over the competition. Switchgear manufacturers that focus on the entire production chain – from planning and designing a product through to the placing of orders, production, delivery and service operations – will increase their throughput, boost their efficiency and achieve major competitive advantages.

Our solutions will optimise and digitalise your entire process. Our focus is on you – our customer. We will support you through the digital transformation – and you can benefit from the high availability of our top-quality data in the Eplan Data Portal.

Rittal and Eplan provide the technological foundations and specific solutions that offer added value – but that's not all. With more than six decades of experience and expertise to draw on, we are always one step ahead of the future. We have always understood our customers' processes perfectly. We know what is possible and what works well – and we are experts at putting these very solutions into practice. This is in our very DNA – it is what drives us and will inspire you, too.

Our aim is to be a future partner for our customers - including you.



Take advantage of digitisation's opportunities with Eplan

Digitisation is a challenge for all industrial sectors. The world is changing – standing still is not an option for companies that want to remain competitive in the era of Industry 4.0. Eplan offers integrated solutions for your industry and services that will help you make your engineering processes future-proof.







Machinery and plant construction

Integrated control and technical designs and a powerful ECAD platform form the professional foundation for stepby-step automation of processes in engineering and in manufacturing.

Panel building

Integrated process quality improvements are needed across the entire control and switchgear engineering field. Trust in Eplan and Rittal as your strong partners.

Automotive

Eplan offers significant added value for more efficiency: from concept planning, standardisation and detail planning, to manufacturing integration for plant system manufacturers and supplier companies, and even for plant system documentation.

Building technology

With Eplan you can rely on a continuous and consistent database that goes far beyond just the engineering processes – along your entire value chain.

Energy

Whether for conventional or alternative energy sources, or for high-voltage, medium-voltage or low-voltage network grids: use Eplan solutions for designing complex switchgear devices and systems and for your network designs.







Eplan offers you data continuity, planning security and optimised processes for the oil and gas industry, the pharmaceutical and chemical industries, and for water suppliers and the wastewater treatment sector amongst others.

Maritime

From designing cruise ships, constructing yachts and even transport and special engineering: Eplan offers shipyards and shipping companies worldwide support in integrating their processes into existing PDM system landscapes.

Food and beverage

Eplan offers you solutions for engineering the control systems of machines and plant systems, supporting you in the creation, production, further processing and packaging of agricultural products into foods and beverages.







Eplan Platform 2026



Good prospects and initial insights

Professional electrical design in one engineering system – consistent, seamless and fast.

With wiring schematics and a 3D enclosure layout, Eplan facilitates a complete digital description of the automation system – including as a 100% manufacturing specification.

Eplan Data Portal

With well over 4 million predefined and configurable components available, engineering can be carried out using drag and drop controls.

- A complete overview It is now possible to save up to 10 separate views of the 3D enclosure.
- Focus on component and item data Local and cloud-based item management and 400 additional item properties ensure excellent data depth in electrical design.
- New standard ERP interface

Extremely straightforward connection to customer ERP systems for the seamless transfer of item data and parts lists.



Find out more about Eplan Platform 2026:

> www.eplan-software.com/ eplan-platform

Eplan Pro Panel



End-to-end 3D planning for panel builders and switchgear manufacturers

Design your control cabinets, switchgear and power distribution systems for energy supply in 3D. Eplan Pro Panel helps you create the basis for automating and streamlining your enclosure manufacturing even at the design phase. A complete digital description of your enclosure in a single solution – mechanical construction, electrical components, routing and climate control:

- The 3D enclosure model functions as a specification and database for production
- Profitable from batch sizes of just 1 up to mass production

Streamline your production processes in panel building and switchgear manufacturing

- Production has access to suitably prepared data and information
- Both manual and partially automated production processes are supported
- Reproducible processes with automated enclosure machining and wire processing



Find out more about Eplan Pro Panel:

> www.eplan-software.com/ pro-panel

Eplan Smart Mounting



Eplan Smart Wiring

Your virtual assistant for manual cabling in enclosure manufacturing

From each connection point to the wire connection to the exact installation route, the software provides the wiring technician with all the information digitally as a wiring list. If required, this can also be supplemented by a 3D view of the enclosure.



Your digital mounting assistant for enclosure production

The manual mounting of mechanical and electrical components in enclosure production just got easier with Eplan Smart Mounting. Precise work instructions, combined with 3D visualisation, ensure efficient configuration of your enclosures, based on the digital twin from Eplan Pro Panel or a parts list.

- Rails, ducts, components:
 All information visible at a glance
- Step-by-step work instructions for installation, including progress documentation
- Monitoring and reporting tool for production managers
- Scanning function for fast, error-free component identification



Find out more about Eplan Smart Mounting:

> www.eplan-software.com/ smart-mounting

In the event of changes, project synchronisation and the display of all necessary activities ensure that nothing is overlooked. Status information facilitates project handover and project monitoring.

- All wiring information at a glance: Source/destination, connector parts, wire end preparation, installation route and tightening torque.
- As a wiring expert, you receive detailed step-by-step instructions for simple usage.
- Change management: Automatic comparison of the current production status with the new planning status for essential modifications.
- Wire labelling on demand by connecting label printers at the workstation.



Find out more about Eplan Smart Wiring:

> www.eplan-software.com/ smart-wiring

Eplan Cable proD

Software for efficient machine cabling

Eplan Cable proD enables the virtual cabling of machines. The software digitises the planning and provides all the information for the use of pre-assembled cables from ordering to assembly on the basis of a digital twin.



Eplan Data Portal

Over 500 manufacturers and more than 4 million part records

The Eplan Data Portal gives you direct online access to high-quality product catalogues from numerous component manufacturers.



- The installation routes and thus the length of the cables is clearly determined on the digital machine model as early as the engineering stage.
- Electrical engineering requirements are visualised in the MCAD model. This ensures that cables can be installed as planned.
- "Nasty surprises" due to errors that are only recognised during installation are a thing of the past.
- The digital twin provides all important information for cable installation via a viewer.



Find out more about Eplan Cable proD:

> www.eplan-software.com/ cable-prod

By dragging and dropping the available components into the Eplan documentation, you can reduce project planning work and upgrade the quality of machine and system documentation.

- Quickly and easily locate standardised, intelligent, globally valid device data.
- Minimise the effort required for item data maintenance.
- Choose technical products faster and more easily, thanks to direct access to numerous configurators offered by leading component manufacturers.
- Boost your engineering quality thanks to greater data depth in your automation documentation.



Find out more about Eplan Data Portal:

> www.eplan-software.com/ eplan-data-portal

The production chain from end to end

How can panel builders and switchgear manufacturers make the leap into the world of digitalisation and automation – and how can they prepare for the future? Answers to these questions can be found at the Rittal Application Centers (RACs).

Rittal Application Center Join. Apply. Grow.





The concept:

Rittal is turning the spotlight on the customer and their workshop, application scenarios and processes. These are the places where existing and new customers can work with experts from Rittal to develop their projects, get to know new technologies and try these technologies out easily – all in the spirit of "Join. Apply. Grow.".

The combined expertise of Eplan, Rittal and Rittal Automation Systems is unparalleled on the market. The Rittal Application Centers are where the interplay between these solutions throughout the entire value chain comes into play. As a user, you can experience this live in a genuine workshop environment. Our goal is to show you new development opportunities for the future and thereby continue to enhance your competitiveness.

What you can expect:

- Process standardisation
- Short training times
- Increased reproducibility
- Reduction of data sources
- Shorter throughput times
- Increase in production capacities and reduction in production costs

Together, we will lift your productivity to a whole new level!

Additional services:

Besides our standard services, such as

- Modifying Rittal enclosures
- Installing Rittal system components and accessories

our Rittal Modification Centers also offer

additional services on a site-specific basis:

- Planning and pre-assembly of low-voltage switchgear
- Precise machining of copper busbars
- On-site delivery with optional on-site installation
- Special logistics services





Rittal Application Centers worldwide – combined expertise within easy reach

Our team looks forward to seeing you at the following locations

- Australia: Sydney
- Belgium: Lokeren
- Brazil: São Paulo
- Germany: Gera and Rittal Innovation Center Haiger
- UK: Hellaby
- Italy: Valeggio
- Japan: Odawara
- Canada: Mississauga
- Austria: Vienna
- Poland: Stryków
- Sweden: Ängelholm
- Switzerland: Neuenhof
- Czech Republic: Zdiby
- USA: Houston



Find out more about Rittal Application Centers:

www.rittal.com/rac

My Rittal online shop

The central point of contact that makes it easy to select from our comprehensive range of enclosures, power distribution systems, climate-control solutions and IT infrastructure products and purchase the products you need.



You can use the online shop to...

- Place an order conveniently, quickly and efficiently
 at any time and from any place
- Check the availability of products
- Configure solutions in RiPanel and quickly find accessories and spare parts
- Track orders and view your order history
- Upload and download documents for efficient ordering (PDF, Excel, CSV files)
- Save and share shopping carts and create and edit projects
- Manage user rights through at least one administrator
- View customised prices, terms and conditions

RiPanel



Your cutting-edge tool for individual enclosure system configuration

Key functions at a glance:

- User-friendly interface
- Plausibility-checked selection of accessories
- Customised cut-outs and import of CAD data
- Automatic generation of technical data

Your benefits:

- Save time with configuration and ordering
- Avoid errors with the selection of accessories
- Parts list for improved planning

RiPanel:

Faster processes



Find out more about

www.rittal.com/RiPanel

RiTherm



Your climate control planning tool for enclosures

Quickly and easily design the correct climate control for your switchgear:

- Calculation and selection depending on the ambient conditions (indoor and outdoor applications)
- More accurate costings for bayed enclosures as a result of division into customised "heat loss zones"
- Improved documentation thanks to separate designation of the cooling output buffer
- Simplified product selection process because of customised product recommendations
- Support for compliance with international
 F-gas regulations due to GWP data and review of climate-control design



Find out more about RiTherm:

www.rittal.com/RiTherm

Rittal ePocket

Digital machine and system documentation throughout the entire value chain

Rittal ePocket ensures fast, straightforward access to complete documentation. Thanks to round-the-clock access to the latest technical documents and wiring schematics, documentation, maintenance and service processes can all be made more efficient.



Your design and documentation benefits:

- Save on printing costs when preparing documents
- Reduce your carbon footprint
- Transfer digital documentation to customers efficiently

Your service and maintenance benefits:

- Up-to-the-minute data always available for everybody involved
- Fast change management with the integrated Eplan eVIEW workflow
- Clear tracking of changes



Find out more about Rittal ePocket:

www.rittal.com/epocket

RiPower configurator



Welcome the dawn of a new era, thanks to our new RiPower configurator – the cloud-based project planning tool that is setting completely new standards in the planning of low-voltage switchgear. The tool guides the user through the entire planning process quickly and efficiently, in simple, logical steps.

- System documentation including assembly instructions
- Thanks to direct access to the online shop, you can order your custom configuration directly
- Supports subsequent processing with the market's leading tools (Eplan P8, AutoCAD, etc.)
- Automatic integration of configuration results via pre-prepared interfaces such as GAEB (XML) for preparing quotes for end customers.



Find out more about RiPower:

www.rittal.com/RiPower-configurator

Enclosures



	Product group		Small enclosures	Compact enclosures	Hygienic Design	
i	We are standardising our image and are therefore switching the design elements of our products to our registered colour (red – RAL 35745). www.rittal.com/colour-change		Tough enough to take it all – there are practically no limits to the scope of applications for these especially robust small and compact enclosures. Electrical, electronic and pneumatic components are securely protected with a high IK impact resistance.		Hygienic Design (HD) enclosures are key elements in the design of open processes in the food industry due to their ease of cleaning.	
	Material	Plastic		•	_	
		Aluminium	•	-	-	
		Sheet steel	•	•	-	
		Stainless steel				
	Dimension options		More than 160 small enclosures and 160 compact enclosures in a range of individual materials and designs.		30 different enclosure types and sizes.	
Product characteristics			Exceptionally robust and with a high IP and IK protection class, Rittal small and compact enclosures are compliant with all major international approvals and standards.		The range is based on common standards, directives and regulations in the food and luxury goods industry.	



Enclosure systems	Console systems	PC enclosure systems	Industrial Workstations	Operating housings	Support arm systems	Stand systems
Ingeniously simple, fully symmetri- cal, and patented worldwide – this is the successful formula which has established the VX25/VX SE as a global standard.	Versatility through modularity – essential for meeting individual customer requirements for machine and plant operation perfectly and cost-effectively.		Always exactly the right position: Different viewing angles of the machine, tall or short operating staff – find your perfect ergonomic solution at the human/machine interface.			
-	_	_	-	_	_	-
-	-	-	-		•	-
•	•	•	•	-	•	-
•	•		_			_
Free-standing and bayed enclosures in more than 120 options for controlgear production and plant manufacturing.	Choose from console systems in over 30 combination variants, 8 PC enclosure systems and 13 variants of Industrial Workstations.			systems with a v	erating housings, 5 vide range of coml ems, there is a so	bination options
Infinite installation opportunities, simple assembly, uncompromising baying and tested quality are the distinguishing features of these enclosure systems. QR codes on all machinable components.	Robust and modular, especially designed for tough industrial environments where a high protection category and good accessibility are key.			tremendous vers	ty, simple asseml atility with produc requirement is cat	t combinations

AX wall-mounted enclosure, 3-part



Availability: Q2 2025

More flexibility!

The new enclosure with a simplified delivery concept offers more flexibility in terms of product selection and can be used for many applications. It can also be easily fitted out using AX and VX system accessories. One basic enclosure – Countless opportunities. Extend without machining using Rittal system accessories.

- The 482.6 mm (19") range may be flexibly used in the centre part (depending on the required installation depth)
- Access from the front and rear for maximum user-friendliness during installation and maintenance



Find out more about the AX wall-mounted enclosure, 3-part:

www.rittal.com/AX-3-part

AX compact enclosure, sheet steel



- Simple, flexible interior installation
- Configuration without machining

Availability: Off-the-shelf

New sizes added to the AX compact enclosures in sheet steel.

The wide enclosures offer an alternative to bayed enclosure suites for various applications, and are ideal as base enclosures in mechanical engineering or for conveying applications in logistics.



Find out more about the AX compact enclosure, sheet steel:

www.rittal.com/ax

AX compact enclosure and VX C4-H baying enclosure system



Coming soon, discover the AX/VX C4-H options from Rittal with surface coatings analogous to ISO 12944. The special spray-finish on the body and enclosure panels, plus zinc magnesium coating of the VX frame, ensure high levels of corrosion resistance.



 Corrosiveness category C4-H (high) analogous to ISO 12944

Availability VX: Off-the-shelf Availability AX: Q2 2025



Find out more about C4-H:

www.rittal.com/C4-H

Ex enclosures for projects



Our Ex standard enclosures in stainless steel and plastic, which have been popular for many years now, are being joined by the new Ex enclosure platform for projects with custom requirements.

- Various dimensions and defined modification options
- For applications in compliance with IECEx, ATEX and UL Hazloc
- Available in AISI 304 and 316L

Availability: On request



Find out more about Ex enclosures:

www.rittal.com/Ex-enclosures

Hygienic Design viewing window



Optimum protection of switches and displays available in three sizes.

- Optimum seal thanks to slot-free transition between the viewing window and the frame
- All three variants have a large viewing panel

Availability: Off-the-shelf



Scan here to go to the order page for the Hygienic Design viewing window:

www.rittal.com/hd-viewing-window

VX base/plinth system, stainless steel



- High corrosion resistance and stability
- Configured using various rails, bars and cable clamp rails
- Cover caps can be replaced with stainless steel versions available as accessories

Find out more about the VX stainless steel base/plinth system:

www.rittal.com/ VX-base-plinth-stainless-steel

Availability: Off-the-shelf

Cover caps, stainless steel



The new cover caps for the VX base/plinth system, stainless steel, can simply be clipped on to cover the base/plinth corner pieces.

- Entire system solution made from stainless steel
- Simple installation thanks to tool-free assembly

Availability: Q2 2025



Scan here to go to the order page for stainless steel cover caps:

www.rittal.com/ cover-caps-stainless-steel

Energy & Power



		RiLine busbar systems				
		The tried-and-trusted, super-flexible power distribution systems for individual requirements. From small power distributors, to individual switchgear and controlgear, through to heavy-current power distributors for infrastructure and industry applications. Simple, secure assembly plus user-friendly planning with design verification are the distinguishing features of these systems.				
	Systems	RiLine Compact	Mini-PLS	RiLine60		
	Bar centre distance mm	60	40	60		
	Rated current A up to	160	250	800, 1600		
	Product characteristics	 Contact hazard-protected board with integral busbars for the safe accommodation and contacting of components The board and all components are simply top-mounted; no tools required Suitable for AC and DC applications 	 Space-saving design, as components can be installed above the busbar supports and bar connector elements Simple component installation via plug and lock action from the front Optimum contact hazard protection with all-round encapsulation 	 Thanks to the special design of the PLS special busbars, components can be installed above them in the support area without any problems Optimum contact hazard protection with all-round encapsulation Suitable for AC and DC applications 		

Ri⁴**Power**



Ri4Power low-voltage switchgear

The tested complete solution – Enclosure and bar system. Mutual interference between electrical equipment in low-voltage switch- gear systems has already been tested to IEC 61439 and confirmed with a design verification.	Modular system for low-voltage switchgear with design verification to IEC 61 439-1/-2 and DIN EN 61 439-1/-2 plus power distributors and structured system solutions for switchgear with 1-4b Form separation.	ISV distribution enclosures for standard-com- pliant power supply in buildings and industry. Flexible configuration with practical power distribution modules.
Ri4Power 185 Compact	Flat-PLS	ISV distribution enclosures and wall-mounted distributors
185	60, 70, 80, 185	60, 100, 185
2100	6300	1200
 Components in the pitch pattern of the cover system can be installed above the busbar support Integral busbar shielding in the cover section to prevent accidental arcing Components can be installed above the cover section and components can be retrofitted quickly without removing the cover section 	 Tested system solutions to the internationally valid IEC 61 439-1 standard and simple creation of the design verification High levels of short-circuit withstand strength up to I_{cw} 100 kA for 1 sec./i_{pk} 220 kA Tested accidental arcing protection to IEC 61 641 	 Distribution enclosures as wall-mounted and free-standing enclosures for individual population with modular elements

Innovative strength in our DNA





RiLineX – busbar system

The requirements placed on state-of-the-art, dependable power distribution are growing all the time due to developments such as the growth of electrification and the energy savings brought about by the switch to direct-current technologies. Demand for internationally recognised and approved components is also growing. This new system platform utilises the DNA of our modular platforms and is the result of over 40 years of experience in power distribution.



With RiLineX, we and our partners are setting the global standard in power distribution across all sectors – from the process industry to renewable energies. This open system platform is not just ideal for today's requirements, it has also been designed for the future. RiLineX is the optimum basis for efficient and sustainable power distribution and supports the integration of new technologies on its innovative busbar system.

Innovative strength in our DNA





Become a partner!

Businesses deliver genuine customer benefits when they don't just supply standalone products and proprietary solutions, but actually offer solutions that span multiple processes and meet the needs of entire value chains. That is why we work with our partners in the Rittal partner network to enhance our joint reputation as a solution provider in the markets, expand our shared customer base and build a global network of experts. Our RiLineX partner program gives you, as a component manufacturer, the opportunity to bring your technology to our platform licence-free.

- Raise your profile within the Rittal ecosystem.
- Become part of an innovative power platform.
- Create added value through pooled expertise.



Your link to the Rittal Partner Network:

www.rittal.com/RiLineX-partner

Nine good reasons to use RiLineX

- X Fast and efficient planning thanks to a simple system design
- X Approximately 30% saving in engineering
- X Up to 75% saving in assembly
- X Simple installation thanks to innovative plug-in system for the board and tool-free component fitting
- X Simplification thanks to modular system design
- X Contact hazard protection to IP 2XB, suitable for upgrade to IP 4X at front
- X Tested short-circuit resistance up to 65 kA
- X Suitable for applications up to 1000 V AC and up to 1500 V DC
- X Seamless approvals for UL/IEC



Find out more about RiLineX:

www.rittal.com/RiLineX

Ri4Power outgoing section and RiLineX

Ri4Power combined with the new RiLineX busbar system opens up completely new possibilities. In the outgoing section, many different components may be connected under one roof, such as power distributors with control units.

To achieve this, individual compartments, shielded from one another, are created within the section.



- Form separation up to 4b is possible.
- Safety from the base up to the roof, thanks to a fully tested system
- Each compartment is configured to suit your requirements with VX25 Ri4Power system components and then individually populated e.g. with switchgear, power supply outgoing feeders or control units.
- The fully modular busbar system can be used across all sections and compartments and is exceptionally straightforward to plan and install. It also offers extensive individualisation options with uncompromising consistency.

Availability: Q3 2025



Find out more about Ri4Power:

www.rittal.com/Ri4Power

Ri4Power busbar trunking system



Busbar trunking systems are used to transport and distribute electrical energy. With Ri4Power, there is now also the option of linking busbar trunking systems.

- The busbars can be installed in either the roof or the base section – in other words, they can be connected to the low voltage distribution from above or below.
- Suitable for Schneider Electric and ABH busbar trunking systems
- Tested up to 6300 A

Availability: Q4 2025



Find out more about Ri4Power:

www.rittal.com/Ri4Power

Rittal Energy Meter & current transformer



Transparency when it comes to identifying energy flows is the bedrock of any energy management solution. This transparency is made possible by energy monitoring using measuring instruments (Rittal Energy Meter) and by a suitable current transformer.

- Simple integration thanks to top hat rail mounting
- Low-power current transformer technology (333 mV) helps lower costs, as there is no need for design work or the short-circuit terminals that are otherwise commonly used
- Identify potential energy savings and harvest optimisation potential

Current transformers are compact and precise current measurement solutions that can be connected to the Rittal Energy Meter (REM). These transformers ensure measurements are transmitted reliably and efficiently at low voltage, which supports high precision and makes it easy to integrate the solution into legacy energy monitoring systems.

Availability: Off-the-shelf



Find out more about energy efficiency solutions:

www.rittal.com/Energy-Solutions



Find out more about the Rittal Energy Meter:

www.rittal.com/Energy-Meter

VX ESS – Energy Storage Solutions



Flexible energy storage enclosure based on our proven VX enclosure system, specially designed to accommodate energy storage modules in a wide variety of dimensions.

Naturally, this versatile modular system is also ideal for applications involving hydrogen, supercapacitors and other energy storage media.

- Width pitch pattern adjustable in 6.25 mm increments, for energy storage modules in many different sizes
- Optimum organisation with flexible positioning of the interior
- Efficient passive ventilation thanks to perforated door and rear panel
- Robust construction ensures a load capacity of up to 1,000 kg in total and 120 kg per slide-in level or 200 kg per heavy-duty shelf
- Modular energy storage component installation compatible with the CS Toptec outdoor enclosure

Availability: Can be ordered now



Find out more about energy storage solutions:

www.rittal.com/ energy-storage-solutions

Industry Standard Projects





Speed up your engineering and conversion of energy systems with our Industry Standard Projects. These pre-configured solutions deliver efficient engineering by supplying you with an Eplan project plus documentation. Use this forward-thinking configuration as a basis and adapt it to your requirements to produce a bespoke solution fast – without any time-consuming brand-new development work.

Our seamless integration also makes the ordering process easier: Simply upload the parts list of Rittal components and all the required information is sent directly to the procurement team so your project can be implemented quickly. Benefits at a glance:

- Forward-thinking, standardised solution
- Fast, simple adaptation to your requirements
- Eplan project, CAD files, parts lists All data is directly available
- Perfectly coordinated components
- Clear time and cost savings

Available online



Find out more about Industry Standard Projects:

www.rittal.com/industry-standard



Find out more about Eplan engineering standards:

> www.eplan.com/ en-engineering-standard

Climate Control



	Type of climate control	Fans, fan-and-filter units, air/air heat exchangers	Cooling units, Thermoelectric Cooler	
		Ambient air cooling units are ideally suited for dissipating heat loads exceptionally cost-effectively. The pre-requisite for this is that the ambient air must be relatively clean and at a temperature below the required enclosure internal temperature.	Cooling units keep the enclosure internal temperature at a constant level, which is independent of the ambient temperature. The air routing meets individual requirements. Two separate circuits prevent the ingress of dust into the enclosure.	
	Air throughput, unimpeded airflow m ³ /h	20 – 1160	_	
	Specific thermal output W/K	17.5 – 90	_	
-	Total cooling output W	_	80 – 5500	
	Continuous thermal output W	_	_	
	Product characteristics	The new generation of Blue e+ fan-and-filter units is impressively simple to maintain. It is available in AC/DC, EC and EMC variants. Fan-and-filter units with EC technology, in particular, deliver significant time and cost benefits with their IoT capabilities.	The Rittal Blue e+ series is the world's most efficient cooling unit. With heat pipe technology as standard and speed-controlled components, average energy savings of 75% can be achieved.	



Air/water heat exchangers, chillers	Enclosure heaters	Climate control accessories
Efficient liquid cooling may be used in all situations where a high cooling load is required, such as process and machine cooling or when dissipating heat loss from enclosures via air/water heat exchangers. Liquid cooling allows you to achieve spatial separation between cooling production and process cooling.	Condensation poses a particular risk for control electronics, especially with outdoor siting. A range of output categories ensures that the correct thermal output is always available.	Perfectly coordinated components allow you to customise the climate control to your specific requirements, whether you need targeted air routing, precise control of the equipment or appropriate consumables.
-	_	-
_	_	-
300 - 50,000	_	-
_	10 – 800	-
Energy savings of up to 70% can be achieved with the Blue e+ generation of chillers. They ensure efficient cooling of liquid media with a high degree of control accuracy thanks to innovative DC inverter technology.	The innovative profile geometry means that heat is distributed evenly inside the enclosure and cold spots are prevented. The tool-free push-in connection technology speeds up the wiring process considerably.	With innovative accessories, the efficiency and reliability of climate control components can be additionally enhanced with monitor- ing, control and individual air routing.

Switching refrigerants made easy!



In 2024, Rittal switched its entire cooling unit range from refrigerant R134a to R-513A.*

The order numbers of the affected products will remain unchanged.

Cooling units that have already been installed can be operated and maintained with R134a.

Affected product groups:

- Blue e cooling units 0.3 4 kW
- Blue e+ cooling units 1.5 5.5 kW

Benefit:

- Compliance with statutory regulations for refrigerants in the USA from 1 January 2025 in the case of cooling units and from 1 January 2026 for chillers
- * The entire chiller portfolio is also being switched to R-513A. The switchover will be completed in March 2025.



Find out more about switching refrigerants:

www.rittal.com/F-Gas

Additions to the chiller portfolio



- More power options: Blue e+ chillers in 1.5 kW and 7 kW complement the series
- Higher efficiency in outdoor siting with Blue e+ Outdoor chillers in 4, 5.5 and 7 kW variants
- Blue e+ Hybrid IT chiller in 7 kW with integrated "outdoor" and "free cooling" option

Benefits:

The "outdoor" option guarantees optimum protection from the weather, protection category IP 54 for the electronics and high operating limits. The integrated heating also ensures that the cooling medium is brought to the optimum temperature before it is used. When the "free cooling" option is also used, the associated carbon footprint can be reduced by up to 90%.



Our chillers deliver the energy you need for the energy transition

Applications such as High Power Charging (HPC) for electric cars, hydrogen refuelling stations for fuel cell vehicles and cooling systems for battery stores all need active cooling, which a chiller can provide. By additionally equipping these chillers with a free cooler, significant energy and CO₂ savings are achievable. The electricity used for cooling is then green. **Please contact us for advice.**



Find out more about Blue e+ chillers:

www.rittal.com/blueepluschiller

Blue e+ Dynamic



Cooling units for maritime and dynamic applications

This series of cooling units has been designed for use in dynamic applications. Tested to DNV-CG-0339, it is particularly suitable for use on ships (e.g. enclosures in engine rooms). Their exceptionally stable mechanical design makes these cooling units suitable for any application that creates high vibration levels on the device, such as applications in ports (cranes), logistics (storage and retrieval systems) and airports (baggage handling systems).

Availability: Q1 2025



Find out more about Blue e+ Dynamic:

www.rittal.com/dynamic

LCP Rear Door CW



The LCP Rear Door CW is the perfect solution for dissipating heat from IT racks efficiently. Thanks to the modular concept consisting of a passive, active and water module, heat can be dissipated out of the server room directly from the rack, via the medium of water.

Your benefits:

- Extensive use of indirect "free cooling", thanks to the design of the heat exchanger with a water inlet temperature of 15 °C
- Low installation depth (180 mm) with an output class of up to 30 kW
- Direct mounting on VX IT and TS IT racks (no adaptor frame needed)
- Can be used independently of existing climate control systems and flexibly extended by adding modules

Availability: Q2 2025

Direct Liquid Cooling (DLC) – Modular platform solutions



The Rittal Direct Liquid Cooling portfolio is available as:

- An air-based solution in the form of a rear-door heat exchanger (70 kW)
- A water-based CDU in-rack solution (up to 150 kW) and CDU in-row solution for very high performance densities up to 1 MW in your data centre

Benefits:

- Modular concept for all units
- Redundant pump units and fail-safe mode for pumps
- Leak monitoring on an individual component basis
- Sensors and controllers can be replaced during active operation
- Pumps and filters in the CDU in-row solution can be replaced during active operation
- Modular pipework concept from the CDU to customised liquid distribution busbars in the rack
- Power supply via DC busbar

Availability: Q3 2025



Find out more about Direct Liquid Cooling:

www.rittal.com/dlc

IT Infrastructure



,	IT category	IT enclosure systems/racks	IT power	
		The VX IT is the solution for all network and server applications, whether a network distributor or server racks in an edge, colocation or hyperscale data centre. It is the ideal platform for all requirements in modern IT infrastructures.	Put your faith in innovative IT power concepts for energy distribution and backup to meet all your redundancy, scalability and availability requirements.	
_	Product options	Over 100 enclosures, 4 distributor frames and 48 racks provide an unrivalled range in this sector, with a suitable solution for every requirement.	From a simple socket strip, to interlinked power distribution units (PDU) through to a complete UPS system, choose from over 150 products for a reliable power supply to your IT.	
	Product characteristics	All enclosures are available off the shelf or with a short delivery time. All this plus a high load-bearing capacity of up to 18,000 N and a protection category of up to IP 55, allowing it to be used in tough industrial environments as well.	Optimum integration of the rack PDUs by mounting in the zero U space and professional monitoring by linking to standard DCIM software (such as RiZone). The voltage, current, active and apparent power and power factor may be transmitted directly.	


IT cooling	IT monitoring	IT security solutions	Modular data centre solutions
Climate control concepts from Rittal cover the full spectrum of applications, from cooling a single rack through to entire data centres. Security plus optimum energy and cost efficiency are paramount.	Today's IT landscape would be unthinkable without monitoring. It has become firmly established as a permanent feature of physical IT security, allowing modern IT infrastructures to be operated securely.	As well as security rooms, Micro Data Centers Level E provide optimum protection against potential physical threats. Modularity and extendibility offer a high level of diversity and protection of your investment.	Rittal offers predefined MDC bundle solutions for up to four IT racks and various climate control options. There are also preconfigured RiMatrix data centre solutions for modules with more than four racks.
Demand-based cooling provides the basis for optimum energy efficiency in data centres, thanks to 45 units with cooling outputs ranging from 3 to 481 kW.	More than 15 different sensors and upgrades ensure 360° monitoring of your entire IT infrastructure.	A flexible modular system allows you to configure a solution tailored to your requirements, for both security rooms and Micro Data Centers Level E.	The predefined RiMatrix data centre modules can each cover up to 400 kW. This means that several modules in a data centre can be combined.
Integral climate control concepts for rack, suite and room climate control help to minimise operating costs and ensure energy-efficient operation over a period of many years.	The CMC III monitoring system sets new standards in terms of configuration and reducing system complexity. It can communicate with a range of sensors and actuators via the integral CAN bus, and can be integrated into standard DCIM systems.	Protection from fire, flue gases, water and dust, as well as unauthorised access. Power supply, cooling, monitoring, fire alarm and extinguisher systems round out this security cover into a complete data centre.	The predefined solutions can be customised to ensure maximum flexibility and customer benefits with minimum planning outlay.

Optimised cable solution in a network rack



TX CableNet – The perfect solution for your network infrastructure

- Multi-functional roof: Cable entry via brush strip or retrospective insertion of a fan
- Comprehensive range of accessories: Cable cage for optimum cable routing or AX comfort handle for enhanced access protection
- Load capacity up to 500 kg
- Variants that can be dismantled: Ideal for building a network infrastructure in the tightest of spaces

Availability: Off-the-shelf



Find out more about the TX CableNet:

www.rittal.com/TX-CableNet-rack

Added flexibility for TX



Base mount for TX with VX compatibility

The new base mount clears the way for customised floor space configuration in the TX CableNet and TX Colo!

The base mount makes it possible to fit VX gland plate modules in the TX, meaning only VX gland plates are now needed – whether they're to be installed in TX or VX solutions. As a result, the vented gland plate module can be used to assist passive enclosure ventilation or the multi-piece gland plate set with cable entry options can be fitted, for example.

Availability: Off-the-shelf



Scan here to go to the order page for the base mount:

www.rittal.com/base-mount

OCP door set for OCP ORV3



AX IT Nano DC

The space-saving solution for IT infrastructure

The AX IT Nano DC is the ideal small data centre if you are looking for a space-saving solution for integrating your network and IT infrastructure into your production facility in order to process large volumes of data directly. Thanks to the new 19" swing mounting frame, servers or switches can be integrated vertically.

The new OCP door set for the OCP ORV3 rack has been specially designed to ensure enhanced security in your data centre. The set consists of a vented onepiece front door and an asymmetrically divided vented rear door.

- Enhanced access protection: The doors come with a comfort handle and a lock and push-button insert
- Accessibility: Optimum service access thanks to the asymmetrically divided rear door

Availability: Q2 2025



Find out more about OCP ORV3:

www.rittal.com/OCP-ORV3

- High protection category (up to IP 56): Based on the AX industry standard and ideally suited to use in industrial environments
- Climate control: Ventilation via pre-assembled fan-and-filter units ensures reliable climate control for the IT components
- Optimum cable routing and installation: Straightforward handling and cable routing thanks to the integrated swing frame
- Maximum flexibility: Can be used as a wall-mounted or free-standing enclosure in combination with the Rittal AX compact enclosure modular system

Availability: Q3 2025



Find out more about AX IT Nano DC:

www.rittal.com/AXITNanoDC

Automation with RAS











Helping you forge ahead step by step

The solutions offered by Rittal Automation Systems cover a whole host of individual processes and the entire manufacturing spectrum – from manual tools to fully automated machining centres.

- Our machines for the mechanical processing of metals work fast, accurately and highly efficiently.
- Thanks to **automated solutions** for wire processing, we deliver enormous efficiency gains.
- Ergonomic handling tools optimise processes on the shop floor.
- We offer tailored advice and bespoke solutions for each step in your automation journey.
- Our professional hand tools support fatigue-free work.













Rittal Automation Systems –

the best route to automating and optimising workflows and processes in panel building and switchgear manufacturing.



Further information:

www.rittal.com/ras

Cutting Terminal CT



User-friendly length cutting with reduced wastage

Cut wiring ducts, cable duct covers and support rails to the precise length required with our new Cutting Terminal CT M and Cutting Terminal CT H cutting centres. The integrated manual cutting tools offer a user-friendly, simple and burr-free means of cutting to length.

The Cutting Terminal CT H variant offers hydraulically supported cutting for support rails.

Data supplied from engineering plus automated end stops in the cutting terminal support the workshop process and ensure cut optimisation even across multiple projects.

Full connectivity and data continuity from engineering through to the production processes delivers an integrated, cross-process product solution.

Moreover, the RiPanel Processing Center order management tool provides an efficient solution for managing production and machine jobs. This means you can rely on dependable production control and planning confidence.

Integrated component labelling also assists with subsequent order picking and the placement of processed rails and conduits on the mounting plate. During later stages in the process, the QR code on the label can be used with Eplan Smart Mounting to visualise the placement of the component that has been cut to length.

Other benefits:

- Fast, precise, dependable working
- Waste-related costs can be optimised across multiple projects.
- Modern touch screen
- As an additional function, round holes and horizontal and vertical slots can also be punched into support rails.
- Five DIN rail sizes in one template with dimensions of 35 x 7.5 mm, 35 x 15 mm, 15 x 5.5 mm and copper earth rails with dimensions of 10 x 3 mm and C rails 34 x 15 mm. G rails to EN 60715 can also be cut to length.
- Dimensions of wiring ducts that can be processed: width 15 – 125 mm and height max. 100 mm

Availability: Can be ordered from Q2 2025



Find out more about our new automation solutions:

www.rittal.com/Cutting-Terminal

Punching Terminal PT S4

Smooth, reliable machining with modern, intuitive operation

The Punching Terminal PT S4 is ideally suited for entry-level automated busbar machining. Accommodating up to 4 tools with a quick-change function, this product solution allows you to punch and cut flat materials quickly and precisely to the required length.

With powerful tool springs and correspondingly high retraction forces, even thick copper bars are punched extremely cleanly, so that no reworking is required. The seamless data communication via Ethernet ensures professional machine monitoring and production analysis to boost your production efficiency.

Other benefits:

- Compact design
- Machining of copper and (on request) aluminium busbars
- Busbar sizes from min. 15 mm to max. 127 mm in width and min. 3 mm to max. 16 mm in thickness

Availability: Can be ordered from Q1 2025





Find out more about our new automation solutions:

www.rittal.com/Punching-Terminal

Bending Terminal BT 20E

Energy-saving drive is pioneering

The new electric bending machine for busbar machining can be used for many different types of bending, such as multi-stack, flat, edge, closed and U-shaped bending.



The electric drive makes the Bending Terminal BT 20E particularly quiet, low-maintenance and efficient. The special plug-in system supports user-friendly tool changes, quick set-up times and exceptionally precise bending results.

Depending on the type of bending, flat materials up to 160 mm wide and up to 20 mm thick can be processed. The maximum bending force is 240 kN and the bending precision is 0.2°.

Availability: Can be ordered from Q3 2025

Overview of our services

Sustainability and energy efficiency are among the biggest challenges facing industrial companies today. This requires careful analysis of every aspect, from small pieces of equipment through to large-scale production machines.

The demands on plant availability are increasing, as the pressure on costs and resources continues to rise. Now more than ever, it is vital to continuously modernise and maintain your production equipment and keep it in optimum condition. The Rittal service team is on hand to support you with a comprehensive range of one-stop services, short response times, and qualified service engineers offering in-depth product and system knowledge.

Global service network



Wherever your plant or system is located, we are on hand to assist.

Our global service network means you can rely on consistent quality. Our local experts always support you, whether by providing quick, straightforward assistance over our service hotline to help resolve minor issues or travelling to you to carry out repairs, conduct regular maintenance or replace equipment.

- All from a single source
- Manufacturer expertise
- Always nearby



Find out more about Rittal Services:

www.rittal.com/Services



Original spare parts

Do you want to find the spare part you need quickly and reliably? No problem! It couldn't be simpler, thanks to the high availability of our spare parts – we have more than 2,000 different products that you can order with ease through our online shop.

- Optimum spare parts availability ensures rapid fault resolution
- Original spare parts from the manufacturer
- Simple and convenient search via the spare parts finder and the Rittal Scan & Service app



Service agreements

Would you like to be able to plan your maintenance and costs? The design of Rittal service agreements gives you the flexibility to tailor the scope of our services to your requirements and to choose from various service packages.

- Minimum downtime thanks to guaranteed response times
- Plannable service budget
- Peace of mind in daily operations

Scan & Service app



Want to configure your climate control devices quickly and easily?

Simply scan the QR code on the rating plate for detailed information about every Rittal product. The NFC scan gives an overview of your device statuses for easier configuration. That's no problem when using the Scan & Service app.

- Save time by transferring your settings to other cooling units
- Contact Rittal around the clock
- Easily request accessories and spare parts

Register your product now in the app and get an extended warranty.



Download here:

Rittal efficiency advice

Taking stock Determining the current state of affairs on site



Calculation + Energy saving + CO₂ reduction + Amortisation period



Modernisation projects

+ Uninstalling old units
+ Installing new units
+ Disposing of old units



Efficiency and service check

Is your cooling unit still efficient and up-to-date? Let us check it for you with the Rittal efficiency and service check! We capture data on site and check the general condition and service status of your equipment. By carrying out energy analyses, we show you how much you can save – for the sake of the environment and your budget.

- Overview of the current status of your equipment
- Illustration of energy consumption and costs as well as potential savings
- Specific and detailed programmes and initiatives for energy audits to ISO 50001



Documentation

- + Installed units
- + Age of units
- + Maintenance status



Comparison test (optional) Evidence of savings directly on site

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Value retention and regular maintenance For efficient and reliable operation



Find out more about Rittal efficiency advice:

www.rittal.com/Efficiency-analyses

EPLAN

efficient engineering.



Missed the trade fair? Never mind.

Whether automation with RAS, the take-apart variant of the TX CableNet or the brand-new shock-hazard-protected 60 mm system platform for "RiLineX" power distribution, we've put together a brief summary of our trade fair highlights.



Simply scan the QR code and enjoy the film once the trade fair has ended. Happy watching!

www.rittal.com/Highlights-HM25

You can find the contact details of all Rittal companies throughout the world here.



www.rittal.com/contact

Your Eplan contact.



www.eplan-software.com/contact





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