


Rittal – The System.

Faster – better – everywhere.

► World's first – The  principle



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

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SOFTWARE & SERVICES



FRIEDHELM LOH GROUP

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The whole is more than the sum of its parts

The same is true of “Rittal – The System.” With this in mind, we have bundled our innovative enclosure, power distribution, climate control and IT infrastructure products together into a single system platform. Complemented by our extensive range of software tools and global service, we create unique added value for trade and industry: Production plant, test equipment, facility management and data centres. In accordance with our simple principle, “Faster – better – everywhere”, we are able to combine innovative products and efficient service to optimum effect.

Faster – with our “Rittal – The System.” range of modular solutions, which guarantees fast planning, assembly, conversion and commissioning with its system compatibility.

Better – by being quick to translate market trends into products. In this way, our innovative strength helps you to secure competitive advantages.

Everywhere – thanks to global networking:

- 13 production facilities with almost 250,000 m² production space worldwide
- 58 subsidiaries
- Around 90 warehouse facilities with more than 180,000 pallet locations and over 250,000 m² storage space worldwide

IT INFRASTRUCTURE

SOFTWARE & SERVICES



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World's first

The Blue e+ cooling unit series – the ultimate in efficiency.
Worldwide.

The principle:

- **Efficiency** – 75% energy saved due to speed-regulated components and heat pipe technology
- **Versatility** – Suitable for international use due to unique multi-voltage capability
- **Safety** – Longer service life of the components inside the enclosure and the cooling unit due to component-friendly cooling
- **User-friendliness** – Intuitive operation due to touch display and intelligent interfaces

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Rittal climate control/Wall-mounted cooling units Blue e+

The **e+** principle

A revolution in energy efficiency through innovative hybrid technology

Unbelievably efficient

- Let hybrid technology take your cooling units' energy efficiency to a whole new level
- Active cooling circuit with speed-regulated components for demand-based cooling
- Integral heat pipe for passive cooling. Dissipates heat from the enclosure as soon as the ambient temperature falls below the setpoint.

Transparent efficiency comparisons

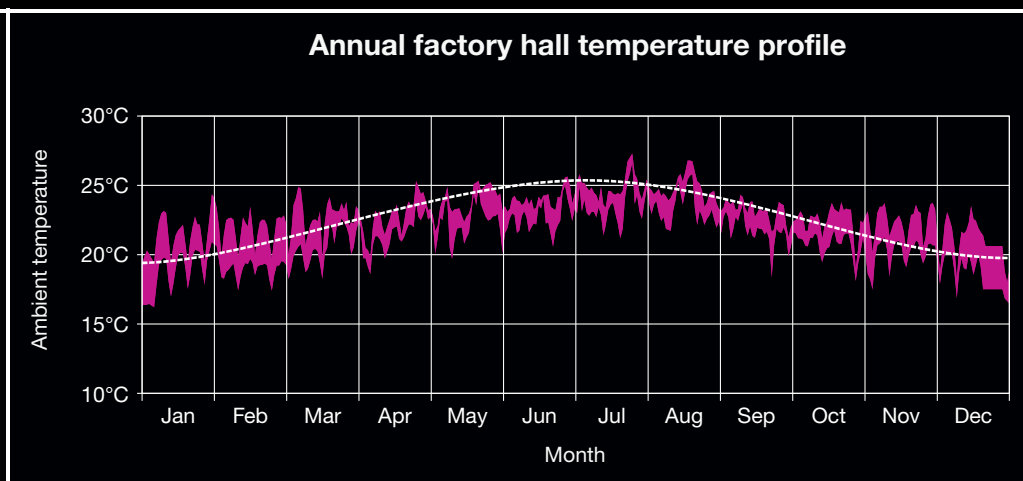
- Energy Efficiency Ratio: The standardised efficiency ratio
- Seasonal Energy Efficiency Ratio: The seasonal efficiency ratio for actual energy consumption

Amazingly economical

- Energy savings of up to 75%
- Component-friendly cooling for a longer service life
- A constant temperature inside the enclosure is ensured – with three control modes
- High operational reliability

Easier to calculate

- Determine your energy savings with the efficiency calculator
- TCO calculation includes all costs arising in the product's lifecycle
- Precise amortisation calculation



Rittal specifies the SEER to indicate the actual efficiency of a cooling unit, since a precise calculation must also consider the seasonal temperature variation. The standard point for determining the EER does not make allowance for actual fluctuations in hall temperatures.



The **e+** principle

Simple operation with touch display and intelligent interfaces

Get information faster

- Fast device analysis with RiDiag software via the USB interface
- Remote monitoring via Ethernet

Blue e+ app

- Contactless information exchange and rapid, direct on-site analysis via an NFC interface
- Simple repair, maintenance and spare parts enquiries may be sent directly via your smartphone
- Save device data directly on the device

Easier to operate

- Fast parameterisation, data reading and plain-text system messages on the intelligent, multi-lingual, industrial-grade display

Blue e+ update function

- Software for updating the Blue e+ firmware
- Updating of language packs in 21 individual languages
- Download at www.rittal.com





The **e+** principle

Versatility through standard assembly

Easy assembly

- One version for external mounting, partial internal mounting and full internal mounting
- One mounting cut-out for external mounting, partial internal mounting and full internal mounting in multiple output categories
- Maintenance-friendly filter mat replacement, tool-free

Rapid assembly

- Handle for convenient transport and positioning
- Mounting clip as securing aid
- Eyebolts for easy mounting

Maximum flexibility with unique multi-voltage capability

- One device for all voltages and networks, suitable for worldwide use thanks to inverter technology:
 - 110 – 240 V, 1~, 50 – 60 Hz
 - 380 – 480 V, 3~, 50 – 60 Hz
- International approvals and certifications:
 - cULus Listed
 - EAC
 - TÜV Nord GS
 - TÜV Nord-tested output measurement



Wall-mounted cooling units Blue e+



Accessories for climate control Cat. 34, page 369 Therm software Cat. 34, page 385

Benefits:

- 75% energy saved due to speed-regulated components and heat pipe technology
- Suitable for international use due to a unique multi-voltage capability
- Longer service life of the components inside the enclosure and the cooling unit due to component-friendly cooling
- Intuitive operation due to touch display and intelligent interfaces

Temperature control:

- e+ controller (factory setting +35°C)

Material:

- Sheet steel

Colour:

- RAL 7035

Protection category IP to IEC 60 529:

- Internal circuit IP 55

Supply includes:

- Assembly parts

Approvals:

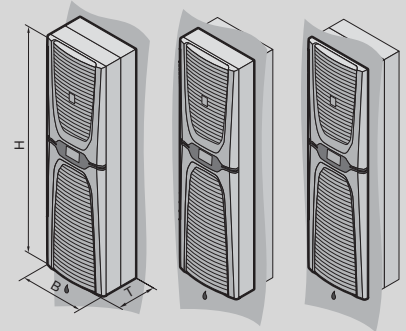
- UL
- cUL
- Tested safety GS
- EAC

Performance diagrams:

Available on the Internet

Further technical information:

Available on the Internet



Output class 2000 – 6000 W

Model No.	Packs of	3186.930	3187.930	3188.940	3189.940	Page
Total cooling output 50 Hz L35 L35 to DIN EN 14511 kW		2	2.6	4.2	5.8	
Total cooling output 50/60 Hz L35 L35 kW		2 / 2	2.6 / 2.6	4.2 / 4.2	5.8 / 5.8	
Total cooling output 50/60 Hz L35 L50 kW		1.29 / 1.29	1.82 / 1.82	3.02 / 3.02	4.2 / 4.2	
Rated operating voltage V, ~, Hz		110 - 240, 1~, 50/60 380 - 480, 3~, 50/60	110 - 240, 1~, 50/60 380 - 480, 3~, 50/60	380 - 480, 3~, 50/60	380 - 480, 3~, 50/60	
Width (B) mm		450	450	450	450	
Height (H) mm		1600	1600	1600	1600	
Depth (T) mm		294	294	393	393	
Rated output kW		0.73	1.05	1.3	2.2	
Power consumption P _{el} 50/60 Hz L35 L35 kW		0.57 / 0.57	0.99 / 0.99	1.21 / 1.21	2.2 / 2.2	
Power consumption P _{el} 50/60 Hz L35 L50 kW		0.6 / 0.6	0.94 / 0.94	1.28 / 1.28	2.2 / 2.2	
Operating temperature range		-20°C...+60°C	-20°C...+60°C	-20°C...+60°C	-20°C...+60°C	
Setting range		+20°C...+50°C	+20°C...+50°C	+20°C...+50°C	+20°C...+50°C	
Storage temperature range		-40°C...+70°C	-40°C...+70°C	-40°C...+70°C	-40°C...+70°C	
Energy efficiency ratio (EER) 50 Hz L35 L35 to DIN EN 14511		3.5	2.63	3.46	2.64	
Seasonal energy efficiency ratio (SEER) 50/60 Hz L35 L35		8.1	6.2	8.1	6.2	
Refrigerant g		R134a, 1150	R134a, 1150	R134a, 1750	R134a, 1750	
Air throughput of fans (unimpeded air flow), internal circuit/external circuit m ³ /h		1250 / 1250	1250 / 1250	2300 / 2300	2300 / 2300	
Weight kg		55.2	55.2	72.4	72.4	
Note on Model No.		-	-	Full installation not possible	Full installation not possible	

Accessories

Filter mats	3 pc(s).	3285.900	3285.900	3285.900	3285.900	13
Metal filters	1 pc(s).	3285.910	3285.910	3285.910	3285.910	13
Temperature sensor	1 pc(s).	3124.400	3124.400	3124.400	3124.400	13
Door-operated switch	1 pc(s).	4127.010	4127.010	4127.010	4127.010	Cat. 34, 639

Filter mats

Rittal cooling units are low-maintenance and are supplied without filter mats. Filter mats may be used for extreme conditions.

Benefits:

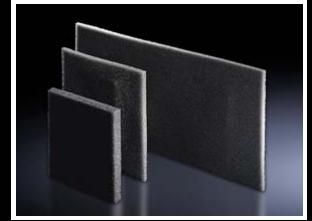
- Temperature-resistant from -40°C...+80°C

Material:

- Open-celled polyurethane foamed plastic
- Thickness: 10 mm

For cooling units Blue e+

To fit Model No.	Packs of	Model No.
3186.930/ 3187.930/ 3188.940/ 3189.940	3 pc(s).	3285.900



Metal filters

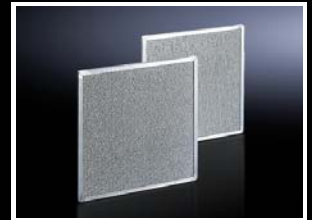
Particularly when cooling units are used in dusty and oily environments, it is advisable to use washable metal filters. If air or steam condenses on the metal surfaces, any particles present will adhere to the metal, and can easily be washed out with water or grease-dissolving detergents.

Material:

- Aluminium
- Thickness: 10 mm

For cooling units Blue e+

To fit Model No.	Packs of	Model No.
3186.930/ 3187.930/ 3188.940/ 3189.940	1 pc(s).	3285.910



Temperature sensor

for Blue e+ cooling units

NTC sensor to regulate Blue e+ cooling units according to an individual measurement point within the enclosure (control based on an external sensor).

Supply includes:

- External sensor with connection cable (length 2.5 m)

Packs of	Model No.
1 pc(s).	3124.400



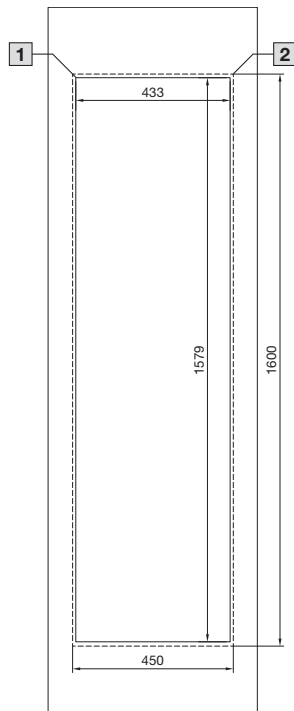
Wall-mounted cooling units Blue e+

Technical details

Wall-mounted cooling units

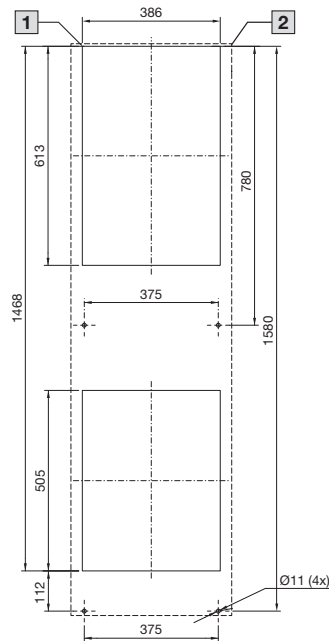
Blue e+ Page 12

Mounting cut-out
SK 3186.930, SK 3187.930, SK 3188.940, SK 3189.940



- 1 A corner radius of up to 5 mm is permissible for the four corners of the rectangular cut-out
- 2 External dimensions of the cooling unit

Mounting cut-out
SK 3186.930, SK 3187.930, SK 3188.940, SK 3189.940
for 500 mm deep enclosures (external mounting only)



- 1 A corner radius of up to 5 mm is permissible for the four corners of the rectangular cut-out
- 2 External dimensions of the cooling unit

Overview of all Blue e+ information

Design made easy

- Detailed climate control calculation with the Therm software
- Therm app enables rapid parameterisation

www.rittal.com/therm

Item information

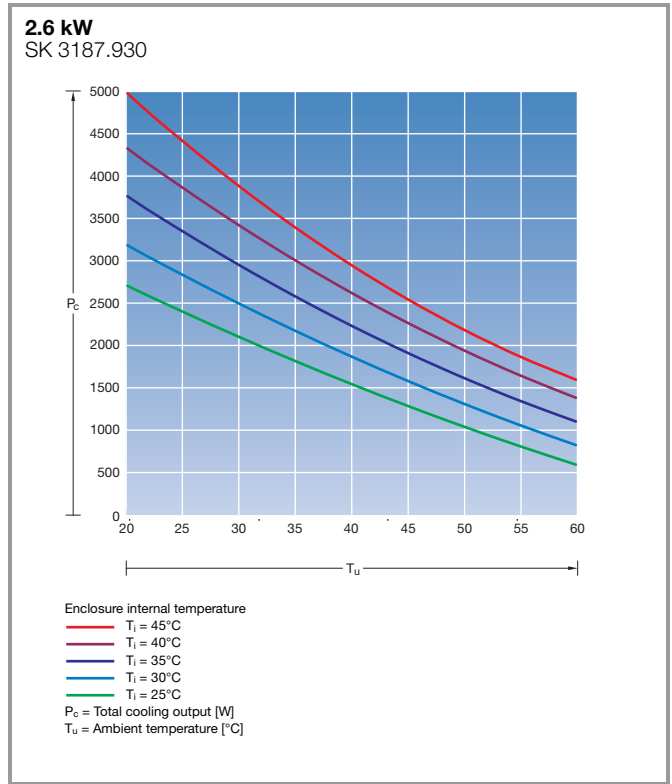
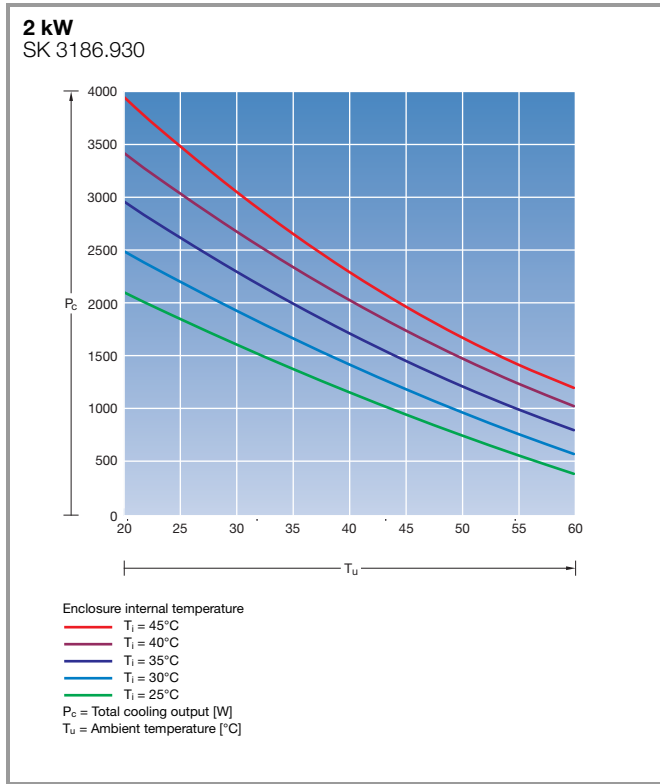
- Product description and features
 - Assembly instructions
 - Approvals
 - Interactive performance diagrams
 - CAD drawings
- and much more besides can be found at
www.rittal.com/blue_e_plus_wallmount

The Blue e+ microsite

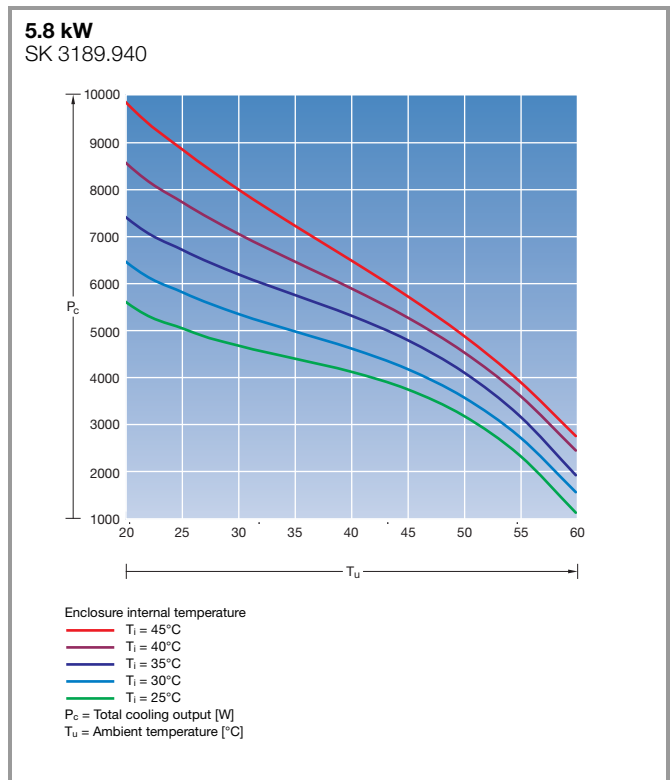
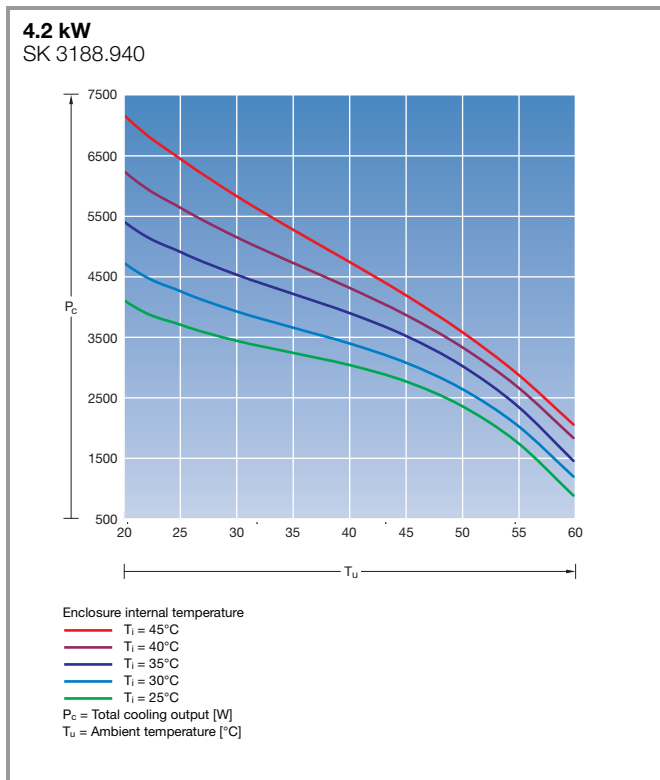
- Calculate potential savings and amortisation periods with the efficiency calculator
- Full information on the energy label and the SEER
- Videos showing technical details:
 - Heat pipe
 - Multi-voltage support
 - Intelligent interfaces and Blue e+ app
- Service messages may easily be sent with the Blue e+ app via an NFC interface and much more besides can be found at
www.rittal.com/blue_e_plus

TopTherm wall-mounted cooling units "Blue e"

Output class 2000/2600 W (110 – 240 V, 1 ~, 50 – 60 Hz / 380 – 480 V, 3 ~, 50 – 60 Hz)



Output class 4200/5800 W (380 – 480 V, 3 ~, 50 – 60 Hz)



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- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

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