Faster - better - everywhere.

World's first – The principle



Faster - better - everywhere.



ENCLOSURE

FRIEDHELM LOH GROUP

POWER DISTRIBUTION

CLIMATE CONTROL

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

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 all industrial applications: 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 across 150 locations. Rittal has over 60 subsidiaries, more than 150 service partners with over 1,000 service engineers worldwide. For more than 50 years, we have been on hand to offer advice, assistance and product solutions.



IT INFRASTRUCTURE

Faster – better – everywhere.

World's first

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

The 룔 principle:

- **Efficiency –** 75% energy saved due to speed-regulated components and heat pipe technology
- Versatility Suitable for international use due to multi-voltage support
- 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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ENCLOSURE

POWER DISTRIBUTION

CLIMATE CONTROL

FRIEDHELM LOH GROUP

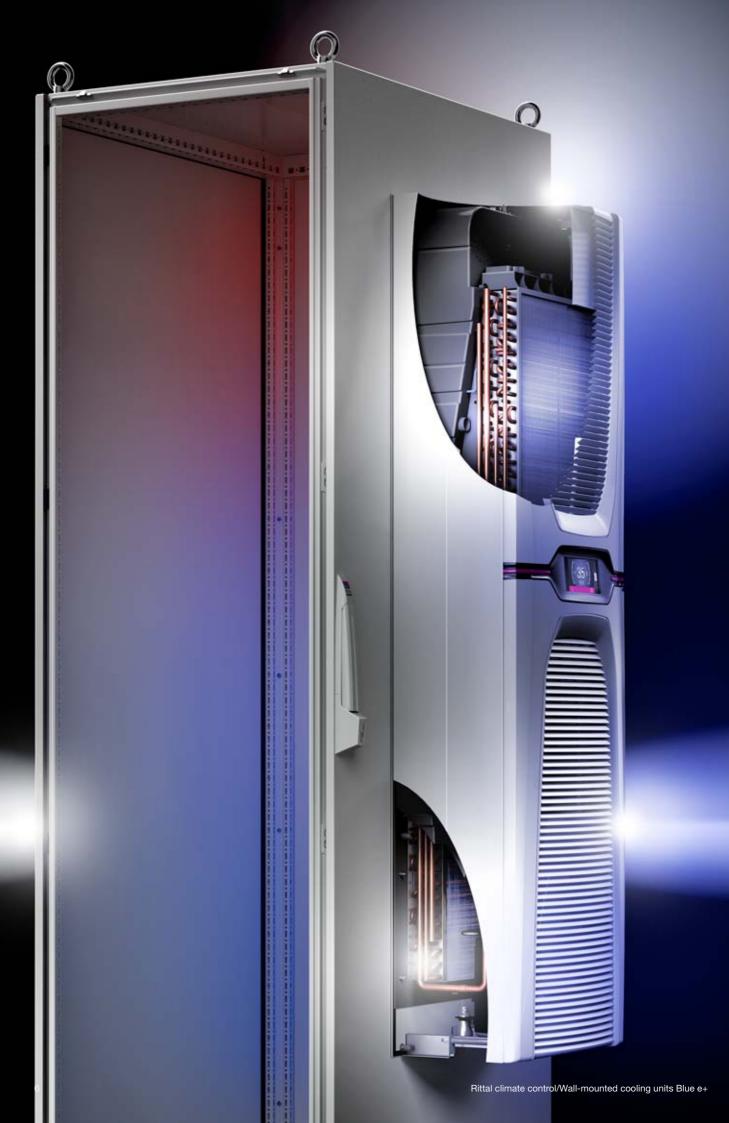




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IT INFRASTRUCTURE

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The principle A revolution in energy efficiency through innovative hybrid technology

Unbelievably efficient

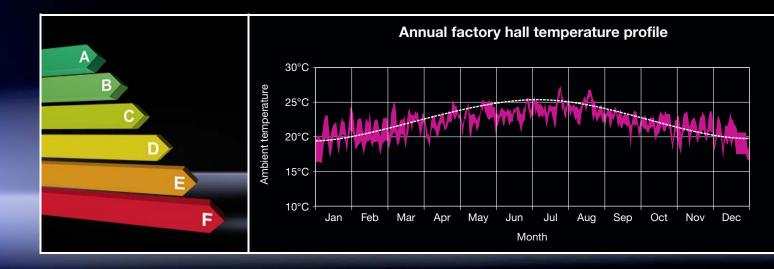
- Let hybrid technology take your cooling units' energy efficiency to a whole new level
- Active cooling circuit with speed-regulated components for demand-based cooling
- Integral heat pipe for passive cooling. Dissipates heat from the enclosure as soon as the ambient temperature falls below the setpoint.

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





The principle Simple operation with touch display and intelligent interfaces

Get information faster

- Contactless local information exchange using an app via the NFC interface
- Fast device analysis with RiDiag software via the USB interface
- Remote monitoring via Ethernet

Easier to operate

 Fast parameterisation, data reading and plaintext system messages on the intelligent, multilingual, industrial-grade display





The 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 with:
 - 110 230 V, 1~, 50/60 Hz
 - 240 V, 2~, 50/60 Hz
 - 380 480 V, 3~, 50/60 Hz
- UL Listed approval



Wall-mounted cooling units Blue e+



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 multi-voltage support
- 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:

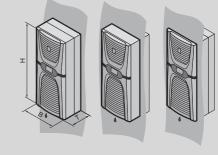
- e+ controller (factory setting +35°C) _
- Material:
- Sheet steel
- Colour:
- RAL 7035

Protection category IP to IEC 60 529:

- External circuit IP 24
 Internal circuit IP 55

Supply includes: - Drilling template

- Assembly parts



Output class 1500 W

Model No.	Packs of	3185.830	Page
Total cooling output 50 Hz L35 L35 to DIN EN 14511 kW		1.5	
Total cooling output 50/60 Hz L35 L35 kW		1.5 / 1.5	
Total cooling output 50/60 Hz L35 L50 kW		1/1	
Rated operating voltage V, ~, Hz		110 - 230, 1~, 50/60 240, 2~, 50/60 380 - 480, 3~, 50/60	
Width (B) mm		400	
Height (H) mm		950	
Depth (T) mm		305	
Rated output kW		0.70	
Power consumption Pel 50/60 Hz L35 L35 kW		0.50 / 0.50	
Power consumption Pel 50/60 Hz L35 L50 kW		0.70 / 0.70	
Operating temperature range		-30°C+60°C	
Setting range		+20°C+50°C	
Energy efficiency ratio (EER) 50 Hz L35 L35 to DIN EN 14511		3.00	
Refrigerant g		R134a, 640	
Permissible operating pressure (p. max.) bar		25	
Air throughput of fans (unimpeded air flow), Internal circuit/external circuit $\ensuremath{m^3/\!\mathrm{h}}$		700 / 900	
Weight kg		38.0	
Accessories			
Filter mats	3 pc(s).	3285.800	14
Metal filters	1 pc(s).	3285.810	14
Door-operated switch	1 pc(s).	4127.010	Cat. 34, 639

Wall-mounted cooling units Blue e+



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 multi-voltage support
- 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:

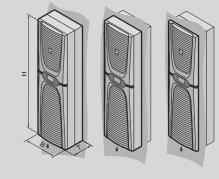
- e+ controller (factory setting +35°C) _
- Material:
- Sheet steel
- Colour:
- RAL 7035

Protection category IP to IEC 60 529:

- External circuit IP 24
 Internal circuit IP 55

Supply includes: - Drilling template

- Assembly parts



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	2.5	4	6	
Total cooling output 50/60 Hz L35 L35 kW		2/2	2.5 / 2.5	4 / 4	6/6	
Total cooling output 50/60 Hz L35 L50 kW		1.4 / 1.4	1.65 / 1.65	2.8 / 2.8	3.5 / 3.5	
Rated operating voltage V, ~, Hz		110 - 230, 1~, 50/60 240, 2~, 50/60 380 - 480, 3~, 50/60	110 - 230, 1~, 50/60 240, 2~, 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		290	290	395	395	
Rated output kW		0.97	1.21	1.83	2.75	
Power consumption Pel 50/60 Hz L35 L35 kW		0.57 / 0.57	0.83 / 0.83	1.14 / 1.14	2.14 / 2.14	
Power consumption P _{el} 50/60 Hz L35 L50 kW		0.95 / 0.95	1.19 / 1.19	1.75 / 1.75	2.5 / 2.5	
Operating temperature range		-30°C+60°C	-30°C+60°C	-30°C+60°C	-30°C+60°C	
Setting range		+20°C+50°C	+20°C+50°C	+20°C+50°C	+20°C+50°C	
Energy efficiency ratio (EER) 50 Hz L35 L35 to DIN EN 14511		3.50	3.00	3.50	2.80	
Refrigerant g		R134a, 1200	R134a, 1200	R134a, 1900	R134a, 1900	
Permissible operating pressure (p. max.) bar		25	25	25	25	
Air throughput of fans (unimpeded air flow), Internal circuit/external circuit m ³ /h		1250 / 1250	1250 / 1250	2300 / 2300	2300 / 2300	
Weight kg		55.0	57.0	84.0	85.0	
Note on Model No.		-	-	Full installation not pos- sible	Full installation not pos- sible	
Accessories						
Filter mats	3 pc(s).	3285.900	3285.900	3285.900	3285.900	14
Metal filters	1 pc(s).	3285.910	3285.910	3285.910	3285.910	14
Door-operated switch	1 pc(s).	4127.010	4127.010	4127.010	4127.010	Cat. 34, 639

Accessories for climate control



Filter mats

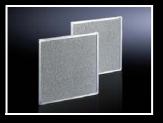
Rittal cooling units are low-maintenance and are supplied without filter mats. Filter mats may be used for extreme conditions.

Material:

- Open-celled polyurethane foamed plastic
 Thickness: 10 mm
- Temperature-resistant from -40°C...+80°C

For cooling units Blue e+

To fit Model No.	Packs of	Model No.
3185.830	3 pc(s).	3285.800
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 solvents.

Material:

- Aluminium - Thickness: 10 mm

For cooling units Blue e+

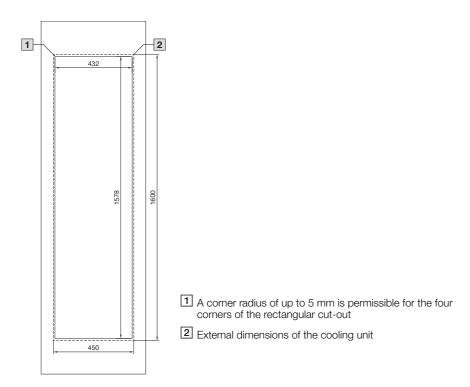
-	To fit Model No.	Packs of	Model No.
	3185.830	1 pc(s).	3285.810
	3186.930/3187.930/ 3188.940/3189.940	1 pc(s).	3285.910

Technical details

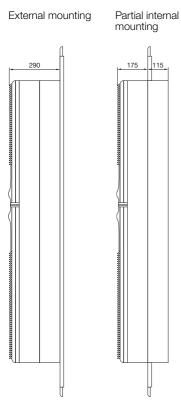
Wall-mounted cooling units

Blue e+ Page 13

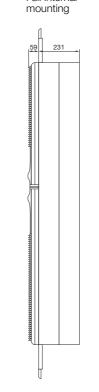
Mounting cut-out SK 3186.930, SK 3187.930, SK 3188.940, SK 3189.940



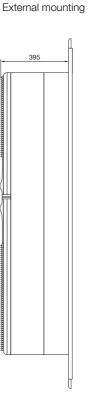
SK 3186.930, SK 3187.930



Full internal



SK 3188.940, SK 3189.940



Partial internal

140

mounting

Faster – better – everywhere.

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

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

POWER DISTRIBUTION CLIMATE CONTROL



ENCLOSURES

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IT INFRASTRUCTURE SOFTWARE & SERVICES

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