

# Rittal – The System.

Faster – better – everywhere.



## ► Roof-mounted Blue e+ cooling unit Integration solution VX25



ENCLOSURES

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CLIMATE CONTROL

IT INFRASTRUCTURE

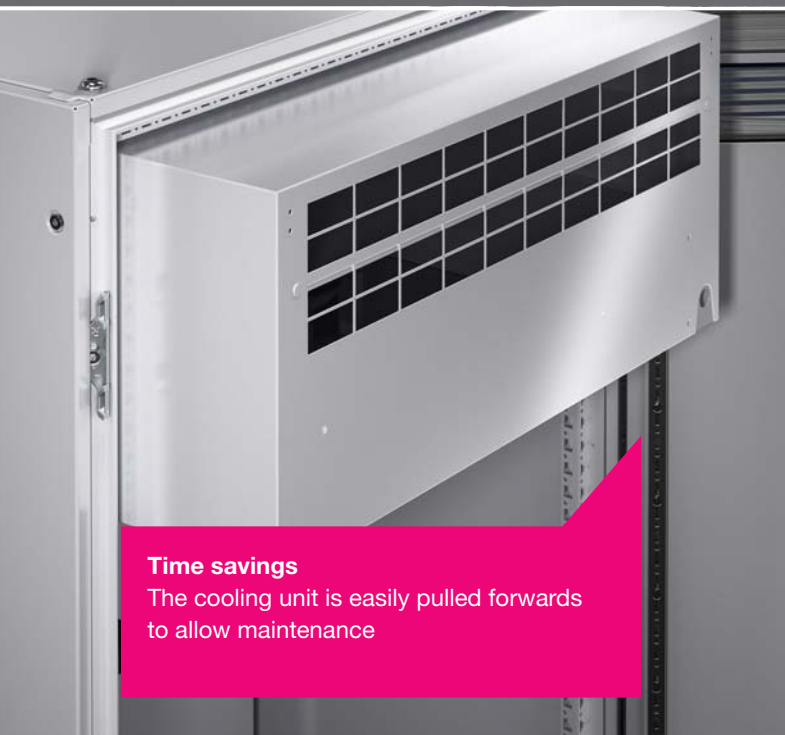
SOFTWARE & SERVICES



FRIEDHELM LOH GROUP



**Ease of use**  
Intuitive operation via  
touch display



**Time savings**  
The cooling unit is easily pulled forwards  
to allow maintenance



**Efficiency**  
High level of energy efficiency, also as an  
autonomous roof-mounted cooling unit.

#### **Integration solution VX25 and Blue e+**

- Cooling unit with 1.3 kW and Blue e+ technology with the dimensions W x H x D 800 x 2200 x 600 mm – integrated into the VX25 baying enclosure system
- No assembly outlay – the cooling unit, door limit switch and connection cabling are installed ready-to-connect
- State-of-the-art design – not a cooling unit built onto the enclosure

#### **Excellent planning certainty**

- The digital twin is available in the EPLAN Data Portal
- Dependable and efficient construction planning with EPLAN Pro Panel
- “Thermal Design Integration” can be used to produce a graphical display of exclusion zones dictated by ventilation requirements, the optimum climate control area, and any hot spots

#### **Efficient roof-mounted solution**

- Also available as an autonomous roof-mounted cooling unit for enclosures with minimum dimensions (W x D) 800 x 600 mm

#### **Ready for Industry 4.0**

- Intelligent interfaces and software
- Cooling units are easily incorporated into a wide range of IoT applications via the Rittal IoT interface (optional)
- This in turn facilitates new applications and smart services

#### **Efficient and flexible**

- High energy efficiency with innovative hybrid technology
- Maximum flexibility, thanks to unique multi-voltage capability
- Longer service life of components with component-friendly cooling
- Simple operation with touch display and intelligent interfaces

**Further information can be found at:**  
<http://www.rittal.com>



# HIGH EFFICIENCY – **THE BLUE E+ PRINCIPLE**

Benefit from this revolutionary energy efficiency with innovative hybrid technology.

# VX25 Blue e+ integration solution



**Accessories for climate control** Cat. 35, page 454 **RiDiag software** Cat. 35, page 474 **Roof-mounted Blue e+ cooling unit** Page 5

## Benefits:

- The perfect symbiosis of the VX25 baying enclosure system and Blue e+ cooling unit
- The cooling unit is easily pulled out forwards for maintenance purposes
- No assembly work required – the cooling unit, door-operated switch and connection cabling are installed ready-to-connect
- Cooling unit offers all the benefits of Blue e+ Technology

## Temperature control:

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

## Protection category IP to IEC 60 529:

- External circuit IP 54 with pleated filter
- Internal circuit IP 54 with pleated filter

## Supply includes:

- Basic enclosure VX25, door, roof, rear panel, side panels, gland plates, mounting plate
- Lock: 3 mm double-bit
- Integral door-operated switch
- Integral Blue e+ cooling unit 1.5 kW
- Electric condensate evaporator
- Pleated filter

## Approvals:

- UL + cUL - NITW

## Output class 1300 W

Model No.		Packs of	3185.030	Page
Material	Sheet steel		■	
Colour	RAL 7035		■	
<b>Total cooling output 50 Hz L35 L35 to DIN EN 14511 kW</b>			<b>1.3</b>	
Total cooling output 50/60 Hz L35 L35 kW			1.3 / 1.3	
Rated operating voltage V, ~, Hz			110 - 240, 1~, 50/60 380 - 480, 3~, 50/60	
Width mm			800	
Height mm			2200	
Depth mm			600	
Mounting plate width mm			699	
Mounting plate height mm			1696	
Rated output kW			0.75	
Power consumption P <sub>el</sub> 50/60 Hz L35 L35 kW			0.67 / 0.67	
Power consumption P <sub>el</sub> 50/60 Hz L35 L50 kW			0.61 / 0.61	
Operating temperature range			-20 °C...+55 °C	
Setting range			+20 °C...+50 °C	
Storage temperature range			-40 °C...+70 °C	
Energy efficiency ratio (EER) 50 Hz L35 L35 to DIN EN 14511			2.04	
Seasonal energy efficiency ratio (SEER) 50/60 Hz			5.3	
Refrigerant g			R134a, 590	
Permissible operating pressure (p. max.) bar			24	
Weight kg			180.0	
<b>Accessories</b>				
IoT interface	1 pc(s).		3124.300	6
Temperature sensor	1 pc(s).		3124.400	Cat. 35, 470
RiDiag	1 pc(s).		3159.300	Cat. 35, 474
Display frame	1 pc(s).		3355.700	7
Pleated filter	3 pc(s).		3285.700	7
Baying plate	1 pc(s).		3355.710	7
LED system light			see page	Cat. 35, 750

# Roof-mounted Blue e+ cooling unit



**Accessories for climate control** Cat. 35, page 454 **Therm software** Cat. 35, page 474 **RiDiag software** Cat. 35, page 474

## Benefits:

- Average 75% energy savings thanks 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)

## Protection category IP to IEC 60 529:

- External circuit IP 54 with pleated filter
- Internal circuit IP 54 with pleated filter

## Supply includes:

- Roof-mounted Blue e+ cooling unit
- Pleated filter
- Fully wired ready for connection
- Assembly parts

## Note:

- Only suitable for mounting on enclosures with minimum dimensions (W x D) 800 x 600 mm

## Approvals:

- UL + cUL - FTTA
- UR + cUR - ACVS2/8
- Tested safety GS

## Output class 1300 W

Model No.		Packs of	3185.730	Page
Material	Sheet steel		■	
Colour	RAL 7035		■	
<b>Total cooling output 50 Hz L35 L35 to DIN EN 14511 kW</b>			<b>1.3</b>	
Total cooling output 50/60 Hz L35 L35 kW			1.3 / 1.3	
Rated operating voltage V, ~, Hz			110 - 240, 1~, 50/60 380 - 480, 3~, 50/60	
Width mm			700	
Height mm			308	
Depth mm			560	
Rated output kW			0.75	
Power consumption P <sub>el</sub> 50/60 Hz L35 L35 kW			0.67 / 0.67	
Power consumption P <sub>el</sub> 50/60 Hz L35 L50 kW			0.61 / 0.61	
Operating temperature range			-20 °C...+55 °C	
Setting range			+20 °C...+50 °C	
Storage temperature range			-40 °C...+70 °C	
Energy efficiency ratio (EER) 50 Hz L35 L35 to DIN EN 14511			2.04	
Seasonal energy efficiency ratio (SEER) 50/60 Hz			5.3	
Refrigerant g			R134a, 590	
Permissible operating pressure (p. max.) bar			24	
Weight kg			38.0	
<b>Accessories</b>				
IoT interface	1 pc(s).		3124.300	6
RiDiag	1 pc(s).		3159.300	Cat. 35, 474
Display frame	1 pc(s).		3355.700	7
Pleated filter	3 pc(s).		3285.700	7
Electrical condensate evaporation	1 pc(s).		3355.720	8
Temperature sensor	1 pc(s).		3124.400	Cat. 35, 470
Door-operated switch	1 pc(s).		4127.010	Cat. 35, 755



# Accessories



## IoT interface

The IoT interface is used to link Rittal components such as Blue e+ cooling units, Blue e+ chillers, smart monitoring systems etc. to the customer's own monitoring and/or energy management systems. Data may be integrated both horizontally and vertically into data collectors and processors, to allow the long-term logging and evaluation of device data, statuses and system messages.

### Benefits:

- The IoT interface is middleware, whose interfaces allow a variety of devices and systems to communicate with one another. The data can then be forwarded into superordinate systems.
- Central element for the intelligent networking of Rittal components
- Up to 5 IoT interfaces may be connected in series
- Simple connection of up to two Blue e+ cooling units or chillers
- Compatible with up to 32 CMC III sensors and the Smart monitoring system

### Material:

- Plastic to UL 94-V0

### Colour:

- RAL 7016

### Protection category IP to IEC 60 529:

- IP 20

### Supply includes:

- IoT interface
- USB cable (USB-A connector on micro-USB-B connector)
- Angle bracket for Blue e+ cooling unit

### Note:

- The IoT interface is only supported by Blue e+ cooling units from firmware version 1.11.0 or above. If applicable, update the firmware using the RiDiag III software (3159.300).



### Assembly

- The IoT interface can be secured on a 35 x 7.5 top hat rail to DIN EN 60715 using a spring-loaded metal clip, or to the rear of a Blue e+ cooling unit using the angle bracket.

W x H x D mm	18 x 117 x 120
For	Blue e+ cooling units Blue e+ chillers Smart Monitoring System CMC III sensors
Operating temperature range	+0 °C...+70 °C
Protocols	OPC-UA SNMPv1 SNMPv2c SNMPv3 Modbus/TCP TCP/IPv4 TCP/IPv6 Radius Telnet SSH FTP SFTP HTTP HTTPS NTP DHCP DNS SMTP Syslog LDAP
Interfaces	1 x Micro USB type B (device) for USB 2.0 1 x Micro-SD memory card slot for SD 2.0 1 x USB 2.0 high-speed functions (EHCI) 1 x acknowledgement button 1 x push-in spring connection terminal for NTC sensor 2 x RJ45 jack for RS 485 interface (climate control unit interface)
Network interface	Ethernet IPv4/IPv6 Ethernet to IEEE 802.3 via 10BASE-T, 100BASE-T and 1000BASE-T
Type of electrical connection	Push-in spring connection terminal (24 V DC)
Packs of	1 pc(s).
<b>Model No.</b>	<b>3124.300</b>

## Display frame

### for Blue e+ roof-mounted cooling unit and VX25 Blue e+ integration solution

The display frame allows the touch display of the roof-mounted cooling unit Blue e+ or the VX25 Blue e+ integration solution to be positioned in the enclosure door.

#### Benefits:

- For positioning the display at the optimum operator height

#### Material:

- Plastic

#### Colour:

- RAL 7016

#### Protection category IP to IEC 60 529:

- IP 54

#### Supply includes:

- Display frame
- Blanking cover
- Assembly parts and sealing material

To fit Model No.	W x H x D mm	Packs of	Model No.
3185.030/ 3185.730	316 x 118 x 27.5	1 pc(s).	<b>3355.700</b>



## Pleated filter

### for Blue e+ roof-mounted cooling unit and VX25 Blue e+ integration solution

To achieve a protection category of IP 54 with roof-mounted cooling unit Blue e+ and VX25 Blue e+ integration solution.

#### Material:

- Non-woven fabric

#### Filter class to DIN EN 779:

- G4

To fit Model No.	W x H x D mm	Filter class to DIN EN 779	Packs of	Model No.
3185.030/ 3185.730	158 x 652 x 15	G4	3 pc(s).	<b>3285.700</b>



## Baying plate

### for VX25 Blue e+ integration solution

The baying plate guarantees a protection category of IP54 when baying the VX25 Blue e+ integration solution to a 2,000 mm high, 600 mm deep enclosure.

#### Material:

- Sheet steel

#### Colour:

- Textured RAL 7035

#### Supply includes:

- Baying plate
- Cross member
- Assembly parts and sealing material

To fit Model No.	W x H x D mm	Packs of	Model No.
3185.030	600 x 200 x 17	1 pc(s).	<b>3355.710</b>



# Accessories



## Electrical condensate evaporation

### for Blue e+ roof-mounted cooling units

Tool-free mounting of the condensate evaporator on the underside of the roof-mounted Blue e+ so that it is not visible from the outside. Any condensation is evaporated and emitted to the ambient air via the air exhaust of the cooling unit.

#### Material:

- Plastic

#### Colour:

- RAL 9005

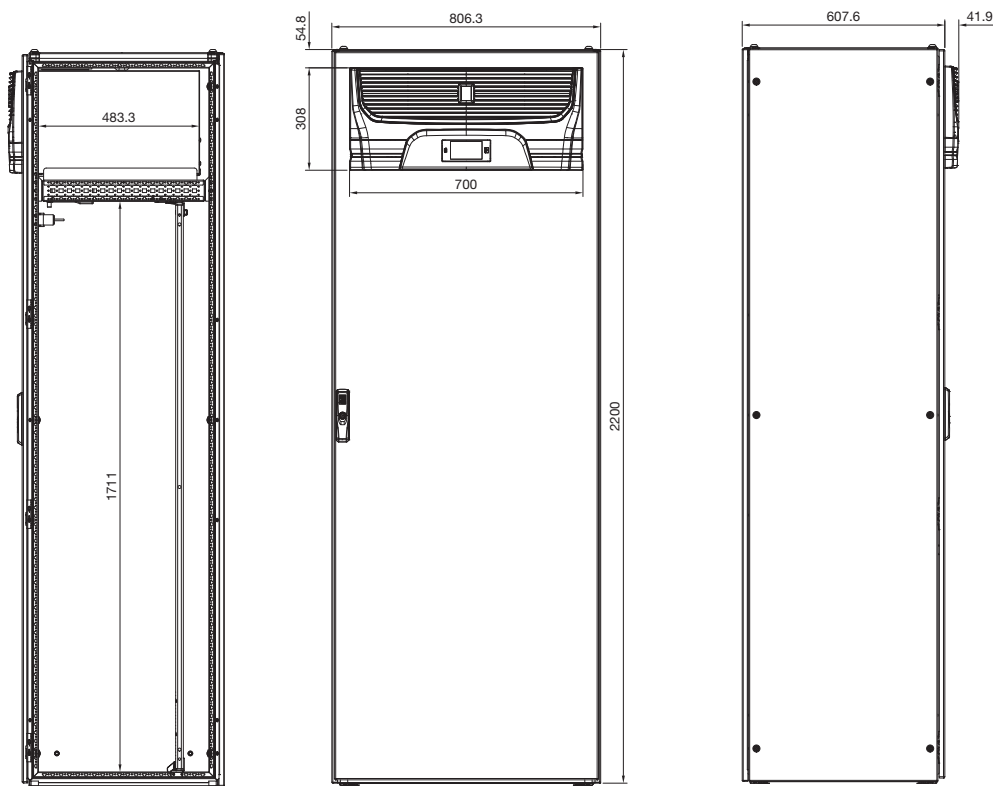
#### Supply includes:

- Electrical condensate evaporation
- Shipping brace screw
- Entry grommet

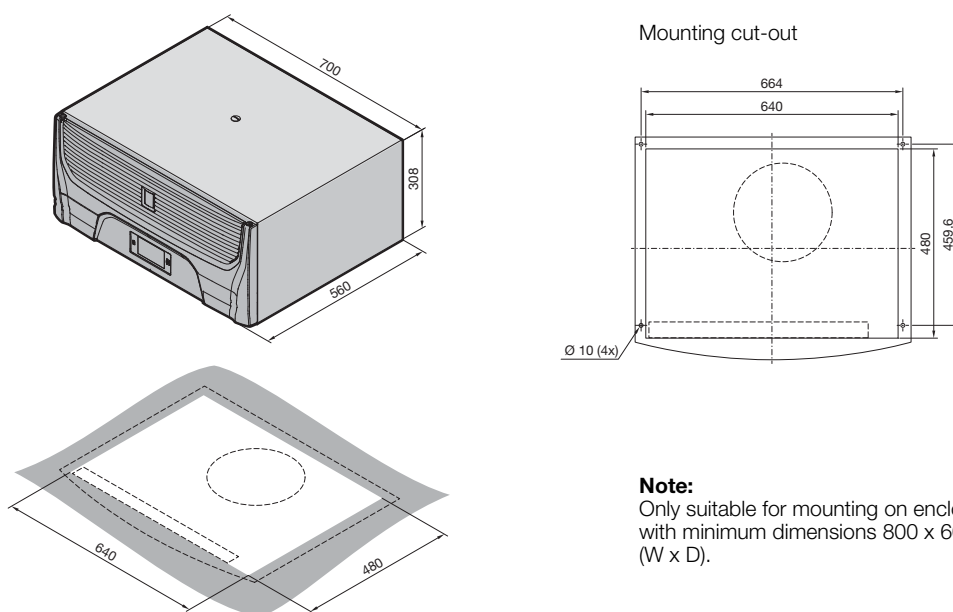
To fit Model No.	W x H x D mm	Rated operating voltage V (DC)	Operating temperature range	Evaporation performance	Packs of	Model No.
3185.730	89 x 121 x 158	380	+5 °C...+60 °C	100 ml/h	1 pc(s).	<b>3355.720</b>



## VX25 Blue e+ integration solution

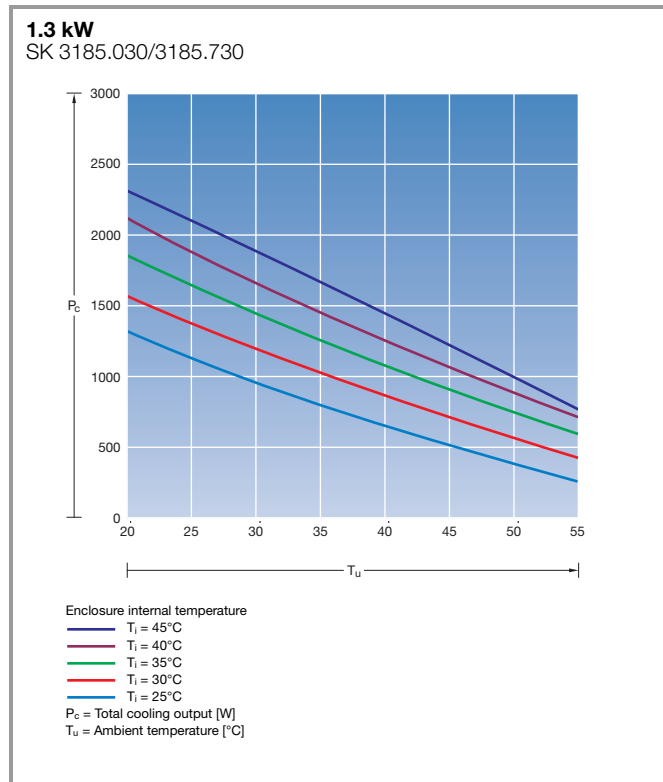


## Roof-mounted Blue e+ cooling unit

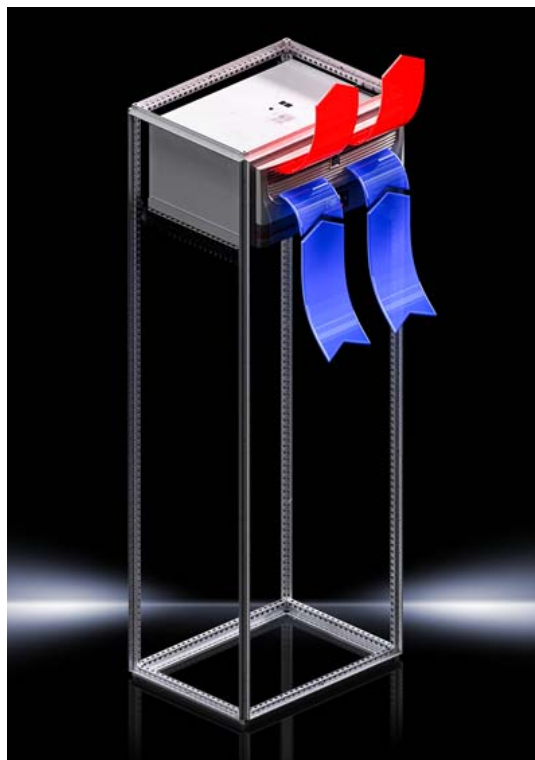


## Characteristic curves

Output class 1300 W (110 – 240 V, 1 ~, 50 – 60 Hz / 380 – 480 V, 3 ~, 50 – 60 Hz)



### External circuit



#### Maximum flexibility

- The ambient air is drawn in and expelled at the front of the cooling unit.
- This means there is no need to observe any minimum distances from adjacent devices or walls.



Flexible baying – no minimum distances to the left or right required



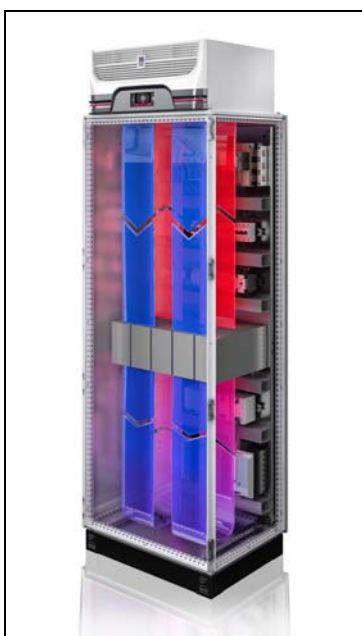
Flexible installation location – no minimum distances at the top or rear required

### Internal circuit



#### Optimum air circulation

- The cooled air is expelled in the front section of the enclosure
- In this way, the cold air flows around and cools other components such as frequency converters



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Rittal companies throughout the world here.



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