Blue e IoT Adaptor

The digital upgrade for cooling units in the Blue e series

Functional upgrade – digital retrofit

For many companies in the industrial space, digitalization is a hot topic. Facilities often have low levels of automation and investing in the latest machines is costly. Additionally, interlinking them can be a complex process.

However, existing machines and systems can also be digitally upgraded. By retrofitting current equipment with suitable sensors and communications technology, they may be readily integrated into a digital manufacturing network.

The IoT Adapter, in conjunction with the IoT Interface, allows existing Blue e cooling units to be easily incorporated into Industry 4.0 environments. This digital retrofit supports state-of-the-art condition monitoring and significantly boosts system availability.

Benefits of the digital retrofit

- Investment costs are lower than for a new purchase
- Logging of process and machine data for Industry 4.0
- Modernization and adaptation to current software and system standards

Benefits of smart networking

- Condition monitoring of up to 10 cooling units in a master/slave arrangement
- Continuous monitoring of temperature levels
- A swift response if threshold values are exceeded
- Automatic notification of any cooling unit malfunctions
- Temperature records and energy efficiency analysis
- Avoidance of downtime costs and consequential damage
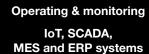- Remote access: Device parameters can be configured remotely

For more information about the IoT interface (3124.300)

For more information about the Blue e IoT adaptor (3124.310)

Operating & monitoring

IoT, SCADA, MES and ERP systems

IoT interface

Blue e IoT adaptor

Rittal cooling unit

TopTherm wall-mounted cooling unit Blue e

TopTherm wall-mounted cooling unit, horizontal format

TopTherm wall-mounted cooling unit Blue e, slimline

Modular climate control concept - cooling module Blue e

TopTherm roof-mounted cooling unit Blue e and/or for office applications

Rittal TopTherm cooling units Generation Blue e

Benefits of Blue e technology

- Energy savings of up to 45%
- Smart control with Comfort controller, icing protection and motor monitoring
- Longer service life of components in the enclosure and cooling units, because efficient components such as fans and compressors run at their optimum operating point

- Eco-mode control: The evaporator coil fan cycles as necessary, depending on the enclosure internal temperature
- The integral electric condensate evaporation system means that condensate evaporates and dissipates to the ambient air via the external fan
- RiNano coating prevents the accumulation of dirt deposits on the condenser, thereby extending maintenance intervals and ensuring a constant long-term cooling output

Model No.	Cooling Capacity	115V	230V	400/460V	UL Type 3R/4	UL Type 12 (CS)	UL Type 12 (SS)	UL Type 4X	Wall-mounted	Roof-mounted	Basic	e-Comfort	IoT Interface	Blue e IoT Adaptor	Integral Condensate Evaporation	External	Partial Internal	Full Internal	cULus Listed	CSA	CE
3302.100	300W		■			■			■		■					■		■	■	■	■
3302.110	300W	■				■			■		■					■		■	■	■	■
3302.200	300W		■				■		■		■					■		■	■	■	■
3302.210	300W	■					■		■		■					■		■	■	■	■
3302.300	300W		■			■			■		■					■		■	■	■	■
3302.310	300W	■				■			■		■					■		■	■	■	■
3303.500	500W		■			■			■			■	■			■	■	■	■	■	■
3303.510	500W	■				■			■			■	■			■	■	■	■	■	■
3303.600	500W		■				■		■			■	■			■	■	■	■	■	■
3303.610	500W	■					■		■			■	■			■	■	■	■	■	■
3303.504	500W		■					■	■			■	■			■		■	■	■	■
3303.514	500W	■						■	■			■	■			■		■	■	■	■
3303.508	500W		■		■				■			■	■			■		■			■
3303.518	500W	■			■				■			■	■			■		■			■
3361.500	750W		■			■			■			■	■			■	■	■	■	■	■
3361.510	750W	■				■			■			■	■			■	■	■	■	■	■
3361.540	750W			■		■			■			■	■			■	■	■	■	■	■
3361.600	750W		■				■		■			■	■			■	■	■	■	■	■
3361.610	750W	■					■		■			■	■			■	■	■	■	■	■
3361.640	750W			■			■		■			■	■			■	■	■	■	■	■
3304.500	1000W		■			■			■			■	■	■		■	■	■	■	■	■
3304.510	1000W	■				■			■			■	■	■		■	■	■	■	■	■
3304.540	1000W			■		■			■			■	■	■		■	■	■	■	■	■
3304.600	1000W		■				■		■			■	■	■		■	■	■	■	■	■
3304.610	1000W	■					■		■			■	■	■		■	■	■	■	■	■
3304.640	1000W			■			■		■			■	■	■		■	■	■	■	■	■
3304.504	1000W		■					■	■			■	■			■		■	■	■	■
3304.514	1000W	■						■	■			■	■			■		■	■	■	■
3304.544	1000W			■				■	■			■	■			■		■	■	■	■
3304.508	1000W		■		■				■			■	■			■		■			■
3304.518	1000W	■			■				■			■	■			■		■			■
3304.548	1000W			■	■				■			■	■			■		■			■
3305.500	1500W		■			■			■			■	■			■	■	■	■	■	■
3305.510	1500W	■				■			■			■	■			■	■	■	■	■	■
3305.540	1500W			■		■			■			■	■			■	■	■	■	■	■
3305.600	1500W		■				■		■			■	■			■	■	■	■	■	■
3305.610	1500W	■					■		■			■	■			■	■	■	■	■	■
3305.640	1500W			■			■		■			■	■			■	■	■	■	■	■
3305.504	1500W		■					■	■			■	■			■		■	■	■	■
3305.514	1500W	■						■	■			■	■			■		■	■	■	■
3305.544	1500W			■				■	■			■	■			■		■	■	■	■
3305.508	1500W		■		■				■			■	■			■		■			■
3305.518	1500W	■			■				■			■	■			■		■			■
3305.548	1500W			■	■				■			■	■			■		■			■
3328.500	2000W		■			■			■			■	■	■	■	■	■	■	■	■	■
3328.510	2000W	■				■			■			■	■	■	■	■	■	■	■	■	■
3328.540	2000W			■		■			■			■	■	■	■	■	■	■	■	■	■
3328.600	2000W		■				■		■			■	■	■	■	■	■	■	■	■	■

Material		Sheet Steel, Outdoor	Sheet Steel	Stainless Steel, AISI 304	Stainless Steel, AISI 316L
Temperature		-4°F to +122°F	+50°F to +131°F		
Display		Rear	Front	Front	Front

Model No.	Cooling Capacity	115V	230V	400/460V	UL Type 3R/4	UL Type 12 (CS)	UL Type 12 (SS)	UL Type 4X	Wall-mounted	Roof-mounted	Basic	e-Comfort	IoT Interface	Blue e IoT Adaptor	Integral Condensate Evaporation	External	Partial Internal	Full Internal	cULus Listed	CSA	CE
3328.610	2000W	■				■			■			■	■	■	■	■	■	■	■	■	■
3328.640	2000W			■		■			■			■	■	■	■	■	■	■	■	■	■
3328.504	2000W		■					■	■			■	■	■	■	■		■	■	■	■
3328.514	2000W	■						■	■			■	■	■	■	■		■	■	■	■
3328.544	2000W			■				■	■			■	■	■	■	■		■	■	■	■
3329.500	2500W		■			■			■			■	■	■		■	■	■	■	■	■
3329.510	2500W	■				■			■			■	■	■		■	■	■	■	■	■
3329.540	2500W			■		■			■			■	■	■		■	■	■	■	■	■
3329.600	2500W		■				■		■			■	■	■		■	■	■	■	■	■
3329.610	2500W	■					■		■			■	■	■		■	■	■	■	■	■
3329.640	2500W			■			■		■			■	■	■		■	■	■	■	■	■
3329.504	2500W		■					■	■			■	■	■		■		■	■	■	■
3329.514	2500W	■						■	■			■	■	■		■		■	■	■	■
3329.544	2500W			■				■	■			■	■	■		■		■	■	■	■
3329.508	2500W		■		■				■			■	■			■		■			■
3329.518	2500W	■			■				■			■	■			■		■			■
3329.548	2500W			■	■				■			■	■			■		■			■
3332.540	4000W			■		■			■			■	■	■		■	■	■	■	■	■
3332.640	4000W			■			■		■			■	■	■		■	■	■	■	■	■
3366.500	1500W		■			■				■		■	■			■	■		■	■	■
3366.510	1500W	■				■				■		■	■			■			■	■	■
3366.540	1500W			■		■				■		■	■			■			■	■	■
3366.600	1500W		■				■			■		■	■			■			■	■	■
3366.610	1500W	■					■			■		■	■			■			■	■	■
3366.640	1500W			■			■			■		■	■			■			■	■	■
3307.700	1500W		■			■				■		■	■			■			■	■	■
3307.710	1500W	■				■				■		■	■			■			■	■	■
3307.740	1500W			■		■				■		■	■			■			■	■	■
3310.700	2500W		■			■				■		■	■			■			■	■	■
3310.710	2500W	■				■				■		■	■			■			■	■	■
3310.740	2500W			■		■				■		■	■			■			■	■	■
3382.500	500W		■			■			■			■	■			■			■	■	■
3382.510	500W	■				■			■			■	■			■			■	■	■
3382.600	500W		■				■		■			■	■			■			■	■	■
3382.610	500W	■					■		■			■	■			■			■	■	■
3359.500	750W		■			■			■			■	■			■			■	■	■
3359.510	750W	■				■			■			■	■			■			■	■	■
3359.540	750W			■		■			■			■	■			■			■	■	■
3359.600	750W		■				■		■			■	■			■			■	■	■
3359.610	750W	■					■		■			■	■			■			■	■	■
3359.640	750W			■			■		■			■	■			■			■	■	■
3383.500	1000W		■			■			■			■	■			■			■	■	■
3383.510	1000W	■				■			■			■	■			■			■	■	■
3383.540	1000W			■		■			■			■	■			■			■	■	■
3383.600	1000W		■				■		■			■	■			■			■	■	■
3383.610	1000W	■					■		■			■	■			■			■	■	■
3383.640	1000W			■			■		■			■	■			■			■	■	■
3384.500	1500W		■			■			■			■	■			■			■	■	■
3384.510	1500W	■				■			■			■	■			■			■	■	■
3384.540	1500W			■		■			■			■	■			■			■	■	■
3384.600	1500W		■				■		■			■	■			■			■	■	■
3384.610	1500W	■					■		■			■	■			■			■	■	■
3384.640	1500W			■			■		■			■	■			■			■	■	■
3385.500	2000W		■			■			■			■	■			■			■	■	■
3385.510	2000W	■				■			■			■	■			■			■	■	■
3385.540	2000W			■		■			■			■	■			■			■	■	■
3385.600	2000W		■				■		■			■	■			■			■	■	■
3385.610	2000W	■					■		■			■	■			■			■	■	■
3385.640	2000W			■			■		■			■	■			■			■	■	■
3386.540	3000W			■		■			■			■	■			■			■	■	■
3386.640	3000W			■			■		■			■	■			■			■	■	■
3387.540	4000W			■		■			■			■	■			■			■	■	■
3387.640	4000W			■			■		■			■	■			■			■	■	■
3273.500	1100W		■			■			■			■	■			■			■	■	■

Material		Sheet Steel, Outdoor	Sheet Steel	Stainless Steel, AISI 304	Stainless Steel, AISI 316L
Temperature		-4°F to +122°F	+50°F to +131°F		
Display		Rear	Front	Front	Front

Control/regulation

Blue e IoT adaptor

The IoT interface is a central component for the intelligent networking of Rittal cooling solutions or sensors for monitoring physical ambient conditions. Equipped with a wide range of interfaces and protocols, it is used to collate and transmit data to superordinate IT systems or to systems for the local monitoring of machine statuses.

Benefits:
– Digitalization and networking offer huge opportunities for every company. With the IoT interface, Rittal cooling solutions and sensors for monitoring physical ambient conditions are easily connected to Industry 4.0 environments without affecting the automation logic.
– Plug and run: The IoT interface is quickly and conveniently configured and commissioned via the integral Web server; no programming required.

Material:
– Plastic to UL 94-V0

Color:
– RAL 7016

Protection category IP to IEC 60 529:
– IP 20

Supply includes:
– Blue e IoT adaptor
– 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).
– To interlink cooling units in the Blue e series, the Blue e IoT adaptor (3124.310) is additionally required

Assembly instruction:

– 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.

Accessories:

– Blue e IoT adaptor, see page 7

H x W x D in (mm)	4.61 x 0.71 x 4.72 (117 x 18 x 120)
For	TopTherm cooling units with e-Comfort controller Blue e+ cooling units Blue e+ chillers Smart Monitoring System for NH fuse-switch disconnectors Rittal 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 acknowledgment 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
Interface bus system	2 x RJ45 CAN bus
Type of electrical connection	Push-in spring connection terminal (24V DC)
Weight lb (kg)	0.613 (0.201)
Packs of	1 pc(s).
Model No.	**3124.300**

Blue e IoT adaptor

In conjunction with the IoT interface, the adaptor supports intelligent networking of cooling units in the Blue e series.

Benefits:
– Digitalization and networking offer huge opportunities for every company. In conjunction with the IoT interface (3124.300), cooling units in the Blue e series are easily connected to Industry 4.0 environments without affecting the automation logic.
– Plug and run: The IoT interface is quickly and conveniently configured and commissioned via the integral Web server; no programming required.
– Condition monitoring of up to 10 cooling units in a master/slave arrangement

Material:
– Plastic
– Front: Smooth
– Enclosure: Textured

Color:
– Front: RAL 9005 (Black)
– Enclosure: RAL 7035 (Light Gray)

Protection category IP to IEC 60 529:
– IP 30

Supply includes:
– Blue e IoT adaptor
– Installation and Short User's Guide
– Mounting bracket
– Assembly parts
– Sub-D to RJ11 connection cable
– Mounting clips for securing top-hat rails

⚠ Also required:

To fit Model No.	3303.5/6xx/3304.5/6xx/3305.5/6xx/3328.5/6xx/3329.5/6xx/3332.5/6xx/ 3361.5/6xx/3366.5/6xx/3377.5/6xx/3307.7xx/3310.7xx/3382.5/6xx/3359.5/6xx/ 3383.5/6xx/3273.500/3384.5/6xx/3385.5/6xx/3386.5/6xx/3387.5/6xx/9776.550
H x W x D in (mm)	1.18 x 3.15 x 1.57 (30 x 80 x 40)
For	TopTherm cooling units with e-Comfort controller
Operating temperature range	+0 °C...+55 °C
Interface bus system	2 x RJ45 CAN bus
Weight lb (kg)	0.443 (0.201)
Packs of	1 pc(s).
Model No.	**3124.310**

Rittal – The System.

Faster – better – everywhere.

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

US518 ■ 2/20

ENCLOSURES   POWER DISTRIBUTION   CLIMATE CONTROL   IT INFRASTRUCTURE   SOFTWARE & SERVICES

RITTAL

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