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VX25 Blue e+
integration solution
Roof-mounted Blue e+
cooling unit

SK 3185030
SK 3185730

Assembly and operating instructions

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES

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Preface

Dear Customer!

Thank you for choosing our roof-mounted cooling unit "Blue e+" or "VX25 Blue e+ integration solution".

The assembly and operating instructions concern not only the roof-mounted cooling unit, but also the integration solution.

The term "unit" or "cooling unit" is generally used in descriptions that concern not only the roof-mounted cooling unit, but also the integration solution. Those sections where information concerns only one of the units are labelled accordingly.

Yours

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We are always happy to answer any technical questions regarding our entire range of products.



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



Hinweis:
Die Montage-, Installations- und Bedienungsanleitung ist auch als Download unter www.rittal.de verfügbar.



Nota:
As instruções operacionais e de montagem estão disponíveis para download em www.rittal.com.



Note:
The assembly and operating instructions are available for downloading from www.rittal.com.



Wskazówka:
Instrukcja montażu, instalacji i obsługi do pobrania na www.rittal.pl.



Remarque :
la notice de montage, d'installation et d'emploi peut être téléchargée depuis le site www.rittal.fr.



Upozornění:
Návody k montáži a obsluze jsou k dispozici ke stažení na www.rittal.cz.



Opmerking:
De montage-, installatie- en gebruikshandleiding is ook te downloaden via www.rittal.nl.



Указание:
Руководство по монтажу, установке и эксплуатации можно найти на сайте www.rittal.ru.



Obs:
Montage-, installations- och bruksanvisningen kan även laddas ner på www.rittal.se.



提示：
装配和操作说明可从 www.rittal.cn 下载。



Nota:
Le istruzioni di montaggio, installazione e uso possono anche essere scaricate dal sito www.rittal.it.



注記：
この取扱説明書 (組立・設置および運用マニュアル) は、www.rittal.co.jp からダウンロードできます。



Nota:
Las instrucciones de montaje, instalación y puesta en marcha también están disponibles para su descarga en www.rittal.es.



Hazards and their prevention according to IEC 60417/ISO 7000/ISO 7010



DE Mit der VX25 Blue e+ Integrationslösung wird auch die Anleitung für den Schaltschrank VX25 ausgeliefert. In dieser Anleitung finden Sie weitere Sicherheitshinweise, die den Schaltschrank betreffen, wie z. B. Hinweise zur Quetschgefahr bei Entnahme der Montageplatte usw.

EN Instructions for the VX25 enclosure are supplied along with the VX25 Blue e+ integration solution. They include further safety-related details about the enclosure, such as a warning about the risk of crushing when removing the mounting plate.

FR Une notice pour l'armoire électrique VX25 est également fournie avec l'armoire climatisée intégrée VX25 Blue e+. Dans cette notice figurent d'autres indications de sécurité qui concernent l'armoire électrique, comme, p. ex., des indications sur le risque d'écrasement lors de la sortie de la plaque de montage, etc.

NL Bij de VX25 Blue e+ integratieoplossing wordt ook de handleiding voor de aanbouwkast VX25 geleverd. In deze handleiding treft u aanvullende veiligheidsinstructies met betrekking tot de kast aan, zoals bijv. aanwijzingen in verband met beknellingsgevaar bij het verwijderen van de montageplaat etc.

SE Med integreringslösningen VX25 Blue e+ medföljer även bruksanvisningen för golvskåpet VX25. I bruksanvisningen hittar du ytterligare säkerhetsinformation för golvskåpet, t.ex. om klämrisker vid borttagning av montageplåten osv.

IT Con la soluzione di integrazione VX25 Blue e+ viene fornito anche il manuale di istruzioni per il quadro di controllo VX25. Questo manuale contiene ulteriori istruzioni di sicurezza che riguardano il quadro di controllo come, ad esempio, gli avvisi sul rischio di schiacciamento durante la rimozione della piastra di montaggio, ecc.

ES Con la solución integrada VX25 Blue e+ se entregará también el manual del armario de distribución VX25. En este manual encontrará indicaciones de seguridad adicionales relacionadas con el armario de distribución, como por ejemplo, indicaciones sobre el riesgo de lesión al extraer la placa de montaje.

FI VX25-kytkentäkaappia koskevat ohjeet sisältävät myös Blue e+ jäädyttimen ja kaapin integrointiohjeen. Tämä opas sisältää lisää kytkentäkaappia koskevia turvallisuusohjeita kuten asennuslevyn irrottamiseen liittyvää puristumisvaaraa.

DK Vejledningen til VX25 skabet udleveres også sammen med VX25 Blue e+ integrationsløsning. Her finder du yderligere sikkerhedsanvisninger for skabet, som eksempelvis klemningsfare ved udtagelse af monteringspladen.

IE Cuirtear na treoracha don iniamh VX25 ar fáil in éineacht leis an réiteach comhtháthaithe Blue e+ VX25. Áirítear leis na treoracha sin sonraí breise bainteach le sábháilteacht maidir leis an iniamh, cosúil le rabhadh faoin mbaol basctha nuair a bhaintear an pláta gléasta.

PT A solução de integração VX25 Blue e+ vem acompanhada do manual de instruções para o armário VX25, que contém indicações adicionais de segurança relacionadas ao armário como, por exemplo, aviso de perigo de esmagamento ao retirar a placa de montagem.

HR Uz VX25 Blue e+ integracijsko rješenje dolaze i upute za kutiju s osiguračima VX25. U ovom priručniku možete pronaći dodatne sigurnosne upute u vezi kutije s osiguračima poput, npr. upozorenja o opasnosti od gnječenja prilikom uklanjanja montažne ploče itd.

MT Flimkien mas-soluzzjoni ta' integrazzjoni VX25 Blue e+ jiġu pprovduti anki l-istruzzjonijiet għall-kaxxa tal-iswiċċijiet VX25. F'dawn l-istruzzjonijiet issib aktar struzzjonijiet ta' sikurezza rilevanti għall-kaxxa tal-iswiċċijiet, pereżempju dwar il-periklu ta' kontużjoni waqt it-tneħħija tal-pjanċa tal-immuntar.

PL Wraz z rozwiązaniem zintegrowanym VX25 Blue e+ dostarczana jest także instrukcja do szafy sterowniczej VX25. W niniejszej instrukcji znajdują się dodatkowo wskazówki bezpieczeństwa dotyczące szafy sterowniczej, jak np. wskazówki o niebezpieczeństwie zgniecenia przy wyjmowaniu płyty montażowej itd.

CZ S integrovaným řešením VX25 Blue e+ dodáváme také návod pro rozváděčovou skříň VX25. V tomto návodu naleznete další bezpečnostní pokyny, které se týkají rozváděčové skříně, jako např. pokyny ohledně nebezpečí přiskřípnutí při vyjímání montážní desky atd.

BG Заедно с решението VX25 Blue e+ се доставя също и ръководството за интеграция в разпределителния шкаф VX25. В това ръководство ще намерите допълнителни указания за безопасност, отнасящи се до разпределителния шкаф, като например указания за опасност от премазване при изваждане на монтажната плоча и др.

GR Με τη λύση ενσωμάτωσης VX25 Blue e+ παρέχεται επίσης το εγχειρίδιο οδηγιών για τον πίνακα ελέγχου VX25. Σε αυτό το εγχειρίδιο θα βρείτε επιπλέον οδηγίες ασφαλείας που αφορούν τον πίνακα ελέγχου, όπως για παράδειγμα Υποδείξεις σχετικά με τον κίνδυνο θραύσης κατά την αφαίρεση της πλάκας στήριξης κ.λπ.

RO Împreună cu soluția integrată VX25 Blue e+ se livrează și instrucțiunile pentru dulapul VX25. În aceste instrucțiuni găsiți indicații de siguranță suplimentare referitoare la dulapul VX25, de exemplu privind pericolul de accidentare la scoaterea plăcii de montaj.

HU A VX25 Blue e+ integrált megoldáshoz mellékelve van a VX25 kapcsolószekrény útmutatója is. Ebben az útmutatóban további, a kapcsolószekrényre vonatkozó biztonsági figyelmeztetéseket talál, pl. a zúzdás veszélyére vonatkozóan a szerelőlap kivételkor stb.

LT Su „VX25 Blue e+“ integravimo sprendimu pristatoma ir skirstomosios spintos VX25 instrukcija. Šioje instrukcijoje rasite kitus saugos nurodymus, susijusius su skirstomąja spinta, pvz., nurodymus dėl suspaudimo pavojaus išimant montavimo plokštę ir t. t.

EE Koos VX25 Blue e+ integratsioonilahendusega tuleb kaasa ka juhend lülitiikilbile VX25. Sellest juhendist leiate edasisi lülitiikilpi puudutavaid ohutusjuhiseid, nt märkusi muljumisohu kohta monteerimisplaadi eemaldamisel jne.

LV VX25 Blue e+ integrācijas risinājumā ir iekļauta arī sadales skapja VX25 instrukcija. Šajā instrukcijā jūs atradīsiet papildus sadales skapja drošības instrukcijas, piemēram, brīdinājumu par traumām, kas var rasties noņemot montāžas plāksni

SI Skupaj z integracijsko rešitvijo VX25 Blue e+ prejmete tudi navodila za stikalno omaro VX25. V teh navodilih so na voljo dodatni varnostni napotki v zvezi s stikalno omaro, npr. opozorila glede nevarnosti stisnjenja pri odstranjevanju montažne plošče itd.



Warn- und Sicherheitshinweise / Safety instructions and warnings / Consignes de sécurité Rittal roof-mounted Blue e+ cooling unit and VX25 Blue e+ integration solution

Hazards and their prevention according to IEC 60417/ISO 7000/ISO 7010

SK Návod pre rozvádzačov skriňu VX 25 sa dodáva spolu s integračným riešením VX25 Blue e+. V tomto návode nájdete ďalšie bezpečnostné upozornenia týkajúce sa rozvádzača, napr. upozornenie na nebezpečenstvo poškodenia pri vyberaní montážneho panela atď.

RU Вместе с интегрированным решением VX25 Blue e+ также поставляется руководство по распределительному шкафу VX25. В данном руководстве можно найти прочие меры безопасности, относящиеся к шкафу, напр. указания по опасности при демонтаже монтажной панели.



DE Die Anschlussvorschriften des zuständigen Stromversorgungsunternehmens sind zu beachten. Schalten Sie vor den Wartungsarbeiten die Spannungsversorgung ab. Halten Sie anschließend eine Wartezeit von mindestens 5 Minuten ein, bevor Sie am Gerät hantieren. Erst dann haben sich die im Gerät verbauten Kondensatoren entladen.

EN The connection regulations of the appropriate power supply company are to be followed. Switch off the power supply before carrying out maintenance work and then wait for at least 5 minutes before handling the unit. Only then will the capacitors installed in the unit have discharged.

FR Respecter les directives de raccordement du fournisseur d'électricité compétent. Couper l'alimentation électrique avant d'effectuer les travaux d'entretien. Respecter ensuite la durée d'attente de minimum 5 minutes avant de travailler sur l'appareil. C'est seulement après cette durée que les condensateurs installés dans l'appareil se sont déchargés.

NL Neem de aansluitvoorschriften van het desbetreffende energiebedrijf in acht. Schakel de voeding vóór de onderhoudswerkzaamheden uit. Houd hierna een wachttijd van tenminste vijf minuten aan voordat u het apparaat aanraakt. Pas dan zijn de in het apparaat gemonteerde condensatoren ontladen.

SE Anslutningsföreskrifterna från det ansvariga elförsörjningsföretaget måste följas. Slå av spänningsförsörjningen innan underhållsarbete utförs. Vänta sedan i minst 5 minuter innan du hanterar aggregatet. Först efter denna tid har kondensatorerna i aggregatet laddats ur.

IT Osservare le prescrizioni relative al collegamento dell'azienda fornitrice di elettricità competente. Scollegare l'alimentazione prima di eseguire la manutenzione. Attendere almeno cinque minuti prima di iniziare a lavorare sull'apparecchio in modo che i condensatori di cui è provvisto si scarichino.

ES Deben tenerse en cuenta las normas del reglamento electrotécnico de baja tensión. Desconecte el suministro eléctrico antes de realizar las tareas de mantenimiento. A continuación, espere al menos cinco minutos antes de manipular el equipo. Transcurrido ese tiempo, los condensadores instalados en el equipo se habrán descargado.

FI Huomioi energiayhtiön liitäntäohjeet. Katkaise laitteen syöttöjännite ennen huoltotöitä. Odota vähintään viisi minuuttia ennen kuin käsittelet laitetta. Vasta tämän ajan kuluttua laitteen kondensaattoreiden sisältämä jännite on purkautunut.

DK Følg altid tilslutningsvejledningen fra det ansvarlige elselskab. Strømmen skal frakobles inden vedligeholdelsesarbejde. Vent derefter mindst fem minutter, inden enheden igen betjenes. Først derefter er de kondensatorer, som er installeret i enheden, blevet afladet.

IE Ní mór rialacháin nasctha na cuideachta cuí a sholáthraíonn an chumhacht a leanúint. Múch an soláthar cumhachta sula ndéantar aon obair chothabhála agus ná déan an t-aonad a láimhseáil ar feadh cúig nóiméad ar a laghad. Tógfaidh sé cúig nóiméad chun na toileoirí atá suiteáilte san aonad a dhíhluchtú.

PT Seguir as orientações da respectiva empresa de fornecimento de energia elétrica. Antes de efetuar qualquer serviço de manutenção, desligue a fonte de alimentação de energia. Aguarde no mínimo 5 minutos antes de manusear o aparelho, pois só depois dessa pausa os capacitores do condicionador de ar estarão descarregados.

HR Potrebno je pridržavati se pravila o priključivanju odgovarajućeg napona isporučitelja električne energije. Prije rada na održavanju, isključite napajanje uređaja. Zatim pričekajte najmanje 5 minuta prije rukovanja uređajem. Kondenzatori ugrađeni u uređaj tek su tada ispražnjeni.

MT Għandhom jiġu osservati r-rekwiżiti tat-tqabbid tal-kumpanija tal-provwista tal-elettriku lokali. Qabel ix-xogħlijiet ta' manutenzjoni, trid tifli l-provwista tal-kurrent elettriku. Wara li tagħmel dan, trid tistenna mill-inqas 5 minuti qabel ma tmiss l-apparat. Biss wara dan l-ammont ta' żmien se jkun seħħ skariku tal-vultaġġ fil-kondensaturi integrati fih.

PL Przestrzegać przepisów odpowiedniego Zakładu Energetycznego. Przed pracami odłączyć zasilanie elektryczne. Następnie przed przystąpieniem do prac przy urządzeniu odczekać 5 minut. Dopiero wtedy rozładują się zainstalowane w urządzeniu kondensatory.

CZ Dodržujte předpisy příslušného dodavatele elektrické energie pro připojení elektrického zařízení. Před zahájením údržby odpojte el. napájení. Před další manipulací s jednotkou počkejte alespoň 5 minut. Teprve pak může dojít k vybití kondenzátorů zabudovaných v jednotce.

BG Трябва да се спазват предписанията за свързване към захранването на компетентното електроснабдително дружество. Изключете електрозахранването преди дейности по поддръжка. След това изчакайте поне 5 минути, преди да започнете работата по уреда. Толкова време е необходимо за разреждане на вградените в уреда кондензатори.

GR Πρέπει να τηρούνται οι κανονισμοί σύνδεσης της σχετικής εταιρείας παροχής ηλεκτρικού ρεύματος. Πριν από τις εργασίες συντήρησης, απενεργοποιήστε την παροχή ρεύματος. Περιμένετε τουλάχιστον 5 λεπτά προτού χειριστείτε τη συσκευή. Μόνο τότε θα έχουν αποφορτιστεί οι πυκνωτές που είναι εγκατεστημένοι στη συσκευή.



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- RO** Trebuie respectate cerințele de racordare ale companiei locale de alimentare cu energie. Înainte de lucrările de întreținere, decuplați alimentarea electrică, apoi așteptați minim 5 minute înainte de a interveni asupra aparatului. Numai după acest timp se descarcă condensatorii integrați în aparat.
- HU** Az illetékes áramszolgáltató csatlakoztatási előírásait figyelembe kell venni. A karbantartási munkálatok megkezdése előtt kapcsolja le a feszültségellátást. Ezután tartsa be a legalább 5 perces várakozási időt, mielőtt a berendezésen szerelést végezne. A berendezésbe épített kondenzátorok csak eddigre sülnek ki.
- LT** Privalu laikytis atsakingos elektros tiekimo tinklų bendrovės parengtų instrukcijų. Prieš atlikdami techninės priežiūros darbus, išjunkite maitinimo įtampą. Po to, prieš pradėdami dirbti su įrenginiu, palaukite mažiausiai 5 minutes. Tik tuomet įrenginyje sumontuoti kondensatoriai išsikrauna.
- EE** Järgige vastutava elektrivarustuse ettevõtte vooluvõrku ühendamise eeskirju. Lülitage enne hooldustööd voolutoide välja. Oodake seejärel veel vähemalt 5 minutit, enne kui seadet puudutate. Alles siis on seadmes olevad kondensaatorid ennast maha laadinud.
- LV** Ievērojiet izmantotā elektropiegādes uzņēmuma pieslēguma noteikumus. Pirms veikt iekārtas apkopes darbus, atslēdziet strāvas padevi un gaidiet vismaz 5 minūtes līdz būs izlādējušies iebūvētie kondensatori.
- SI** Upoštevat je treba predpise za priključevanje naprav pristojnega podjetja za distribucijo električne energije. Pred vzdrževalnimi deli prekinite oskrbo z električno energijo. Nato počakajte vsaj 5 minut, preden začnete rokovati z napravo. Šele po tem času se namreč razelktrijo kondenzatorji, vgrajeni v napravi.
- SK** Treba dbať na predpisy príslušného dodávateľa elektrickej energie týkajúce sa zapojenia. Pred prácami v súvislosti s údržbou vypnite napájanie. Skôr ako začnete so zariadením manipulovať, počkajte minimálne 5 minút. Kondenzátory, ktoré sú súčasťou zariadenia sa úplne vybijú až po uplnutí tejto doby.
- RU** Необходимо соблюдать указания по подключению от компетентного энергопредприятия. Перед работами по обслуживанию отключайте электропитание. Затем подождите минимум 5 минут, прежде чем работать с агрегатом. За это время разряжаются установленные в агрегат конденсаторы.



- DE** Bitte beachten Sie die maximal zulässigen Hebegewichte für Personen. Ggf. ist eine Hebevorrichtung zu verwenden.
- EN** Please observe the maximum permissible weight to be lifted by one person. Use suitable lifting devices, if needed.
- FR** Veuillez tenir compte du poids de levage maximal autorisé pour les personnes et le cas échéant utilisez un appareil de levage.
- NL** Neem het maximaal toegestane tilgewicht voor personen in acht. Gebruik eventueel een hefwerktuig.
- SE** Observera de maximalt tillåtna lyftvikterna för personer. Vid behov ska en lyftanordning användas.
- IT** Prestare attenzione ai carichi massimi consentiti per le persone. Se necessario, utilizzare un dispositivo di sollevamento.
- ES** Rogamos tenga en cuenta el peso máximo permitido que puede levantar una persona. En caso necesario deberá utilizarse un dispositivo de elevación.
- FI** Huomioi sallittu enimmäisnostopaino. Käytä tarvittaessa nostolaitetta.
- DK** Overhold den maksimalt tilladte løftevægt for personer. Brug en løfteanordning, hvis vægten overskrider den tilladte løftevægt.
- IE** Cloígh leis an uasmhéachán is ceadmhach do dhuine amháin a chrochadh. Úsáid gairis ardaithe atá oiriúnach, más gá.
- PT** Por favor, considerar o peso máximo permitido a ser levantado por uma pessoa. Caso necessário, utilizar equipamento adequado.
- HR** Obratite pažnju na najveću dopuštenu masu koju smije podizati jedna osoba. Ako je potrebno, preporuča se upotreba opreme za podizanje i premještanje.
- MT** Jekk jogħġbok innota l-piżijiet ta' rfiġh massimi permessibbli għan-nies. Jekk ikun hemm bżonn, jeħtieġ li jintuża apparat tal-irfiġh.
- PL** Prosimy o nieprzekraczanie maksymalnych dopuszczalnych ciężarów podnoszonych przez ludzi. W razie potrzeby należy zastosować urządzenie podnośnikowe.
- CZ** Dodržujte maximální přípustné hmotnosti zvedaných břemen stanovené pro osoby. Případně použijte zvedací zařízení.
- BG** Спазвайте максимално допустимата товароносимост на човек при транспортиране на охладителя. Ако се налага, използвайте подемно устройство.
- GR** Παρακαλούμε τηρείτε το μέγιστο επιτρεπόμενο βάρος που μπορεί να αρθεί από ένα άτομο. Χρησιμοποιήστε κατάλληλες συσκευές ανύψωσης, εάν είναι απαραίτητο.
- RO** Respectați greutatea de ridicare maxim admisă pentru o persoană. Dacă este necesar, utilizați dispozitive de ridicare.
- HU** Vegye figyelembe az egy személy számára maximálisan megengedett emelhető tömegeket. Szükség esetén emelőberendezést kell használni.
- LT** Žmonės neturėtų kelti pernelyg sunkaus svorio. Prireikus reikia naudoti kėlimo įrangą.
- EE** Arvestage inimestele maksimaalselt lubatud tõstekaaludega. Vajaduse korral kasutage tõsteseadeldist.
- LV** Lūdzu, ievērojiet ierobežojumus attiecībā uz maksimālo svaru, ko ļauts celt vienai personai. Izmantojiet atbilstošas celšanas ierīces, kad tas ir nepieciešams.
- SI** Upoštevajte največjo dovoljeno težo, ki jo oseba lahko varno dvigne. Po potrebi uporabite dvizhno napravo.
- SK** Dodržiavajte maximálne limity pre osoby na zdvíhanie bremien. V prípade prekročenia tohto limitu použite zdvíhacie zariadenie.



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RU При транспортировке вручную обращайтесь внимание на максимально допустимый вес. При необходимости используйте подъемное устройство.



DE Insbesondere beim Anheben der noch unbestückten Integrationslösung sowie bei der Demontage des Kühlmoduls aus der Integrationslösung besteht Kippgefahr durch eine Schwerpunktverlagerung.

EN A shift in the centre of gravity may cause the integration solution to tip over, especially when it is being lifted before anything has been fitted to it or when removing the cooling module.

FR Il y a un risque de basculement dû au déplacement du centre de gravité, en particulier lors du levage de l'armoire climatisée intégrée non équipée ainsi que lors du démontage de son module de refroidissement.

NL Met name bij het optillen van de nog niet gemonteerde integratieoplossing en bij demontage van het koelmodule uit de integratieoplossing bestaat er kantelgevaar als gevolg van een zwaartepuntverlagings.

SE Särskilt vid lyft av den ännu obestyckade integreringslösningen och vid demontering av kylmodulen från integreringslösningen föreligger en tipprisk, på grund av den ändrade tyngdpunkten.

IT In particolare sussiste il rischio di ribaltamento dovuto a uno spostamento del baricentro quando si solleva la soluzione ancora non equipaggiata e quando si smonta il modulo di raffreddamento dalla soluzione.

ES En particular, existe riesgo de vuelco por un desplazamiento del centro de gravedad al elevar la solución integrada aún no equipada, así como al desmontar el módulo de refrigeración de esta.

FI Tyhjillään olevan integrointiratkaisun nostamiseen sekä jäähdytysmoduulin irrottamiseen integrointiratkaisusta liittyy kaatumisvaara painopisteen siirtyessä.

DK Forskydning af tyngdepunktet, specielt ved løft af den endnu ikke monterede integrationsløsning samt ved demonteringen af kølmodulet, udgør en potentiel væltefare.

IE Má thagann athrú ar an meáchanlár, seans go dtífidh an réiteach comhtháthaithe, go háirithe nuair a dhéantar é a ardú gan aon rud a bheith feistithe air nó nuair a dhéantar an modúl fuaraithe a bhaint.

PT Sobretudo na hora de suspender a solução de integração vazia e ao remover o módulo de refrigeração da solução de integração há perigo de tombamento devido ao deslocamento do centro da gravidade.

HR Opasnost od prevrtanja zbog gravitacijskog pomaka posebice je naglašena prilikom podizanja neodgovarajućeg integracijskog rješenja prilikom rastavljanja rashladnog modula iz integracijskog rješenja.

MT B'mod partikolari, waqt l-irfigh tas-soluzzjoni ta' integrazzjoni għadha mhix mghammra kif ukoll waqt l-iżmuntar tal-modulu tat-tkessiġ mis-soluzzjoni ta' integrazzjoni, hemm periklu ta' waqgħa minhabba l-qlib taċ-ċentru tal-gravità.

PL Szczególnie podczas podnoszenia jeszcze niezmontowanego rozwiązania zintegrowanego oraz podczas demontażu modułu chłodzenia z rozwiązania zintegrowanego zachodzi niebezpieczeństwo przewrócenia się z powodu przesunięcia środka ciężkości.

CZ Zejména při zvedání dosud neosazeného integrovaného řešení a při demontáži chladicího modulu z integrovaného řešení hrozí nebezpečí převrácení v důsledku přemístění těžiště.

BG Специално при повдигане и монтаж на все още немонтирания охлаждащ модул, съществува опасност от преобръщане поради изместване на центъра на тежестта.

GR Ειδικότερα, κατά την ανύψωση της ακόμα μη εξοπλισμένης λύσης ενσωμάτωσης και κατά την αποσυρματόληψη της μονάδας ψύξης από τη λύση ενσωμάτωσης υπάρχει κίνδυνος ανατροπής λόγω μετατόπισης του κέντρου βάρους.

RO Modificarea centrului de greutate poate cauza rasturnarea dulapului, in special atunci cand este ridicat inainte de montarea echipamentelor in interior, sau cand se procedeaza la inlaturarea unitatii de racire.

HU Különösen a még nem felszerelt integrált megoldás megemelésekor, valamint a hűtőmodul integrált megoldásból történő kiszerelesekor áll fenn a feldőlés veszélye a súlypont áthelyeződése miatt.

LT Svorio centro padėties pasikeitimas, atsižadęs sumontavus ar demontavus kondicionierių, gali apversti surinktą konstrukciją, ypač jeigu spinta yra tuščia.

EE Eriti just veel varustuseta integratsioonilahenduse ülestõstmisel ja jahutusmoduuli demonteerimisel integratsioonilahendusest võib raskuskeskme muutumise tõttu tekkida ümberkukkumise oht.

LV Pastāv iespēja ka skapis, piemēram, pacelšanas laikā uz kura paredzēts montēt dzesēšanas moduli, īpāšī ja tajā vēl nav uzstādītas jebkādas citas iekārtas, var apgāzties sakarā ar smaguma centra nobīdi.

SI Predvsem pri dviganju neopremljene integracijske rešitve in odstranjevanju hladilnega modula iz integracijske rešitve obstaja nevarnost prevrnitve zaradi premika težišča.

SK Zmena polohy ťažiska môže spôsobiť preváženie integračného riešenia, najmä ak je zdvíhaný predtým, ako je na ňom namontované čokoľvek alebo keď je odstránený chladiaci modul.

RU В частности, при поднятии неукomплектованного интегрированного решения, а также при демонтаже модуля охлаждения из интегрированного решения имеется опасность опрокидывания ввиду смещения центра тяжести.



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- DE** Vor dem Abnehmen der Haube muss das Gerät mind. 10 Min. abkühlen, um Verbrennungen an heißen Oberflächen zu vermeiden.
- EN** Before removing the hood, allow the unit to cool for at least 10 minutes to eliminate the risk of burns from hot surfaces.
- FR** Avant d'ôter le capot, l'appareil doit refroidir pendant au moins 10 minutes pour éviter les brûlures sur les surfaces brûlantes.
- NL** Voor het afnemen van de kap dient het apparaat minstens tien minuten af te koelen, zodat u zich niet brandt aan hete oppervlakken.
- SE** Innan huven tas av måste aggregatet svalna i minst 10 minuter för att undvika att personer bränner sig på heta ytor.
- IT** Far raffreddare il dispositivo per almeno 10 minuti prima di rimuovere la copertura per evitare eventuali ustioni al contatto con le superfici bollenti.
- ES** El equipo debe haberse enfriado durante un mínimo de 10 minutos antes de proceder a retirar la cubierta, con el fin de evitar quemaduras.
- FI** Ennen kehikon irrottamista laitteen on annettava jäähtyä vähintään 10 minuuttia, jotta vältetään kuumien pintojen aiheuttamat palovammat.
- DK** Lad enheden køle af i mindst ti minutter, før dækslet tages af, for at undgå risiko for at brænde sig på varme overflader.
- IE** Sula mbaintear an cochall de, lig don aonad fuarú ar feadh deich nóiméad ar a laghad chun an baol dó ó dhromchlaí teo a sheachaint.
- PT** Antes de remover a cobertura, deixar o aparelho arrefecer por no mínimo 10 minutos, para evitar risco de queimadura nas superfícies quentes.
- HR** Prije uklanjanja poklopca pričekajte barem 10 minuta da se uređaj ohladi, kako bi se uklonila opasnost od opekotina uzrokovanih vrućim površinama.
- MT** Qabel tneħhi l-ghatu, l-apparat għandu jithalla jibred għal mill-inqas 10 min biex tevta hruq minħabba ucuħ jaharqu.
- PL** Przed zdjęciem pokrywy urządzenie musi się chłodzić przez minimum 10 minut, aby nie doszło do poparzenia przez gorące powierzchnie.
- CZ** Před sejmutím pláště jednotky je nutno nechat chladící jednotku minimálně 10 minut vychladnout, aby nedošlo k popálení o horké povrchy.
- BG** Преди да бъде свален капакът, уредът трябва да се остави да изстине най-малко 10 минути, за да се избегнат изгаряния от горещите повърхности.
- GR** Πριν αφαιρέσετε το κάλυμμα, αφήστε τη μονάδα να ψυχθεί για τουλάχιστον 10 λεπτά για να εξαλειφθεί ο κίνδυνος εγκαυμάτων από καυτές επιφάνειες.
- RO** Înainte de scoaterea capacului, aparatul trebuie lăsat să se răcească cel puțin 10 min., pentru a evita arsurile cauzate de contactul cu suprafețele fierbinți.
- HU** A burkolat levétele előtt a berendezést legalább 10 percig hagyja lehűlni a forró felületek miatti égési sérülések elkerülése érdekében.
- LT** Prieš nuimdami gaubtą, turite palaukti bent 10 minučių, kol įrenginys atvės, kad nenusidegintumėte prisilietę prie karštų paviršių.
- EE** Enne katte mahavõtmist peab seade vähemalt 10 minutit jahtuma, et vältida põletusi kuumade pindade tõttu.
- LV** Pirms pārsega atvēršanas, ļaujiet iekārtai atdzist vismaz 10 minūtes, lai izvairītos no apdedzināšanās riska, ko rada uzkaršušās virsmas.
- SI** Preden snamete pokrov, naj se naprava najmanj 10 minut ohlaja, da se izognete nevarnosti opeklin na vročih površinah.
- SK** Pred odstránením krytu musí zariadenie minimálne 10 minút chladnúť, inak môže dôjsť k popáleniu na horúcich povrchoch.
- RU** Перед снятием кожуха дать агрегату остыть в течение ок. 10 мин., во избежание ожога о горячие поверхности.



- DE** Verwenden Sie niemals brennbare Flüssigkeiten zur Reinigung des Geräts.
- EN** Never use flammable liquids for cleaning.
- FR** Ne jamais utiliser de liquides inflammables pour le nettoyage.
- NL** Gebruik geen brandbare vloeistoffen voor het reinigen.
- SE** Använd inga brännbara vätskor för rengöring.
- IT** Non utilizzare liquidi infiammabili per la pulizia.
- ES** No utilice líquidos inflamables para realizar la limpieza.
- FI** Älä käytä puhdistukseen palavia nesteitä.
- DK** Brug aldrig brændbare væsker til rengøring.
- IE** Ná húsáid leachtanna inlasta riamh i gcomhair glanta.
- PT** Nunca utilizar líquidos inflamáveis para efetuar a limpeza.
- HR** Nikada ne koristite zapaljive tekućine za čišćenje.
- MT** Tużax likwidi li jieħdu n-nar għat-tindif.
- PL** Do czyszczenia urządzenia nie stosować łatwopalnych cieczy.
- CZ** Nepoužívejte k čištění žádné hořlavé kapaliny.



Warn- und Sicherheitshinweise / Safety instructions and warnings / Consignes de sécurité Rittal roof-mounted Blue e+ cooling unit and VX25 Blue e+ integration solution

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- BG** Не използвайте запалими течности за почистване.
GR Μη χρησιμοποιείτε ποτέ εύφλεκτα υγρά για τον καθαρισμό.
RO Nu utilizați lichide inflamabile pentru curățare.
HU Tisztításhoz ne használjon gyúlékony folyadékot.
LT Valydami nenaudokite degių skysčių.
EE Ärge kasutage puhastamiseks põlevaid vedelikke.
LV Nekad neizmantojiet uzliesmojošus tīršanas līdzekļus.
SI Za čiščenje ne uporabljajte vnetljivih tekočin.
SK Na čistenie nepoužívajte horľavé kvapaliny.
RU Никогда не используйте горючие жидкости для чистки агрегата.



- DE** Vor Inbetriebnahme ist sicherzustellen, dass das Kondensatmanagement wie in Abschnitt 5.3.4 beschrieben installiert ist. Die Funktionsfähigkeit ist bei Wartung der Endanwendung regelmäßig zu überprüfen.
- EN** Ensure prior to startup that the condensate management system is installed as described in Section 5.3.4. Regularly check the solution is working properly during maintenance of the end application.
- FR** Avant la mise en service, il faut s'assurer que la gestion des condensats est installée tel que décrit au paragraphe 5.3.4. Le fonctionnement doit être vérifié périodiquement lors de l'entretien de l'application complète.
- NL** Vóór de inbedrijfstelling moet worden gewaarborgd dat het condensmanagement is geïnstalleerd zoals beschreven in paragraaf 5.3.4. De functionaliteit moet regelmatig tijdens het onderhoud van de uiteindelijke toepassing worden gecontroleerd.
- SE** Före idrifttagningen ska det säkerställas att kondensathanteringen har installerats i enlighet med beskrivningen i avsnitt 5.3.4. Kontrollera regelbundet vid underhåll att den monterade produkten fungerar som den ska.
- IT** Prima della messa in servizio assicurarsi che la gestione della condensa sia installata come descritto nella sezione 5.3.4. Controllare regolarmente che la soluzione funzioni correttamente durante la manutenzione e nell'applicazione finale.
- ES** Antes de la puesta en marcha hay que asegurarse de que la gestión de condensación se haya instalado como se describe en la sección 5.3.4. El funcionamiento se debe revisar periódicamente durante el mantenimiento del uso final.
- FI** Varmista ennen käyttöönottoa, että kondenssivesi järjestelmä on asennettu luvussa 5.3.4 kuvatulla tavalla. Lopullisen sovelluksen toiminta on testattava säännöllisesti huollon yhteydessä.
- DK** Sørg for, at kondensatstyringen er installeret som beskrevet i afsnit 5.3.4, før ibrugtagning. Funktionen skal kontrolleres regelmæssigt i forbindelse med vedligeholdelsen af slutproduktet.
- IE** Roimh an t-aonad a chur ar siúl, cinntigh go bhfuil an córas bainistíochta comhdhlútháin suiteáilte i gcomhréir le Cuid 5.3.4. Seiceáil go rialta an bhfuil an réiteach ag obair i gceart le linn cothabhála ar an bhfeidhmchlár deiridh.
- PT** Antes de colocar o equipamento em operação, certifique-se de que o sistema de gerenciamento de água condensada esteja instalado conforme indicado no capítulo 5.3.4. Verifique regularmente a funcionalidade ao efetuar a manutenção da aplicação final.
- HR** Prije uključivanja provjerite je li sustav za upravljanje kondenzatorima postavljen u skladu s uputama u odjeljku 5.3.4. Rad uređaja mora se redovito provjeravati prilikom održavanja.
- MT** Qabel it-tqegħid fis-servizz irid jiġi żgurat li l-ġestjoni tal-kondensat hija stallata bħalma jiġi deskritt fit-taqsim 5.3.4. Il-funzjonament tajjeb irid jiġi eżaminat b'mod regolari waqt il-manutenzjoni tal-applikazzjoni finali.
- PL** Przed uruchomieniem należy upewnić się, że zarządzanie kondensatem zostało zainstalowane zgodnie z opisem w rozdziale 5.3.4. Sprawność musi być regularnie kontrolowana w ramach konserwacji urządzenia końcowego.
- CZ** Před uvedením do provozu je nutné zajistit, aby bylo instalováno zařízení pro odpařování kondenzátu dle popisu v kapitole 5.3.4. Při údržbě finální aplikace je nutné pravidelně kontrolovat funkčnost.
- BG** Преди пускане в експлоатация трябва да се уверите, че системата за управление на кондензата е инсталирана, както е описано в раздел 5.3.4. Проверявайте редовно функционалността при поддръжката в крайния обект.
- GR** Πριν από τη θέση σε λειτουργία, βεβαιωθείτε ότι έχει εγκατασταθεί η διάταξη διαχείρισης συμπυκνωμάτων όπως περιγράφεται στην ενότητα 5.3.4. Η λειτουργικότητα πρέπει να ελέγχεται τακτικά κατά τη συντήρηση της τελικής εφαρμογής.
- RO** Înainte de punerea în funcțiune trebuie să vă asigurați că sistemul de gestionare a condensului este instalat așa cum se arată la punctul 5.3.4. Funcționarea corectă a sistemului de evacuare a condensului trebuie verificată regulat, cu ocazia executării operațiilor de mentenanță.
- HU** Az üzembe helyezés előtt ellenőrizni kell, hogy a kondenzátumkezelő rendszer az 5.3.4. pontban leírtak szerint van-e felszerelve. A végső berendezés karbantartásakor a működésképeségét rendszeresen ellenőrizni kell.
- LT** Prieš pradėdami naudoti įsitinkite, kad kondensato valdymo sistema įdiegta taip, kaip aprašyta 5.3.4 skirsnyje. Atlikdami baigiamosios eksploatacijos techninės priežiūros darbus nuolat tikrinkite veikimą.
- EE** Enne kasutuselevõttu tuleb veenduda, et kondensaadi juhtsüsteem on installitud lõigus 5.3.4 kirjeldatud viisil. Töökorras olekut tuleb lõppkasutuse hoolduste tegemisel korrapäraselt kontrollida.
- LV** Pirms iekārtas palaišanas, nodrošiniet lai būtu uzstādīta kondensāta novadišanas sistēma kā aprakstīts nodaļā 5.3.4. Pārbaudiet ierīces pareizu darbību veicot regulāras apkopes.



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- SI** Pred zagonom se prepričajte, da je sistem za odvajanje kondenzata nameščen v skladu z navodili v poglavju 5.3.4. Pri vzdrževanju za končno uporabo je treba redno preverjati delovanje naprave.
- SK** Pred uvedením do prevádzky sa uistite, či je zabudovaný systém riadenia kondenzátu, ako je opísané v odseku 5.3.4. Kontrolujte pravidelne jeho funkčnosť pri údržbe hotovej inštalácie.
- RU** Перед вводом в эксплуатацию необходимо убедиться, что управление отводом конденсата установлено, как описано в разделе 5.3.4. Необходимо регулярно контролировать работоспособность при обслуживании готового решения.



- DE** Der Betrieb des Geräts ohne Faltenfilter ist nicht zulässig. Nur original Zubehör verwenden (3285.700).
- EN** It is not permitted to operate the unit without a pleated filter. Only use original accessories (3285.700).
- FR** L'exploitation de l'appareil sans filtre à plis n'est pas tolérée. Utiliser uniquement les accessoires d'origine (3285.700).
- NL** Bediening van het apparaat zonder vouwfilter is niet toegelaten. Gebruik alleen originele toebehoren (3285.700).
- SE** Aggregatet får inte användas utan veckfilter. Använd endast originaltillbehör (3285.700).
- IT** Non è consentito l'uso dell'apparecchio senza filtro pieghettato. Utilizzare solo accessori originali (3285.700).
- ES** No se permite el funcionamiento del equipo sin filtro plisado. Utilizar solo accesorios originales (3285.700).
- FI** Laitteen käyttö ilman poimusuodatinta on kielletty. Käytä vain alkuperäisiä lisävarusteita (3285.700).
- DK** Det er ikke tilladt at betjene enheden uden plisseret filter. Der må kun anvendes originalt tilbehør (3285.700).
- IE** Ní ceadmhach an t-aonad a oibriú gan scaigaire pléatáilte. Úsáid oiriúintí bunaidh amháin (3285.700).
- PT** Não coloque o aparelho em funcionamento sem filtro plissado. Utilize somente acessórios originais (3285.700).
- HR** Uređaj ne smije raditi bez naboranog filtra. Koristite samo originalnu opremu (3285.700).
- MT** Mhux permess it-thaddim tal-apparat minghajr filtru ppjegat. Għandhom jintużaw aċċessorji oriġinali biss (3285.700).
- PL** Eksploatacja urządzenia bez filtra fałdowanego jest niedozwolona. Stosować tylko oryginalne akcesoria (3285.700).
- CZ** Provoz jednotky bez skládaného filtru není přípustný. Používejte jen originální příslušenství (3285.700).
- BG** Забранена е експлоатацията на уреда без филтър. Използвайте само оригинални допълнителни принадлежности (3285.700).
- GR** Η λειτουργία της συσκευής χωρίς πτυχωτό φίλτρο δεν επιτρέπεται. Χρησιμοποιείτε μόνο αυθεντικά εξαρτήματα (3285.700).
- RO** Nu este permisă operarea aparatului fără filtru. Folosiți numai accesorii originale (3285.700).
- HU** A berendezést hajtogatott szűrő nélkül működtetni tilos. Csak eredeti tartozékot használjon (3285.700).
- LT** Prietaisą draudžiama naudoti be plisuoto filtro. Naudokite tik originalius priedus (3285.700).
- EE** Seadme käitamise ilma voldikfiltrita pole lubatud. Kasutage ainult originaalvarukuid (3285.700).
- LV** Ierīces izmantošana bez kroku filtra nav pieļaujama. Izmantojiet tikai oriģinālo aprīkojumu (3285.700).
- SI** Naprava ne sme delovati brez nagubanega filtra. Uporabljajte le originalno opremo (3285.700).
- SK** Zariadenie sa nesmie používať bez skladaného filtra. Používajte len originálne príslušenstvo (3285.700).
- RU** Эксплуатация агрегата без фильтра-гармошки не допускается. Использовать только оригинальные комплектующие (3285.700).



- DE** Eventuell notwendige Reparaturarbeiten am Kältemittelkreislauf dürfen nur von Kälte-Fachpersonal durchgeführt werden.
- EN** Any repairs required to the refrigerant circuit must be carried out by refrigeration specialists.
- FR** Seuls les spécialistes du froid sont autorisés à effectuer les travaux de réparation éventuellement nécessaires sur le circuit de fluide frigorigène.
- NL** Eventueel noodzakelijke reparaties aan het koudemiddelcircuit mogen alleen door koeltechnici worden uitgevoerd.
- SE** Eventuella nödvändiga reparationer av köldmediekretsen får endast utföras av utbildade kyltekniker.
- IT** Eventuali interventi di riparazione sul circuito frigorifero devono essere eseguiti esclusivamente da personale qualificato.
- ES** Los posibles trabajos de reparación en el circuito de refrigeración solo pueden llevarse a cabo por especialistas en refrigeración.
- FI** Vain kylmäasentajat saavat suorittaa kylmäainekiertoa kohdistuvat tarvittavat korjaustyöt.
- DK** Eventuelle nødvendige reparationer på kølekredsløbet skal udføres af fagspecialister.
- IE** Ní mór do speisialtóirí cuisniúcháin amháin deisiúcháin ar an gciocard cuisneáin a dhéanamh.
- PT** Eventuais serviços de reparo do circuito de refrigeração somente deverão ser realizados por técnicos especializados em sistemas de climatização.
- HR** Potencijalne dodatne popravke rashladnog kruga smije izvoditi samo za to osposobljeno osoblje.
- MT** Jekk ikun hemm bżonn ta' xoghlijiet ta' tiswija fiċ-ċirkwit tar-refriġeranti, dawn jistgħu jsiru biss minn professjonisti kkwalifikati fil-qasam tat-tkessiġ.
- PL** Eventualne niezbędne naprawy obiegu chłodniczego mogą być dokonywane tylko przez wykwalifikowanych specjalistów.



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- CZ** Eventuálně nutné opravy na chladicím okruhu smí provádět pouze kvalifikovaný chladírenský technik.
- BG** Всякакви ремонтни дейности свързани с циркулацията на хладилния агент, трябва да се извършват само от съответните специалисти по хладилна техника.
- GR** Οποιοδήποτε απαραίτητες επισκευές στο κύκλωμα ψυκτικού μέσου μπορούν να πραγματοποιηθούν μόνο από ειδικούς στον τομέα της ψύξης.
- RO** Toate lucrările de reparatii necesare la circuitul de racire, vor fi efectuate de personal calificat in tehnica frigului.
- HU** A hűtőkörön végzett, esetlegesen szükséges javításokat csak hűtéstechnikai szakember végezheti el.
- LT** Reikalingus šaldymo agento sistemos remonto darbus leidžiama atlikti tik profesionaliems šaldymo specialistams.
- EE** Külmaineringlust puudutavaid võimalikke remonditöid tohivad teha ainult vastava eriala spetsialistid.
- LV** Jebkādus nepieciešamos dzesēšanas kontūra remontdarbus atļauts veikt tikai dzesēšanas iekārtu speciālistiem.
- SI** Morebitna popravila na krogotoku hladilnega sredstva sme izvajati le za to usposobljeno strokovno osebje.
- SK** Prípadné potrebné opravy na okruhu chladiva môže vykonávať iba kvalifikovaný personál pre chladiacu techniku.
- RU** Возможно необходимые работы на контуре охлаждения могут производиться только специалистами по холодильному оборудованию.
- DE** Das Kühlgerät ist ausschließlich zum Kühlen von geschlossenen Schaltschränken sowie zur professionellen Nutzung gemäß DIN EN 61000-3-2 vorgesehen. Die VX25 Blue e+ Integrationslösung ist ausschließlich zum Einbau von Schaltanlagenkomponenten und deren Kühlung im erlaubten Einsatztemperaturbereich sowie zur professionellen Nutzung gemäß DIN EN 61000-3-2 vorgesehen. Eine andere Verwendung ist nicht bestimmungsgemäß. Das Gerät darf nicht an Orten installiert und betrieben werden, die der allgemeinen Öffentlichkeit (siehe DIN EN 60335-2-40, Absatz 3.119) zugänglich sind. Das Gerät ist nur für den stationären Betrieb ausgelegt.
- EN** The cooling unit is intended exclusively for cooling closed control cabinets as well as for professional use in accordance with DIN EN 61000-3-2. The VX25 Blue e+ integration solution is solely intended for the installation and cooling of switchgear components within the permitted operating temperature range and for professional use in accordance with DIN EN 61000-3-2. Any other use is not permitted. The unit must not be installed and operated in locations which are accessible to the general public (see DIN EN 60335-2-40, paragraph 3.119). The unit is designed solely for stationary use.
- FR** Le climatiseur est prévu uniquement pour rafraîchir les armoires électriques étanches dans un cadre professionnel conformément à la norme EN 61000-3-2. L'armoire climatisée VX25 Blue e+ est prévue exclusivement pour intégrer des composants électriques et électroniques et les maintenir à une température raisonnable dans la plage de température autorisée ainsi que pour une utilisation professionnelle selon la norme EN 61000-3-2. Toute autre utilisation est non conforme. Le climatiseur ne doit pas être installé et exploité dans des lieux accessibles au public (voir norme EN 60335-2-40, paragraphe 3.119). Le climatiseur est uniquement destiné à l'exploitation statique.
- NL** Het koelaggregaat is uitsluitend bestemd voor het koelen van gesloten schakelkasten en voor professioneel gebruik volgens DIN EN 61000-3-2. De VX25 Blue e+ integratieoplossing is uitsluitend bedoeld voor de inbouw van schakelinstallatiecomponenten en de koeling daarvan binnen het toegelaten temperatuurbereik. Daarnaast is de integratieoplossing bestemd voor professionele toepassingen overeenkomstig DIN EN 61000-3-2. Elke andere toepassing wordt gezien als niet-voorgeschreven gebruik. Het apparaat mag niet worden geïnstalleerd op plaatsen die openbaar (zie DIN EN 60335-2-40, paragraaf 3.119) toegankelijk zijn. Het apparaat is alleen ontworpen voor stationair gebruik.
- SE** Kylaggregatet är endast avsedd för kylning av slutna golvskåp i enlighet med DIN EN 61000-3-2. Integreringslösningen VX25 Blue e+ är endast avsedd för montage av ställverkskomponenter och kylning av dessa i tillåtna användningstemperaturer och för professionellt bruk enligt SS EN 61000-3-2. Annan användning är inte tillåten. Aggregatet får inte installeras och köras på platser som är tillgängliga för allmänheten (se DIN EN 60335-2-40, stycke 3.119). Aggregatet är konstruerat uteslutande för stationär drift.
- IT** Il condizionatore è destinato esclusivamente al raffreddamento degli armadi di comando chiusi e per uso professionale secondo EN 61000-3-2. La soluzione di integrazione VX25 Blue e+ è destinata solo all'installazione di componenti del quadro del controllo e al loro raffreddamento nell'intervallo di temperature di esercizio consentito nonché per l'uso professionale secondo DIN EN 61000-3-2. Ogni altro impiego è da intendersi non conforme alla sua destinazione d'uso. L'apparecchio non deve essere installato e utilizzato in aree accessibili al pubblico (vedere la norma DIN EN 60335-2-40, paragrafo 3.119). L'apparecchio può essere utilizzato solo da fermo.
- ES** El refrigerador se ha diseñado exclusivamente para la refrigeración de armarios de distribución estancos, para su uso según lo detallado en la normativa DIN EN 61000-3-2. Cualquier otro uso no está permitido. La solución integrada VX25 Blue e+ está diseñada exclusivamente para la instalación de componentes de conmutación y su refrigeración en el rango de temperaturas de funcionamiento permitido, así como para un uso profesional según la norma DIN EN 61000-3-2. El equipo no debe ser instalado ni puesto en funcionamiento en entornos accesibles al público en general (ver DIN EN 60335-2-40, párrafo 3.119). El equipo está diseñado para un funcionamiento estacionario.
- FI** Jäähdytysyksikkö on tarkoitettu yksinomaan suljettujen koteloiden jäähdytykseen sekä ammattikäyttöön DIN EN 61000-3-2 mukaisesti. VX25 Blue e+ -integointiratkaisu on tarkoitettu yksinomaan kytkentälaittekomponenttien asennukseen ja jäähdyttämiseen soveltuvalla käyttölämpötila-alueella. Standardin DIN EN 61000-3-2 mukaisesti. Mikään muu käyttö ei ole sallittua. Laitetta ei saa asentaa ja käyttää yleisessä käytössä olevissa paikoissa (katso DIN EN 60335-2-40, kohta 3.119). Laite on suunniteltu ainoastaan kiinteään käyttöön.
- DK** Køleenheden er kun beregnet til køling af lukkede indkapslinger og kun til professionelt brug i henhold til DIN EN 61000-3-2. VX25 Blue e+ Integrationsløsningen er udelukkende beregnet til montering og køling af skabskomponenter i det tilladte drifttemperaturområde, samt til professionelt brug i overensstemmelse med DIN EN 61000-3-2. Enhver anden brug er ikke tilladt. Enheden må ikke installeres

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eller opereres på lokaliteter med offentlig adgang (Se DIN EN 60335-2-40, paragraf 3.119) Enheden er udelukkende designet til stationært brug.

IE Nil an t-aonad fuairithe ceaptha ach amháin d'fhuarú na gcaibinéad rialaithe dúnta agus d'úsáid ghairmiúil eile i gcomhréir le DIN EN 61000-3-2. Ceapadh an réiteach comhtháthaíthe Blue e+ VX25 chun comhpháirteanna lascthrealaimh a shuiteáil agus a fhuarú laistigh den raon ceadaíthe teochta agus ar mhaithe le húsáid ghairmiúil i gcomhréir le DIN EN 61000-3-2. Ní cheadaítear d'aon úsáid eile. Ná suiteáiltear agus ná oibrítear an t-aonad i suíomhanna arb inrochtana don phobal i gcoitinne iad (féach DIN EN 60335-2-40, mír 3.119). Is le húsáid dho-aistrithe amháin a dearadh an t-aonad.

PT A unidade de refrigeração destina-se exclusivamente à refrigerar gabinetes de controle fechados, bem como para uso profissional de acordo com a DIN EN 61000-3-2. A solução de integração VX25 Blue e+ destina-se exclusivamente à instalação de componentes de instalações de distribuição e seu sistema de refrigeração na faixa de temperatura de operação permitida, bem como para utilização profissional segundo a norma DIN EN 61000-3-2. Qualquer outro uso não é apropriado e não é permitido. O aparelho não deve ser instalado e operado em locais acessíveis ao público em geral (consulte a norma DIN EN 60335-2-40, seção 3.119). O aparelho foi projetado apenas para o uso em instalação fixa.

HR Klima uređaj namijenjen je isključivo hlađenu nanizanih ormara te profesionalnoj uporabi sukladno DIN EN 61000-3-2. VX25 Blue e+ integracijsko rješenje isključivo je namijenjeno ugradnji sklopa prekidača i njihovo hlađenje u okvirima dozvoljene radne temperature te za službenu upotrebu u skladu sa standardom DIN EN 61000-3-2. Drugačija uporaba nije dozvoljena. Uređaj se ne smije instalirati i raditi na mjestima gdje je dostupan javnosti (DIN EN 60335-2-40, paragraph 3.119). Uređaj je namijenjen isključivo za unutarnju upotrebu.

MT It-tagħmir refriġeranti għandu jintuża esklussivament biex ikessaħ l-armarji magħluqin kif ukoll għall-użu professjonali skont DIN EN 61000-3-2. Is-soluzzjoni ta' integrazzjoni VX25 Blue e+ hija maħsuba biss għall-integrazzjoni ta' komponenti ta' stazzjonijiet tal-iswiċċjar u t-tkessiħ tagħhom fil-medda ta' temperaturi permessa waqt it-tħaddim kif ukoll għall-użu professjonali skont DIN EN 61000-3-2. Użu ieħor ta' dan huwa ħażin. L-apparat ma għandux jiġi installat u ma għandux jithaddem f'postijiet li huma aċċessibbli għall-pubbliku (ara DIN EN 60335-2-40, Paragrafu 3.119). L-apparat huwa ddisinjat biss għal tħaddim stazzjonarju.

PL To urządzenie chłodnicze jest przewidziane wyłącznie do chłodzenia zamkniętych szaf sterowniczych oraz do użytku profesjonalnego zgodnie z normą DIN EN 61000-3-2. Rozwiązanie zintegrowane VX25 Blue e+ jest przeznaczone wyłącznie do zainstalowania komponentów aparatury sterowniczej i rozdzielczej i do ich chłodzenia w dozwolonym zakresie temperatur pracy, a także do profesjonalnego wykorzystywania według PN-EN 61000-3-2. Każde inne zastosowanie jest niezgodne z przeznaczeniem. Urządzenie nie może być instalowane i użytkowane w miejscach ogólnodostępnych (patrz EN 60335-2-40, punkt 3.119). Urządzenie jest przystosowane wyłącznie do użytkowania stacjonarnego.

CZ Chladicí jednotka je určena výhradně k chlazení uzavřených rozváděčových skříní a k profesionálnímu použití v souladu s ČSN EN 61000-3-2. Integrované řešení VX25 Blue e+ je určeno výhradně k instalaci komponentů rozváděče a jejich chlazení v přípustném rozsahu provozní teplot a k profesionálnímu použití dle normy ČSN EN 61000-3-2. Jiné použití není povoleno v souladu s určením. Zařízení se nesmí instalovat a provozovat na místech, která jsou veřejně přístupná (viz DIN EN 60335-2-40, oddíl 3.119). Zařízení je navrženo jen pro stacionární provoz.

BG Охладителното устройство е предназначено само за охлаждане на кутии и шкафове както и за професионална употреба съгласно DIN EN 61000-3-2. Интегрираното решение VX25 Blue e+ е предназначено само за компоненти на комутационна апаратура и тяхното охлаждане в допустимия диапазон на работна температура, както и за професионална употреба съгласно DIN EN 61000-3-2. Не се разрешава всякаква друга употреба. Уредът не трябва да се монтира и работи в местата, които са достъпни за широката общественост (виж DIN EN 60335-2-40, параграф 3.119). Уредът е предназначен единствено за стационарна употреба.

GR Η μονάδα ψύξης προορίζεται αποκλειστικά για ψύξη κλειστούς πίνακες ελέγχου καθώς και για επαγγελματική χρήση σύμφωνα με το DIN EN 61000-3-2. Η λύση ενσωμάτωσης VX25 Blue e+ προορίζεται αποκλειστικά για την εγκατάσταση εξαρτημάτων πινάκων και την ψύξη τους στο επιτρεπόμενο εύρος θερμοκρασίας λειτουργίας καθώς και για επαγγελματική χρήση σύμφωνα με το DIN EN 61000-3-2. Οποιαδήποτε άλλη χρήση δεν επιτρέπεται. Δεν επιτρέπεται η εγκατάσταση και η λειτουργία της συσκευής σε σημεία, τα οποία είναι προσβάσιμες στο ευρύ κοινό (δείτε DIN EN 60335-2-40, σημείο 3.119). Η συσκευή έχει σχεδιαστεί αποκλειστικά για στατική χρήση.

RO Climatizorul este conceput doar pentru racirea dulapurilor inchise precum si pentru o utilizare industriala conform normelor DIN EN 61000-3-2. Soluția integrată VX25 Blue e+ este destinată exclusiv acomodării si climatizării de componente ale instalațiilor de comandă în intervalul de temperatură de utilizare admis, precum și pentru uz profesional conform DIN EN 61000-3-2. Orice alta utilizare nu este permisa. Unitatea nu trebuie instalata si folosita in locatii la care are acces publicul larg. (vezi DIN EN 60335-2-40, paragraf 3.119). Unitatea este proiectata doar pentru utilizare stationara.

HU A hűtőberendezés kizárólag zárt kapcsoló- és vezérlőszekrények hűtésére, valamint a DIN EN 61000-3-2 szabvánnyal összhangban történő professzionális alkalmazásra használható. Minden más alkalmazás tilos. A VX25 Blue e+ integrált megoldás kizárólag kapcsolószekrény-komponensek beépítésére és azok hűtésére szolgál a megengedett üzemi hőmérsékleti tartományban, valamint professzionális felhasználásra a DIN EN 61000-3-2 szerint. A berendezést tilos olyan helyre telepíteni és üzemeltetni, amely szabadon hozzáférhető laikusok számára (lásd DIN EN 60335-2-40, 3.119 bekezdés). A berendezést kizárólag fixen telepítve és álló helyzetben szabad telepíteni és üzemeltetni.

LT Vėsinimo agregatas skirtas tik uždaro tipo skydų vėsinimui, taip pat profesionaliam naudojimui pagal DIN EN 61000-3-2. Bet koks kitas naudojimas yra draudžiamas. „VX25 Blue e+“ integravimo sprendimas skirtas tik komutacinių įrenginių komponentų montavimui ir jų aušinimui leistiname darbinės temperatūros diapazone bei profesionaliam naudojimui pagal DIN EN 61000-3-2. Agregatas negali būti



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sumontuojamas ir eksplatuojamas viešai prieinamose vietose (pagal DIN EN 60335-2-40, punktas 3.119). Prietaisas skirtas tik stacionariam naudojimui.

EE Jahutusseadmed on ettenähtud ainult kinniste kilpide jahutamiseks ja professionaalseks kasutamiseks vastavalt standardile DIN EN 61000-3-2. VX25 Blue e+ integratsioonilahendus on ette nähtud ainult lülitiseadmete komponentide paigaldamiseks ja nende jahutamiseks lubatud kasutustemperatuurivahemikus ning professionaalseks kasutamiseks standardi DIN EN 61000-3-2 järgi. Muu laadne kasutus ei ole lubatud. Seadmete kasutus üldkasutatavates ruumides ei ole lubatud (vaata DIN EN 60335-2.40, § 3.119). Seade on ettenähtud ainult statsionaarseks paigalduseks.

LV Dzesēšanas bloks paredzēts tikai sadalīnu ar slēgto kontroli dzesēšanai, kā arī profesionālai lietošanai saskaņā ar DIN EN 61000-3-2. VX25 Blue e+ integrācijas risinājums ir paredzēts tikai uzstādīšanai sadales iekārtās un to dzesēšanai atļautajā darba temperatūras diapazonā, kā arī profesionālai lietošanai saskaņā ar DIN EN 61000-3-2. Jebkura cita izmantošana nav atļauta. Iekārtu nedrīkst uzstādīt un izmantot publiski pieejamās vietās (skatīt standarta DIN EN 60335-2-40, paragrāfu 3.119). Iekārta ir izstrādāta tikai stacionārai lietošanai.

SI Hladilna naprava je namenjena samo za hlajenje vrstno povezanih ohišij, kot tudi za profesionalno uporabo skladno z DIN EN 61000-3-2. Integracijska rešitev VX25 Blue e+ je predvidena izključno za vgradnjo komponent stikalnih naprav in njihovo hlajenje v dovoljenem območju delovne temperature ter za strokovno uporabo v skladu s standardom DIN EN 61000-3-2. Vsaka druga uporaba ni dovoljena. Naprava ne sme biti nameščena in delovati na lokaciji ki je dostopna širši javnosti (glej DIN EN 60335-2-40, odstavek 3.119). Naprava je namenjena izključno za stacionarno uporabo.

SK Chladiaca jednotka je určená pre chladienie uzavretých rozvádzačových skríň ako aj iných zariadení, ktoré sú v súlade s normou DIN EN 61000-3-2. Integrované riešenie VX25 Blue e+ je výlučne určené na zabudovanie rozvádzačových komponentov a ich chladienie v povolenom rozsahu prevádzkových teplôt, ako aj na profesionálne použitie v súlade s normou EN 61000-3-2. Iné použitie nie je prípustné. Zariadenie nesmie byť inštalované a používané vo verejne dostupných priestoroch (viď DIN EN 60335-2-40, odstavec 3.119). Zariadenie je určené na stacionárnu prevádzku.

RU Агрегат предназначен исключительно для охлаждения закрытых распределительных шкафов, а также для профессионального использования согл. DIN EN 61000-3-2. Интегрированное решение VX25 Blue e+ предназначено исключительно для установки компонентов НКУ и их охлаждения в допустимом диапазоне температур, а также для профессионального использования согласно DIN EN 61000-3-2. Использование в других целях не соответствует его прямому назначению. Агрегат нельзя устанавливать и эксплуатировать в местах, доступных для посторонних лиц (см. DIN EN 60335-2-40, абзац 3.119). Агрегат предназначен только для стационарного применения.

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1 Notes on documentation

1.1 CE labelling

Rittal GmbH & Co. KG confirms the conformity of the cooling unit with the European Union's Machinery Directive 2006/42/EC and EMC Directive 2014/30/EC.

A corresponding declaration of conformity has been issued and enclosed with the unit. These are the original operating instructions.



1.2 Storing the documents

The assembly and operating instructions as well as all other applicable documents are an integral part of the product. They must be issued to everyone who works with the unit and must always be available and on hand for operating and maintenance personnel.

1.3 Symbols used in these operating instructions

The following symbols are used in this documentation:



Danger!

A dangerous situation in which failure to comply with the instructions will result in death or severe injury.



Warning!

A dangerous situation which may cause death or serious injury if the instructions are not followed.



Caution!

A dangerous situation which may lead to (minor) injuries if the instructions are not followed.



Note:

Important notices and indication of situations which may result in material damage.

- This symbol indicates an "action point" and shows that you should perform an operation or procedure.

1.4 Other applicable documents

Assembly and operating instructions exist as paper documents and/or digital data carriers for the unit types described here and are enclosed with the equipment.

The integration solution also provides the instructions for the VX25 enclosure. These instructions, for example, describe how the mounting plate is removed and the door is dismantled.

We cannot accept any liability for damage associated with failure to observe these instructions. Where applicable, the instructions for any accessories used also apply.

2 Safety notes

2.1 General safety instructions

Please observe the following general safety instructions for the installation and operation of the system:

- Please be sure to observe the applicable regulations governing electrical installations of the country in which the device is installed and operated as well as national regulations for accident prevention. Please also observe any internal company regulations, such as work, operating and safety regulations.
- Use only original Rittal products or products recommended by Rittal in conjunction with the cooling unit.
- Please do not make any changes to the cooling unit that are not described in these operating instructions or other applicable assembly and operating instructions.
- The operational safety of the cooling unit is only warranted if used as intended. The technical specifications and limit values stated must not be exceeded under any circumstances. In particular, this applies to the specified ambient temperature range and IP protection category.
- Operating the cooling unit in direct contact with water, aggressive materials or inflammable gases and vapours is prohibited.
- Other than these general safety instructions, it is also vital to observe the specific safety instructions when carrying out the tasks described in the following chapters.
- Please note the maximum weights that may be lifted by individuals. It may be necessary to use lifting gear.

2.2 Operating and technical staff

- The assembly, installation, commissioning, maintenance and repair of this cooling unit may only be performed by qualified, trained personnel.
- Only properly instructed personnel may operate a cooling unit with the system operational.
- Children and persons with limited cognitive/coordination abilities must **not** operate, maintain or clean the unit or be allowed to use it as a toy.

2.3 Other dangers when using the cooling unit

If the air inlet or outlet of the cooling unit is obstructed, there is a risk of air short-circuits, resulting in inadequate climate control.

- Please ensure that the electronic assemblies in the enclosure are installed in accordance with section 5.3.1 "Assembly instructions".
- Where applicable, use suitable components to divert the air.

3 Product description

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■ Please observe the prescribed minimum distances at the installation site as outlined in section 5.3.1 "Assembly instructions".

There is a risk of cut injuries when working on the unit.

■ Wear personal protective equipment, consisting of at least cut-resistant gloves.

There is a risk of injuries when lifting and transporting the unit.

■ Note the maximum permitted weights that may be lifted by individuals.

■ Lift the roof-mounted cooling unit by two persons or use lifting gear.

■ Lift the integration solution only with suitable lifting gear.

3 Product description

3.1 Functional description and components

3.1.1 Function

There are two separate cooling circuits installed in the cooling unit.

- One conventional refrigerant circuit (compression system), and
- One heat pipe integrated into the condenser and evaporator coil.

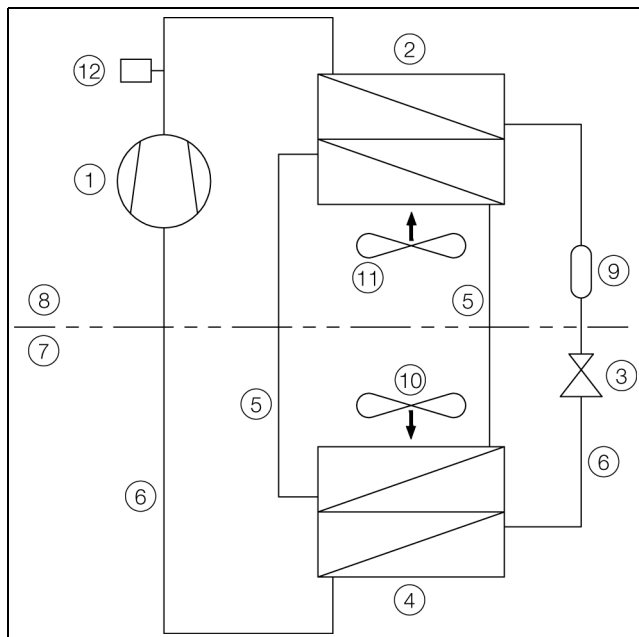


Fig. 1: Cooling circuit

Key

- 1 Compressor
- 2 Condenser (dual version) with fan
- 3 Expansion valve
- 4 Evaporator coil (dual version) with fan
- 5 Refrigerant circuit with heat pipe
- 6 Refrigerant circuit with compression system
- 7 Internal circuit
- 8 External circuit
- 9 Dryer/collector
- 10 Internal fan

- 11 External fan
- 12 PSA^H pressure monitor

In both cooling circuits, the individual components are connected with pipes in which the refrigerant R134a is circulating. This refrigerant is very environmentally friendly, thanks to the following properties:

- Chlorine-free
- Does not deplete the ozone layer (ozone destruction potential ODP = 0)

Refrigerant circuit with compression system

The refrigerant circuit with compression system is comprised of the following four main components:

1. Evaporator coil
2. Compressor
3. Condenser
4. Expansion valve

The evaporator coil fan draws hot air from the enclosure in the internal circuit of the cooling unit and passes it over the evaporator coil. After the evaporator coil, the cooled air is fed back into the enclosure via the outlet opening.

The air is cooled down by evaporating the refrigerant in the evaporator coil. The refrigerant vapour is transported by the compressor in the external circuit of the cooling unit to the condenser. There, the refrigerant condenses and becomes a liquid. The heat produced is dissipated by the condenser fan. The downstream electronic expansion valve reduces the high pressure of the refrigerant, and the refrigerant is then fed back into the evaporator coil.

Both the compressor and the two fans in the cooling unit are activated via an inverter. This makes it possible to control these components, so that the fan and compressor may be activated for a longer time but at a lower output and improved efficiency.

Refrigerant circuit with heat pipe

The additional second refrigerant circuit operates without a compressor, expansion valve or other control elements, and is integrated into the evaporator coil and condenser as a heat pipe.

The refrigerant inside the heat pipe (R134a) absorbs thermal energy from the intake of enclosure air and evaporates. The gaseous refrigerant then rises through the pipeline until it reaches the condenser. The refrigerant is cooled down again in the condenser (provided $T_u < T_i$), and the heat released is emitted into the environment. Gravity then causes the liquid refrigerant to flow back down the pipelines. The whole cycle begins again.

3.1.2 Components Roof-mounted cooling unit Blue e+

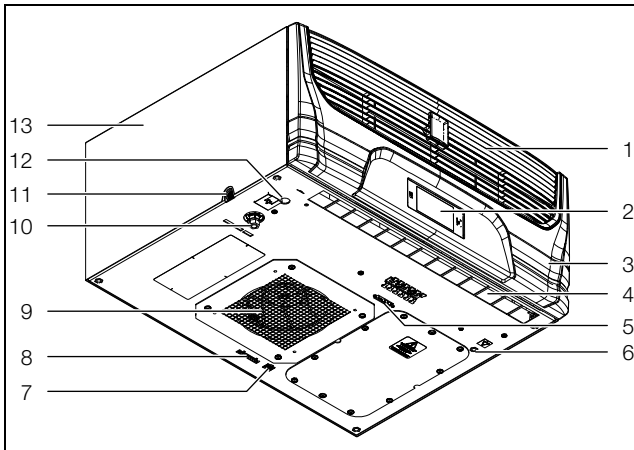


Fig. 2: Main components of roof-mounted cooling unit

Key

- 1 Louvred grille
- 2 Display
- 3 Infill panel
- 4 Air outlet opening (internal circuit)
- 5 Connection for mains connector (X1)
- 6 Connection point for potential equalisation
- 7 Connection for IoT interface (3124.300) (X3)
- 8 Connection for signal connector (X2)
- 9 Air inlet with evaporator fan (internal circuit)
- 10 Condensate water discharge below (closed with a bung)
- 11 Condensate water discharge at the side
- 12 Electrical condensate water evaporation connection point (3355.720 accessory)
- 13 Housing

VX25 Blue e+ integration solution

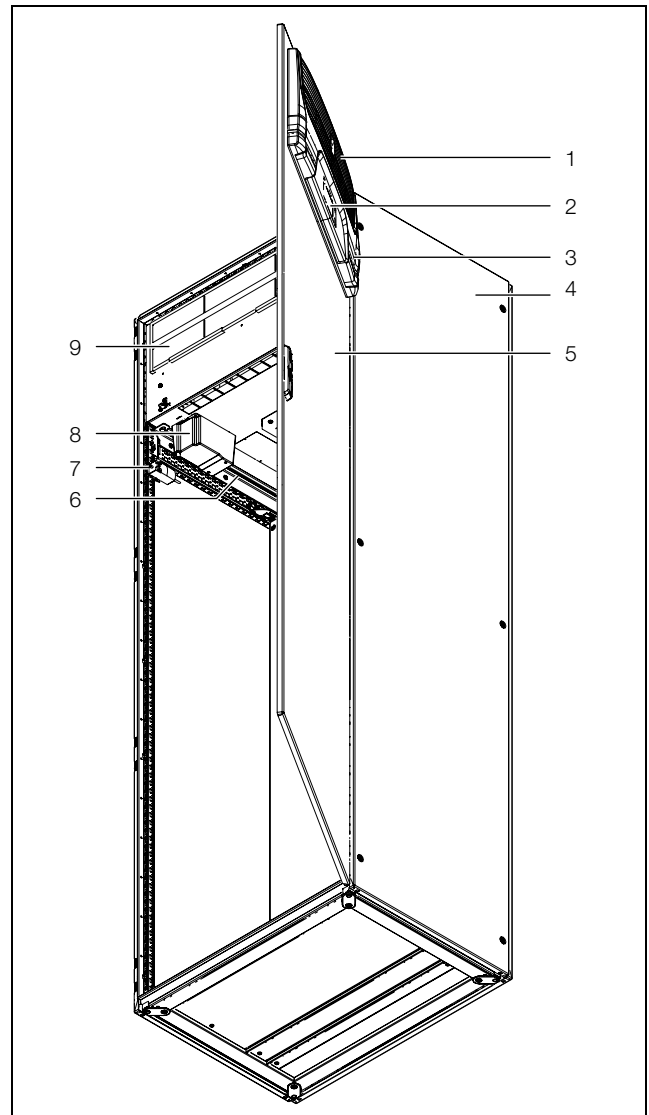


Fig. 3: Main components of integration solution

Key

- 1 Louvred grille
- 2 Display
- 3 Infill panel
- 4 VX25 enclosure
- 5 VX25 enclosure front door
- 6 Cooling unit support rails
- 7 Door limit switch
- 8 Electrical condensate water evaporation
- 9 Blue e+ cooling module

3.1.3 Control

Rittal enclosure cooling units are fitted with a controller for setting the functions of the cooling unit.

Operation using this controller is described in section 7 "Operation".

3.1.4 Safety devices

- In the refrigerant circuit, the cooling units have a type-tested pressure monitor (to EN 12263) which switches off the cooling unit if the maximum admissible pressure is exceeded. Once the pressure drops back be-

3 Product description

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low the admissible pressure, the unit will automatically resume operation.

- Temperature monitoring prevents the evaporator coil from icing over. If there is a risk of icing, the compressor switches itself off and automatically switches itself back on again at higher temperatures.
- The compressor is monitored and protected by the inverter to prevent overloading.
- The fans have a built-in overload protection with automatic reset.
- In order to allow a reduction of pressure inside the compressor and hence a safe restart, once it has been switched off (e.g. upon reaching the set temperature via the door limit switch function or via de-energising), the device will switch back on with a delay of 180 seconds.
- The device has floating contacts on the connection pins on terminals 1 and 3 of the signal connector (X2), via which system messages from the device may be polled, e.g. using a PLC (2 x normally closed or normally open contacts).

3.1.5 Condensation

At high levels of humidity and low temperatures inside the enclosure, condensate water may form on the evaporator coil.



Note:

For the roof-mounted cooling unit, the automatic, electrical condensate water evaporation is **not** installed as standard, but available as accessory.

The cooling module of the integration solution possesses an automatic, electrical condensate water evaporation. The thermal component used for this purpose is based on self-regulating PTC technology. Condensate water arising on the evaporator coil is collected in a tank in the external circuit of the cooling unit, and partially evaporated via the airflow. When the water level rises, the water enters the PTC thermal component and is evaporated (through-flow heater principle). The water vapour streams out of the cooling unit with the airflow from the external fan.

The PTC thermal component is activated automatically when the compressor is running, and continues to run for around 15 minutes after the compressor has been switched off. During the after-run phase, the condenser fan will likewise continue to run at low speed.

In the event of a short-circuit in the PTC component or if there is a risk of inverter overload (possible at high ambient temperatures), the PTC component will be deactivated. This means that any condensate water arising can be discharged via the safety overflow.

If the fuse has tripped, any condensate water is drained off via the safety overflow. The condensate water is discharged at the bottom from the condensate water evaporator with an overflow pipe. The condensate hose in-

cluded with the scope of supply **must** be connected to the condensate water nozzles at this overflow pipe. (see section 5.3.4 "Connect the condensate water discharge").

3.1.6 Filter mats

The entire cooling unit condenser is covered with a dirt-repelling, easy-to-clean RiNano coating. A pleated filter is also installed in the cooling unit. This pleated filter **must** be installed to achieve IP 54 degree of protection.



Note:

Operation without the pleated filter is **not** permitted! Use only original accessories (3285.700).

Depending on the incidence of dust, you will need to replace the pleated filter regularly (see section 8 "Inspection and maintenance").

3.1.7 Door limit switch

The cooling unit may be operated with a floating door limit switch connected. The door limit switch is available as accessory from Rittal.



Note:

The door limit switch is installed in the enclosure and wired with the cooling module as standard for the integration solution.

The door limit switch function causes the fans and the compressor in the cooling unit to gradually slow down and then switch off after approximately 15 seconds when the enclosure door is opened (contacts 5 and 6 closed). This prevents the formation of condensate water inside the enclosure while the enclosure door is open. In order to prevent damage to the unit, it is equipped with an ON delay: The evaporator fan will cut in again after a delay of a few seconds on closure of the door.

Please note that no external voltage may be applied to the door contacts (connection clamps 5 and 6).

3.2 Proper use, foreseeable misuse

The cooling unit is intended exclusively for cooling closed control cabinets as well as for professional use in accordance with DIN EN 61000-3-2. The VX25 Blue e+ integration solution is envisaged only for the installation of switchgear components and their cooling in the permitted operating temperature range as well as for professional use in accordance with DIN EN 61000-3-2. Any other use is not permitted.

- The unit must not be installed and operated in locations which are accessible to the general public (see DIN EN 60335-2-40, paragraph 3.119).
- The unit is designed solely for stationary use.

The cooling unit is state of the art and built according to recognised safety regulations. Nevertheless, improper use can pose a threat to the life and limb of the user or third parties, or result in possible damage to the system and other property.

Consequently, the cooling unit must only be used properly and in a technically sound condition! Any malfunctions which impair safety should be rectified immediately.

Proper use also includes the observance of the documentation provided, and compliance with the inspection and maintenance conditions.

Rittal GmbH & Co. KG is not liable for any damage which may result from failure to comply with the documentation provided. The same applies to failure to comply with the valid documentation for any accessories used.

Inappropriate use may be dangerous. Examples of inappropriate include:

- Use of the cooling unit over long periods with the enclosure open.
- Use of impermissible tools.
- Improper operation.
- Improper rectification of malfunctions.
- Use of accessories not approved by Rittal GmbH & Co. KG.
- Operation in an explosion-risk area.

3.3 Supply includes

3.3.1 Blue e+ roof-mounted cooling unit scope of supply

Qty.	Description
1	Roof-mounted Blue e+ cooling unit, including pleated filter
1	Shipping bag with
1	- Assembly and installation instructions
1	- T-rail
4	- Threaded bolt M8 x 40 mm
4	- Hex nut M8
4	- Washer M8
1	- Signal connector X2
1	- Connector X1
1	- Condensate hose (3 m)
1	- Hose clip
1	- Screw-in nozzles

Tab. 1: Blue e+ roof-mounted cooling unit scope of supply

Qty.	Description
1	- Seal

Tab. 1: Blue e+ roof-mounted cooling unit scope of supply

3.3.2 VX25 Blue e+ integration solution scope of supply

Qty.	Description
1	VX25 Blue e+ integration solution
	Consisting of
1	- VX25 basic enclosure with door, roof, rear panel, side panels, gland plates, mounting plate (1696 x 699 mm)
1	- Integral door-operated switch
1	- Cooling module, 1.30 kW
1	- Electrical condensate evaporator
1	- Pleated filter
1	Shipping bag with
1	- Assembly and installation instructions
1	- Connector X1
1	- VX25 mounting material

Tab. 2: VX25 Blue e+ integration solution scope of supply

4 Transport and handling

4.1 Delivery

The cooling unit is supplied in one packaging unit.

- Check the packaging carefully for signs of damage. Traces of oil on damaged packaging indicate a loss of refrigerant and/or a leak in the cooling unit. Any packaging damage may be the cause of a subsequent functional failure.

4.2 Unpacking

- Remove the packaging materials from the cooling unit.



Note:

After unpacking, the packaging materials must be disposed of in an environmentally friendly way.

- Check the cooling unit for any damage that may have occurred during transport.



Note:

Damage and other faults, e.g. incomplete delivery, should be reported immediately, in writing, to the shipping company and to Rittal GmbH & Co. KG.

4 Transport and handling

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- Check the supply contents for completeness (see section 3.3 "Supply includes").

4.3 Transport

4.3.1 Roof-mounted cooling unit Blue e+

The cooling unit weighs 38 kg. The components in the cooling unit chassis account for the bulk of the weight.



Warning!

Please note the maximum weights that may be lifted by individuals. Lift the cooling unit by two persons or, if necessary, use lifting gear.

An M12 thread provided at the top of the chassis allows a Rittal eyebolt (e.g. for an enclosure) to be screwed in. The cooling unit is readily transported with the aid of lifting gear and an indoor crane.



Note:

An eyebolt with M12 thread may be ordered as an accessory from Rittal (see section 13 "Accessories").



Note:

The roof-mounted cooling unit may be transported only in a horizontal position.

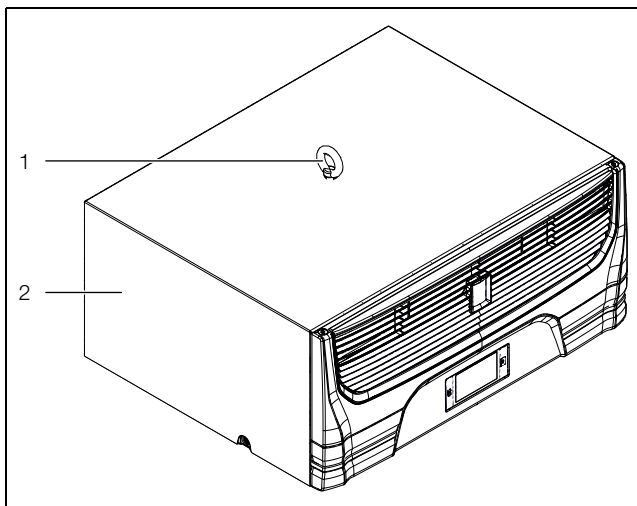


Fig. 4: Eyebolt on top of the chassis

Key

- 1 Eyebolt
- 2 Cooling unit

- Before transporting by crane, please ensure that the lifting gear and crane have sufficient load capacity to transport the cooling unit safely.
- Never allow anyone to stand beneath a suspended load, even for a short time, during transportation by crane.

- Protect the lifting gear on the crane hook from load deflection, because the load's centre of gravity may be off-centre.
- First position the cooling unit close to the installation site and protect from accidentally being knocked over.
- First position the cooling unit close to the installation site.

4.3.2 Integration solution

The integration solution unit weighs 180 kg. The cooling module in the upper area of the enclosure is the major factor for the overall weight. The centre of gravity of the integration solution is also located there, provided no equipment has been installed in the enclosure.



Warning!

Risk of tipping caused by displacement of the centre of gravity. Fasten the lifting gear to the crane hook to prevent the load from moving.



Warning!

Please note the maximum weights that may be lifted by individuals. Always use lifting gear for lifting and transporting the integration solution.

The integration solution must be secured against tipping during transport, assembly and configuration. If a base/plinth system is deployed, during transport, also ensure when raising and lowering that the load is always applied at the base/plinth corner pieces and never at the base/plinth trim panels. The VX 8618.410 shipping brace must be used when parts heavier than 10 kg are mounted in the door!

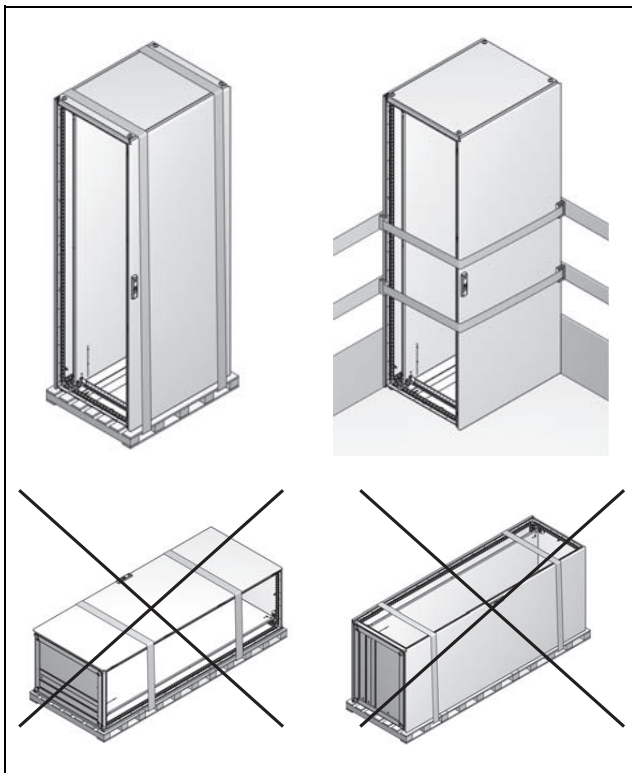


Fig. 5: Permitted and prohibited transport positions of the integration solution

■ Also observe the following details when lifting the integration solution.

∠	90°	45°	60°	
F	13,600 N	4,800 N	6,400 N	Max. 15,000 N

Tab. 3: Brackets and payloads

The integration solution is delivered on a pallet.

- Transport the integration solution still on the pallet using a floor conveyor, preferably a fork lift, to near the final installation location.
- Replace the four fastening screws of the roof plate with the appropriate eyebolts with M12 thread.

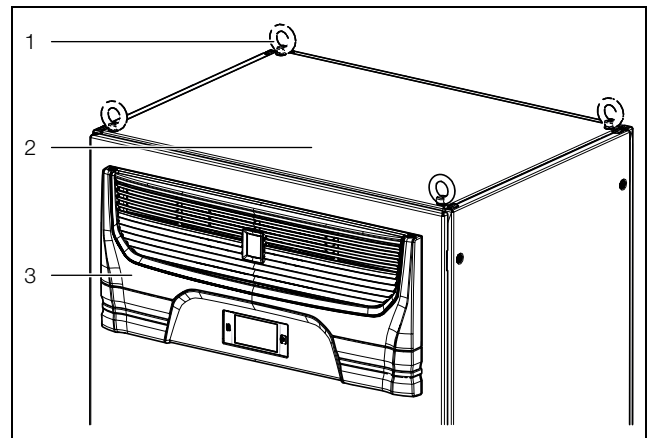


Fig. 6: Eyebolts at the top of the enclosure

Key

- 1 Eyebolts (4x)
- 2 Enclosure
- 3 Cooling module

- Before transporting with a crane, ensure that the lifting gear and the crane have sufficient load capacity to transport the integration solution safely.
- Never allow anyone to stand beneath a suspended load, even for a short time, during transportation by crane.
- Protect the lifting gear on the crane hook from load deflection, because the load's centre of gravity may be off-centre.
- Place the integration solution at its final installation location.

5 Installation

5.1 Safety instructions



Warning!

Please note the maximum weights that may be lifted by individuals. It may be necessary to use lifting gear.



Warning!

Work on electrical systems or equipment may only be carried out by an electrician or by trained personnel under the guidance and supervision of an electrician. All work must be carried out in accordance with electrical engineering regulations.

The cooling unit may only be connected after the aforementioned personnel have read this information!

Use only insulated tools.

Follow the connection regulations of the appropriate electrical supply company.

The cooling unit must be connected to the mains via an all-pole disconnecting device to overvoltage category III (IEC 61058).

The cooling unit is not de-energised until all of the voltage sources have been disconnected!

- Please be sure to observe the applicable regulations governing electrical installations of the country in which the device is installed and operated, as well as national regulations for accident prevention. Please also observe any internal company regulations, such as work, operating and safety regulations.
- The technical specifications and limit values stated must not be exceeded under any circumstances. In particular, this applies to the specified ambient temperature range and IP protection category.

5.2 Siting location requirements

When choosing the installation location, observe the following notes:

- The installation location, and hence the arrangement of the cooling unit, must be chosen to ensure good ventilation (the separation between cooling units and the clearance to the wall must be at least 200 mm in each case, and 500 mm from the louvred grille).
- The cooling unit must be installed and operated in a horizontal position (maximum deviation: 2°).
- The installation site must be free from excessive dirt, aggressive ambient conditions and moisture.
- The ambient temperature must be within the limits specified on the rating plate.
- It must be possible to fit a condensate water discharge (see section 5.3.4 "Connect the condensate water discharge").

- The mains connection data as stated on the rating plate of the cooling unit must be guaranteed.

Size of installation room

- **Units SK 3185730 and SK 3185730** must not be installed in rooms of less than 3 m³.

Electromagnetic interference (EMI)

- Interfering electrical installations (high frequency) must be avoided.
- Signal cables must be laid separately from live cables.

5.3 Assembly procedure

5.3.1 Assembly instructions

- Before mounting the roof-mounted cooling unit, ensure that the enclosure is sealed on all sides (IP 54). Increased condensate water occurs if the enclosure is not airtight when it is put into operation later.
- If necessary, also mount on the enclosure, on which the roof-mounted cooling unit is to be mounted, a door limit switch (e.g. 4127.010) that switches off the cooling unit when the enclosure door opens and so prevents an increased condensate water accumulation (see section 3.1.7 "Door limit switch"). This is already standard for the integration solution.
- Please ensure that the electronic assemblies in the enclosure allow the even circulation of air.
- Under no circumstances should the air inlet and outlet openings of the cooling unit be obstructed. Only in this way is it possible to ensure that the maximum cooling output is available.
- Please ensure that the cold airflow from the cooling unit is not directed at active components.

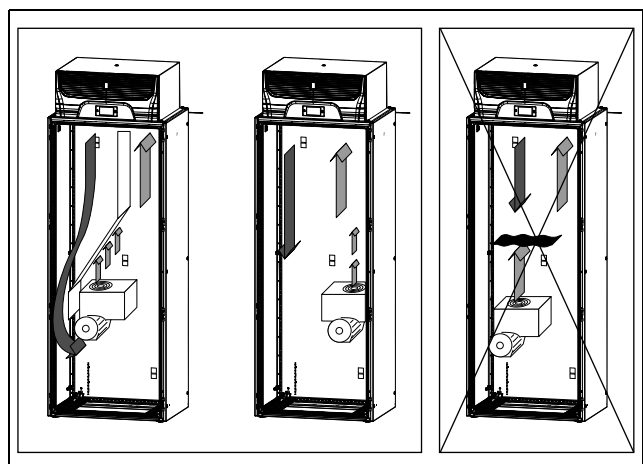


Fig. 7: Never direct the cold airflow at active components (example illustration)

A special baying plate is available as accessory (see section 13 "Accessories") for baying the integration enclosure onto an enclosure taller than 2000 mm. This baying plate covers the opening in the upper area of the integration enclosure so that degree of protection IP 54 is still guaranteed.

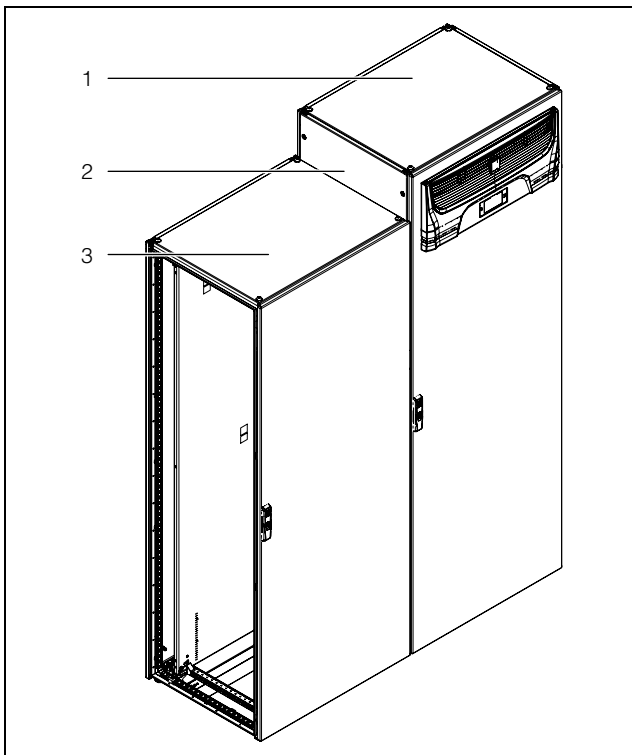


Fig. 8: Bayed integration solution

Key

- 1 Integration solution
- 2 Baying plate
- 3 Bayed enclosure taller than 2000 mm



Note:
If no specific cooling unit is operated on the bayed enclosure, the cooling capacity may not suffice for cooling all installed components.

5.3.2 Make a mounting cut-out in the enclosure



Note:
A mounting cut-out does **not** need to be provided for the integration solution.



Note:
To mount the roof-mounted cooling unit, the roof surface of the enclosure must be at least 800 mm x 600 mm (W x D).

An appropriate mounting cut-out must be provided to mount the roof-mounted cooling unit on the roof of an enclosure.

For this purpose, you must cut the roof plate as specified in the drawing in section 12.1 "Mounting cut-out representation".

- Determine the required dimensions for the mounting cut-out as shown in the representation.

- Remove the roof plate from the enclosure on which the roof-mounted cooling unit should be mounted.
- Drill all the required holes and make the mounting cut-out.
- Carefully deburr all drilled holes and the cut-out to prevent injuries caused by sharp edges.



Caution!
Drilled holes and cut-outs that have not been fully deburred may cause cut injuries, particularly when assembling the cooling unit.

- Remount the roof plate onto the enclosure.

5.3.3 Mounting of the roof-mounted cooling unit



Note:
A further mounting does **not** need to be provided for the integration solution.

- Affix the supplied sealing frame onto the cut out roof plate.
- Mount the cooling unit on the enclosure roof.

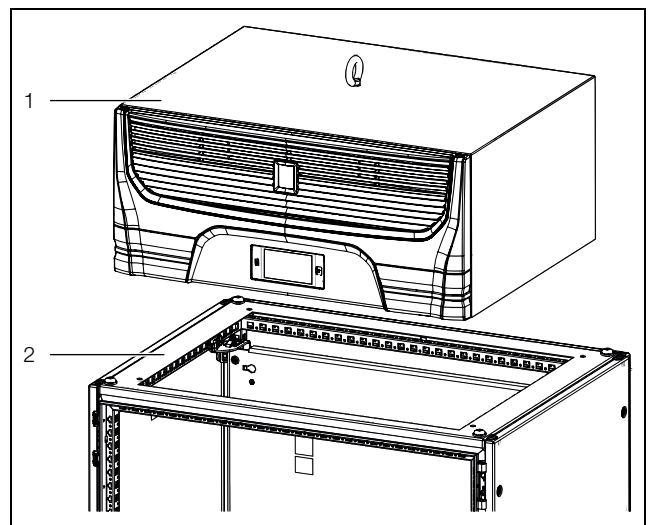


Fig. 9: Attaching the cooling unit to the roof plate

Key

- 1 Cooling unit
- 2 Roof plate with mounting cut-out

- Screw the supplied twin-threaded bolts into the core holes in the plastic base on the underside of the cooling unit with a maximum of 5 Nm.
- Secure the unit using the supplied washers and nuts.



Note:
In order to achieve a permanent seal between the cooling unit and the enclosure, the mounting surface should be reinforced or supported if necessary. This is particularly applicable with large roof areas.

5 Installation

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Accessories for roof plate reinforcement with VX25 system

- Punched section with mounting flange, 18 x 64 mm, for VX

5.3.4 Connect the condensate water discharge



Caution!

Before commissioning, ensure that the condensate management is installed, as described in this section. The correct functioning must be checked regularly for maintenance of the final application (see section 8 "Inspection and maintenance").

For the integration solution, a condensate water evaporator is mounted at the bottom of the cooling module. With an enclosure connected, this condensate water evaporator may typically evaporate condensate water volumes of up to 100 ml/h. For the roof-mounted cooling unit, the condensate water evaporator can also be installed subsequently as accessory (3355.720).

General notes for routing the condensate water discharge hose

- The hose must be laid with an adequate and constant gradient to prevent siphoning.
- The hose must be laid without any kinks.
- If extended, the cross-section of the hose must not be reduced.
- The hose should be routed to a drain or external condensate water evaporator by the customer.

Roof-mounted cooling unit Blue e+

You can attach the supplied condensate water discharge hose (L=3 m, Ø 1/2") to the roof-mounted cooling unit. For this purpose, two connection points are provided on the cooling unit.

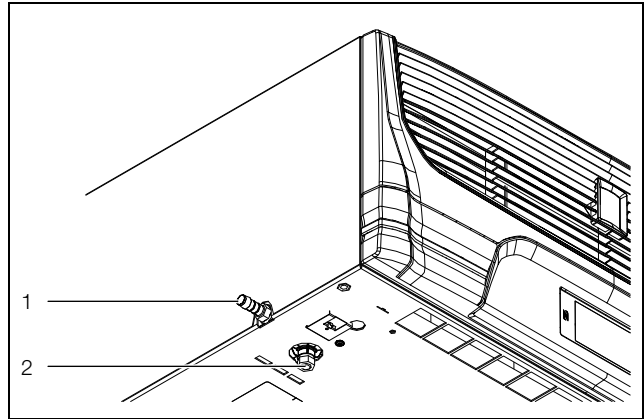


Fig. 10: Connection for the condensate water discharge hose

Key

- 1 Connection point on the side of the unit (here with screw-in grommet)
- 2 Connection point at the bottom of the unit (closed with a bung)

Proceed as follows when you want to use the side connection point of the unit:

- Screw the supplied screw-in grommet into the side connection point.
- Then place the supplied condensate hose onto the screw-in grommet and secure it with the hose clip (also supplied).
- Lay the hose as per the instructions above.

Proceed as follows when you want to use the bottom connection point on the unit:

- Unscrew the bung from the bottom connection point.
- Close with this bung the side connection point of the unit so that condensate water cannot discharge there.
- Screw the supplied screw-in grommet into the bottom connection point.
- Then place the supplied condensate hose onto the screw-in grommet and secure it with the hose clip (also supplied).
- Lay the hose as per the instructions above.



Note:

If you **must** use the bottom connection point of the unit, connect the supplied condensate hose there. Otherwise, condensate can escape uncontrolled from the cooling unit and cause an electrical short-circuit or fire in the enclosure.

VX25 Blue e+ Integration solution

A condensate evaporator is installed as standard for the integration solution. A factory-mounted hose at the bottom of the condensate evaporator discharges any resulting condensate water without pressure from the cooling module.

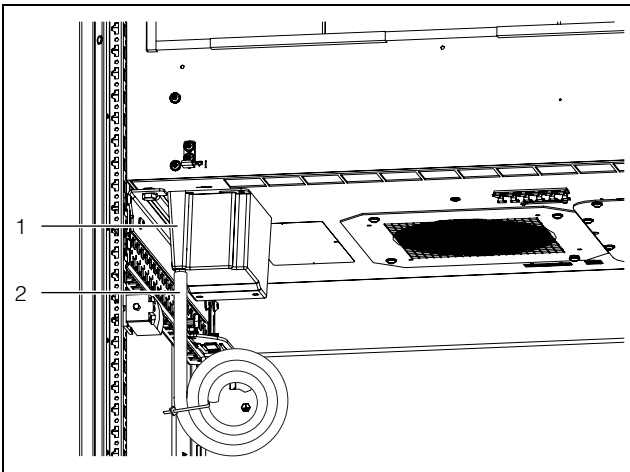


Fig. 11: Condensate water discharge hose on the condensate evaporator

Key

- 1 Condensate evaporator
- 2 Condensate water discharge hose at the bottom of the condensate evaporator (emergency discharge)



Note:

Under no circumstances may the condensate hose be removed from the condensate evaporator.

- When the integration solution is located on the VX base/plinth system available as accessory: route the discharge hose downwards in accordance with the above-mentioned notes through the base from the enclosure (fig. 12).

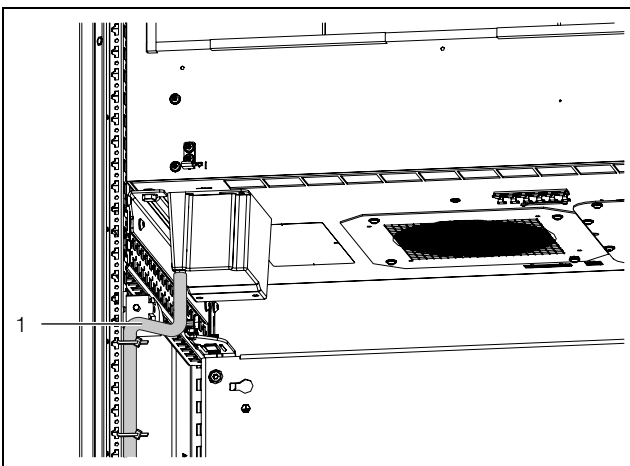


Fig. 12: Laying the hose (sample representation)

Key

- 1 Hose with cable ties on the enclosure frame

As an alternative or when the integration solution is not placed in the base/plinth system, route the hose outwards through the side panel of the enclosure.

- Drill a hole (\varnothing 20.5 mm) at an appropriate location in the side panel.

- Place the supplied grommet in this hole to provide the enclosure degree of protection.
- Then route the hose from the enclosure through the grommet in accordance with the above-mentioned notes.

5.4 Electrical connection

5.4.1 Notes on electrical installation

- When carrying out the electrical installation, it is important to observe all valid national and regional regulations as well as the provisions of the responsible power supply company.
 - Electrical installation must only be carried out by a qualified electrician who is responsible for compliance with the existing standards and regulations.
 - All cables routed into the wiring compartment have to be insulated for the maximum voltage of the power supply.

Connection data

- The connected voltage and frequency must correspond to the ranges stated on the rating plate. The units support multiple voltages.
- The cooling unit must be connected to the mains via an all-pole disconnect to overvoltage category III (IEC 61058-1).
- No additional temperature control may be connected upstream of the unit at the supply end
- To ensure the proper functioning of internal safety devices in the event of a malfunction, a line fuse not less than 15 A and of type "Slow (Time Delay CCMR)" or one of the following UL-listed circuit-breakers (DIVQ/7) is required:
 - 3RV2711-4AD10 by SIEMENS (E235044) rated 15 A
 - FAZ-C15/3-NA by EATON (E235139) Class curve C rated 15 A
 - FAZ-D15/3-NA by EATON Class curve D rated 15 A
- If a motor circuit-breaker or circuit-breaker is used, it should be selected in accordance with EN 60898-1 (tripping characteristic type D).
- Low-noise potential equalisation must be guaranteed with the mains connection.

Overvoltage protection and supply line load

- The unit does not have its own overvoltage protection. Measures must be taken at the supply end by the switchgear manufacturer or operator to ensure effective protection against lightning and overvoltage.
- The units are classified as overvoltage category III. The mains voltage must not deviate by more than the tolerance specified in section 10 "Technical specifications".
- The discharge current may exceed 3.5 mA.

5 Installation

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- The units are high-voltage tested ex works. An additional high voltage test must only be carried out with a DC voltage supply source (1500 VDC max.).
- If the combined output of the frequency converters, power converters or transformers in the network where the device is being operated is >70 kVA, the customer must connect a Class II surge voltage protector in the mains supply line upstream of the cooling unit. The surge voltage protector must be designed to EN 61800 -1. The following values may be assumed as starting-points for the design:

Transformers, power electronics	Assumed discharge energy
70 kVA...100 kVA	40 J
100 kVA...200 kVA	80 J
200 kVA...400 kVA	160 J
400 kVA...800 kVA	320 J

Tab. 4: Design of the surge voltage protector

Three-phase devices

- There is no need to observe a counterclockwise or clockwise phase rotation when making the electrical connection for inverter devices in the three-phase version. The electronics incorporated into the devices automatically create the required phase rotation.
- In three-phase devices, the absence of a phase is detected, and the device is switched off.
- Outgoing equipment is monitored by the inverter, and deactivated in the event of a malfunction in the electricity supply.

Door limit switch



Note:

The door limit switch is installed in the enclosure as standard for the integration solution. Consequently, the following description applies only to the Blue e+ roof-mounted cooling unit.

- Each door limit switch can only be assigned to one cooling unit.
- Several door limit switches may be operated in parallel with one cooling unit.
- The minimum cross-section for the connection cable is 0.3 mm² for a cable length of 2 m.
- The line resistance to the door limit switch must not exceed a maximum of 50 Ω.
- The maximum admissible line length is 10 m.
- The door limit switch only supports a floating connection; no external voltages.
- The contact of the door limit switch must be closed when the door is open.

- The safety extra-low voltage for the door limit switch is provided by the internal power pack: Current approx. 5 mA DC.

■ Connect the door limit switch to terminals 5 and 6 of the signal connector.

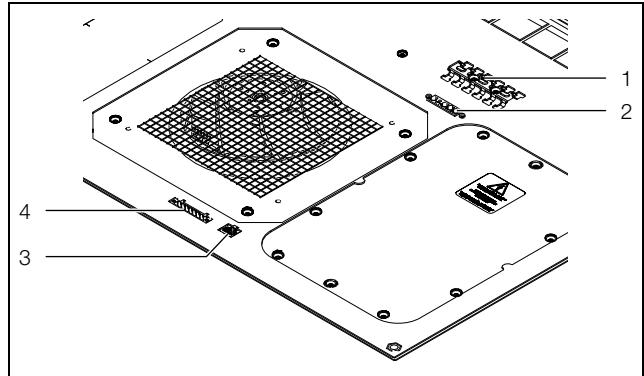


Fig. 13: Fasteners at the bottom of the roof-mounted cooling unit

Key

- 1 T-rail for strain relief
- 2 Connection for mains connector (X1)
- 3 Connection for IoT interface 3124.300 (X3)
- 4 Connection for signal connector (X2)

Potential equalisation

If, for EMC reasons, the unit is to be integrated into the customer's existing potential equalisation system, a conductor may be connected to the potential equalisation connection point. The connection point is labelled with the required switch symbol.

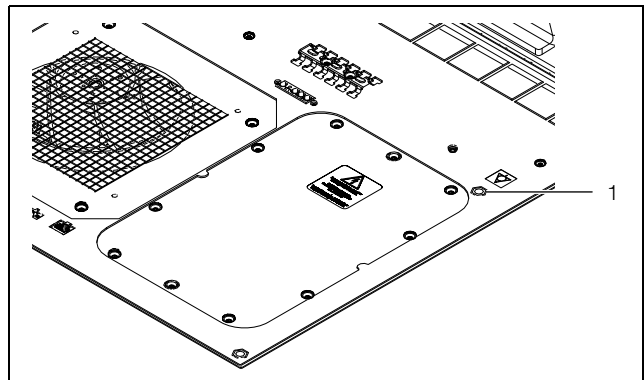


Fig. 14: Connection point for potential equalisation

Key

- 1 Connection point M6

■ Attach the potential equalisation to the unit's connection point using the screw, washer and contact washer.

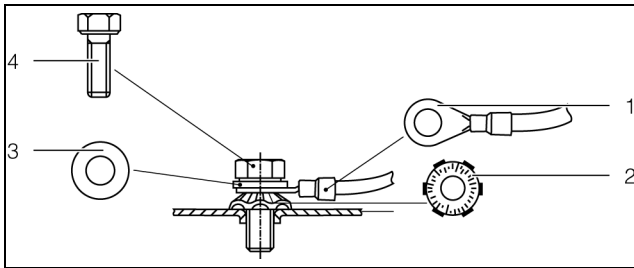


Fig. 15: Potential equalisation arrangement

Key

- 1 Ring terminal with PE conductor
- 2 Contact washer
- 3 Washer
- 4 Screw



Note:
According to the standard, the PE conductor in the mains connection cable is not classed as an equipotential bonding conductor.



Note:
The enclosure of the integration solution or the enclosure on which the cooling unit is mounted must be grounded.

5.4.2 Install the power supply



- Note:**
- The mains supply must be shielded with EMC preferred type to achieve the values demanded by the standard.
 - The cable shield can make contact with the T-rail (fig. 13, item 1).

- Remove the mains connector from the dispatch bag and connect to the mains as shown on the connection diagram (fig. 16 or fig. 17).

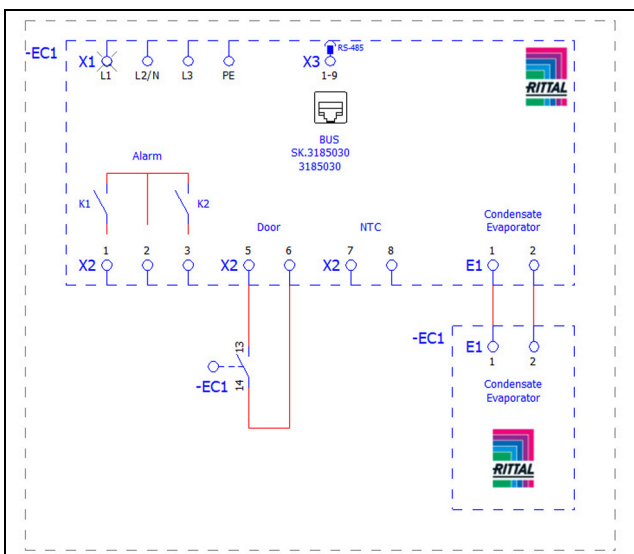


Fig. 16: Circuit diagram 3185030

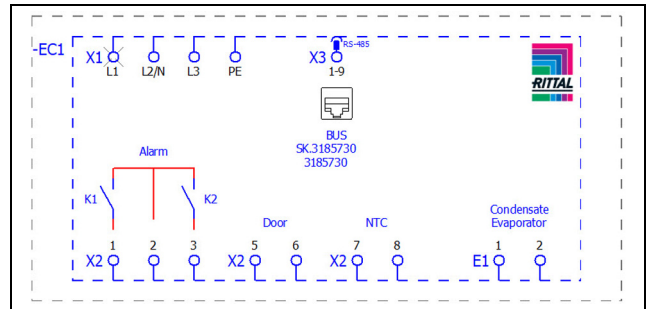


Fig. 17: Circuit diagram 3185730

Key

- X1 Main terminal strip
- K1 Relay collective fault 1
- K2 Relay collective fault 2
- Door Door limit switch (optional for 3185730, without door limit switch: terminal 5, 6 open)
- NTC External temperature sensor (optional)
- X3 RS 485 interface for IoT Interface (3124.300)

Create a strain relief

- For the roof-mounted cooling unit, take the T-rail from the dispatch bag and attach it to the connection unit. The T-rail is already pre-installed for the integration solution.
- Then establish the strain relief on the T-rail using cable ties.

5.4.3 Connect the alarm relays

System messages from the cooling unit may be output to an external signal source via two floating relay outputs.



Note:
The factory setting of the relay outputs in their de-energised state is NO (Normally Open).

- Connect a suitable connection cable to the connection terminals 1 (Alarm K1) and/or 3 (Alarm K2) of the signal connector (X2).
- Configure the alarm relays you wish to use to output error messages (see section 7.4.3 "Alarm relays").

AC
cos φ = 1

I max. = 2 A
U max. = 250 V

Tab. 5: Contact data

5.4.4 Interfaces

The cooling unit has the following interfaces for communicating with external systems:

- Micro-USB interface on the front
- RS 485 interface at the bottom

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Micro-USB interface

A micro-USB interface is located on the front, to the right of the display. A tablet or laptop may be connected here for easy configuration of the unit.

- Connect a tablet or laptop with installed RiDiag III software to the micro-USB interface.

No other USB devices will be detected on this connection.

RS 485 interface

An RS 485 interface is located at the bottom of the cooling unit. The IoT interface (3124.300) for linking the cooling unit to the customer's own monitoring, energy management and/or superordinate systems may be connected here.

- Connect the the IoT interface (accessory) to the RS 485 interface (X3).



Note:

A direct connection to the cooling unit via the RS 485 interface is not possible.

6 Commissioning



Note:

The oil must collect in the compressor in order to ensure adequate lubrication and cooling. For this reason, do not operate the cooling unit for at least 30 minutes after assembling the equipment.

- Observe the aforementioned waiting period of at least 30 minutes before commissioning the unit after assembly.

■ Next, switch on the voltage supply to the cooling unit. The Rittal logo will initially appear on the display, followed a short time later by the start screen.

- You can now make your individual settings on the unit, e.g. set the temperature or assign the network identifier, etc. (refer to chapter 7 "Operation").



Note:

It is **not** necessary to carry out leak or pressure tests on the cooling unit prior to commissioning. Rittal has already done this in the factory.

7 Operation

7.1 General

The cooling unit is equipped with a touch function display for making basic settings and displaying error messages. This is an industrial-grade touch display which is pressure-sensitive and may therefore be operated with gloves.

As well as operating directly on the cooling unit itself, there is also a smartphone app available. This offers al-

most the same functions as the actual display, and additionally provides extended explanations of error messages, as well as the option of contacting the Rittal Service team directly.



Note:

- Install other languages using the RiDiag software or an online tool, available on the Rittal website, to enable the use of all the following functions.

7.2 Layout of the display

The display is divided into a top section on a dark background, and a bottom section with the menu bar. This layout is always identical, but the content of the two sections will vary according to the menu selected.

7.2.1 Start screen

The start screen is always displayed while the cooling unit is in normal operation, provided there are no error messages.



Fig. 18: Layout of the start screen

Key

Item	Description	Possible icons
1	Internal temperature display (2-digit °C/3-digit °F)	Numbers from 0-9
2	EER scale: Range 0...20 / current average EER value of the last 24 hours	EER
3	Ti scale: Range 20 ...60 / value: Average enclosure internal temperature of the last 24 hours	
4	Display temperature unit	°C °F
5	USB connection (if connected)	
6	Self-test (if initiated)	

Tab. 6: List of all icons with descriptions

Item	Description	Possible icons
7	NFC connection (max. 120 seconds after connecting)	
8	Type of cooling	
9	Control based on ...	
10	External sensor	
11	Information menu	
12	System messages (where applicable)	
13	Service icon (if required)	
14	Configuration	

Tab. 6: List of all icons with descriptions

Type of cooling

The current form of cooling is indicated by one of the following four icons.

Symbol	Parameters
	Cooling in compressor mode without support from the heat pipe
	Cooling in compressor mode with support from the heat pipe
	Cooling via the heat pipe only
	No cooling

Tab. 7: Possible icons for the current type of cooling

7.2.2 Changing a parameter value

If a parameter value is changed, the display including the menu bar will also change.

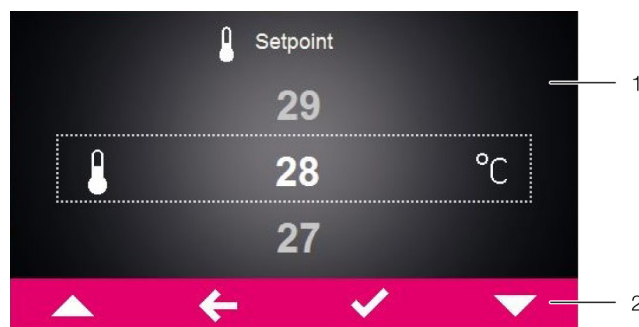


Fig. 19: Screen for changing a parameter value

Key

- 1 Main screen
- 2 Control bar

The currently selected parameter value is displayed in the centre of the main screen. To change this value, you always proceed in the same way, as described below with the example of adjusting the set temperature:

- On the start screen, click on the "Configuration" button.
- Enter the PIN to gain access to the lower-level screen pages of the "Configuration" zone.
"22" is the default PIN.
- Click on the "Temperature" symbol.
- Click on the "Control mode" symbol.
- Select your preferred control mode from the display.
- Change the setting to the required temperature using the "Up" and "Down" arrows.
- Alternatively, you can also select the one of the displayed higher or lower values directly.
- Finally, confirm the set value with "OK".
- Exit this screen page with the "Back" button.

7.3 Information menu

- Click on the "Information" symbol to display a list of lower-level screen pages.



Symbol	Parameters
	Temperature info
	Device info
	Efficiency info

Tab. 8: "Information" zone

7.3.1 Temperature information

- Click on the "Temperature information" symbol.
The ambient temperature and internal temperature are displayed, in each case as an average for the last 24 hours of operation.

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Symbol	Parameter
	ØTU 24h Average ambient temperature (external temperature) over the last 24 hours of operation.
	ØTI 24h Average internal temperature over the last 24 hours of operation.

Tab. 9: "Temperature information" zone

7.3.2 Device information

- Click on the "Device information" symbol.
A list of general information about the device will be displayed.
- Page through the list using the "Up" and "Down" arrows.


Symbol	Parameter
	Serial number
	Manufacture date YYYY-MM-DD
	Hardware Release x.xx.xx
	Firmware Release x.xx.xx
	Software Release x.xx.xx
	Last update YYYY-MM-DD
	Last maintenance YYYY-MM-DD
	User device name Name assigned to the cooling unit by the customer. This title can be assigned using the RiDiag software or the Blue e+ app to distinguish between individual units.
	Act. control mode
	If the unit is configured as a "slave": Slave number.

Tab. 10: "Device information" zone

7.3.3 Efficiency information

- Click on the "Efficiency information" symbol.

The average energy efficiency ratio (EER) for the last 24 hours of operation will be displayed. The energy efficiency ratio is the ratio of the cooling output generated to the electrical power used.

Symbol	Parameter
	Average EER 24h Average energy efficiency ratio (EER) of the last 24 hours of operation.

Tab. 11: "Efficiency information" zone







7.4 Configuration menu

- Click on the "Configuration" symbol.
A screen page will appear asking you to enter the PIN in order to access the lower-level screen pages.



Note:
"22" is preset in the factory as the default PIN.




- For the first digit, page through the digits "0" to "9" using the "Up" and "Down" arrows until the required digit appears in the box.
 - Confirm your selection with "OK".
 - For the second digit, once again page through the digits "0" to "9" using the "Up" and "Down" arrows until the required digit appears in the box.
 - Confirm your selection with "OK".
- A list of lower-level screen pages will be displayed.

Symbol	Parameter
	Temperature Settings for set temperature and control mode
	Network Display of network information from the IoT interface (3124300)
	Alarm relay Settings for the alarm relays.
	Filter mats
	Display language Choice of language for display texts.
	Self-test Perform a self-test.

Tab. 12: "Configuration" zone

7.4.1 Temperature

- Click on the "Temperature" symbol to display a list of lower-level screen pages.

Symbol	Parameter
	Change unit Set the unit "°C" or "°F"
	Control mode
	Alarm threshold Temperature limit which will trigger an alarm message if exceeded.

Tab. 13: "Temperature" zone

Change unit

All temperature values for the unit may be displayed either in degrees Celsius "°C" or degrees Fahrenheit "°F".

- Click on the "Change unit" symbol.
- Change the required unit ("°C" or "°F") using the "Up" or "Down" arrows.
- Confirm your entry with "OK".

Control mode

The cooling unit controls cooling output according to one of the following three temperature values:

- **Inside temp.:** The temperature at which air is drawn out of the enclosure into the cooling unit.
- **External sensor:** The temperature measured with an external temperature sensor at a so-called hot spot in the enclosure.
- **Outlet temp.:** The temperature measured with an external temperature sensor at the cold air outlet from the cooling unit.

Control mode "external sensor"

Please observe the following when selecting the sensor position: The sensor must **not**

- be influenced directly by the cold air expelled from the cooling unit,
- be influenced by external heat sources or heat radiation,
- be exposed to humidity,
- have its connection cable laid in the vicinity of AC cables,
- be exposed to different temperature levels within the first 10 cm of the connection cable.

The sensor **must**

- be located within the effective range of the cooling unit,
- be surrounded by adequate moving air which has blended well with the air expelled by the cooling unit,
- be at an adequate distance from solid and liquid substances.

Control mode "outlet temperature"

- Attach the temperature sensor in front of the cold air outlet from the cooling unit, in the centre (fig. 20).

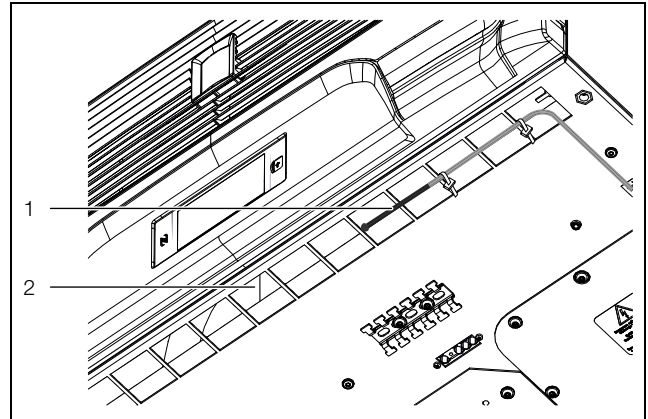


Fig. 20: Temperature sensor in front of cold air outlet

Key

- 1 Temperature sensor
- 2 Cold air discharge at the bottom of the unit



Note:

The sensor element must not be in contact with the enclosure.






Note:

To ensure the accuracy of the outlet temperature, at least 50% of the total cooling output should be installed as heat loss. The output can be taken from the characteristic curve for this unit.

Selecting a control mode

- Click on the "Control mode" symbol.
The setpoint for the currently set control mode is displayed.
- Choose your preferred control mode by selecting it from the display:

Symbol	Parameter	Setpoint	Factory setting
	Internal temperature	20 °C (68 °F)	35 °C (95 °F)
		... 50 °C (122 °F)	
	External sensor		
	Outlet temperature	18 °C (64 °F)	24 °C (75 °F)
		... 28 °C (82 °F)	

Tab. 14: "Control mode" zone

The corresponding symbol for the chosen control mode is likewise displayed on the overview page.

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Note:

The external temperature sensor is available as accessory from Rittal (see section 13 "Accessories").

- Change the setpoint using the "Up" and "Down" arrows or select the required temperature directly.
- Confirm your entry with "OK".

Alarm threshold

This limit is used for an alarm message. The set value must therefore be above the actual setpoint to which the cooling unit has been set.

For example:

- Setpoint: 35 °C (95 °F)
- Alarm limit min.: 38 °C (100 °F)
- Alarm limit max.: 50 °C (122 °F)

Symbol	Parameter	Alarm limit	Factory setting
	Internal temperature	3 K...15 K	5 K
	External sensor		
	Outlet temperature	12 K...24 K	14 K

Tab. 15: Alarm limit

- Click on the "Alarm limit" symbol.
- Change the setpoint using the "Up" and "Down" arrows or select the required temperature directly.
- Confirm your entry with "OK".



Note:

In "external sensor" and "outlet temperature" control mode, the cooling unit additionally monitors the temperature of the air as it is drawn in. If the set alarm limit seems likely to be exceeded (e.g. due to a rise in heat loss), the cooling output is increased for the duration of the threatened overtemperature, and the setpoint is undercut.

Example of "outlet temperature" control mode:

- Setpoint: 24 °C (75 °F)
- Alarm limit: 38 °C (100 °F)

Current situation:

- Temperature of air intake: 37 °C (< alarm limit)
- Temperature of expelled air: 24 °C (= setpoint)

If the alarm limit is exceeded:

- Temperature of air intake: 39 °C (> alarm limit)
- Temperature of expelled air: 22 °C (< setpoint)

If the alarm limit is subsequently undercut due to an increase in the cooling output:

- Temperature of air intake: 37 °C (< alarm limit)
- Temperature of expelled air: 24 °C (= setpoint)

7.4.2 Network

- Click on the "Network" symbol to display a list of lower-level screen pages.

Symbol	Parameter
	Network on/off
	Network info

Tab. 16: "Network" zone

Network on/off

Here, you can activate / deactivate data communication to the IoT interface. Data communication is activated by default.

- Click on the "Network on/off" symbol.
- Select your preferred setting by selecting it from the display.
- Confirm your entry with "OK".

Symbol	Parameter
	Network off
	Network on

Tab. 17: Data communication settings

Network info

Get IP information about how the IoT interface is incorporated into the network.

- Click on the "Network info" symbol to display a list of lower-level screen pages.

Symbol	Parameter
	IPv4
	IPv6

Tab. 18: Select the protocol version

IPv4

- Click on the "IPv4" symbol.
A list of general information about the IPv4 settings will be displayed.
- Page through the list using the "Up" and "Down" arrows.

Parameter	Setting
DHCP	off/on
IP address	xxx.xxx.xxx.xxx
Network mask	xxx.xxx.xxx.xxx
Router address	xxx.xxx.xxx.xxx

Tab. 19: IPv4 settings

IPv6

- Click on the "IPv6" symbol.
A list of general information about the IPv6 settings will be displayed.
- Page through the list using the "Up" and "Down" arrows.
- Click on the desired entries to display the IPv6 addresses.


Parameter	Setting
DHCP	off/on
IP address 1	...
IP address 2	...
Auto address	...
Link-local addr.	...

Tab. 20: IPv6 settings


7.4.3 Alarm relays

There are two floating relay outputs in the connection box on the rear of the unit, which may be used to output system messages from the cooling unit to an external signal source (see section 5.4.3 "Connect the alarm relays"). The relay outputs may be configured here.

- Click on the "Alarm relay" symbol to display a list of lower-level screen pages.

Symbol	Parameter
	Switch NO/NC Switch the alarm relay as a normally closed or normally open contact.

Tab. 21: "Alarm relay" zone

Symbol	Parameter
	Function list Allocation of a function to the respective alarm relay.

Tab. 21: "Alarm relay" zone





Note:

For the factory setting of alarm relay allocation see section 7.6 "List of system messages" (Tab. 25).

Switch NO/NC

The switch logic of the relay output, i.e. whether it is to be used as a normally closed or normally open contact, may be set here.

- Click on the "Switch NO/NC" symbol.
- Choose your preferred switch logic by selecting it from the display.
- Confirm your entry with "OK".

Symbol	Parameters
	Normally open Switch the alarm relay as a normally open contact.
	Normally closed Switch the alarm relay as a normally closed contact.

Tab. 22: Switch logic of the alarm relay




Note:

The factory setting of the relay outputs in their de-energised state is NO (Normally Open).


List of functions

This is where you specify which error messages should lead to switching of the respective relay output.

- Click on the "Relay 1" or "Relay 2" symbol, and select the alarm relay to which you wish to assign a function.
- From the list of errors, select the function which should cause the previously selected relay output to switch.
- If applicable, assign further functions to the relay output, and the output will then be switch if **at least one** of the assigned functions leads to an error message.
- Confirm your entry with "OK".
- If applicable, configure the other relay output with other functions.

Symbol	Parameter
	Assign relay 1



Tab. 23: List of functions

Symbol	Parameter
	Assign relay 2

Tab. 23: List of functions

7.4.4 Filter mats

- Click on the "Filter mat" symbol to display a list of lower-level screen pages.

Symbol	Parameter
	Filter reference
	Alarm tolerance

Tab. 24: "Filter mat" zone

Filter reference

Here the device may be set permanently to operation with filter mats.

- Click on the "Filter reference" symbol.
- Click on the "New filter mat" symbol.
- Confirm your entry with "OK".

If the device has already been set to operation with filter mats, by clicking on the menu point "New filter mat", the adjacent system message "Change filter mat" may be reset.



Note:

This message is also reset automatically as soon as the device identifies an improved air throughput in the external circuit thanks to the use of a new filter mat. Assessment of the air throughput only occurs when using the compression system at constant speed, and takes a few minutes.

Alarm tolerance

Here, the alarm tolerance may be set to one of five levels, or filter mat monitoring deactivated. If the set alarm tolerance is exceeded, the system message "Change filter" appears in the display.

Example:

- Setpoint: 35 °C (95 °F)
- External temperature: 20 °C (68 °F)

If an alarm tolerance level of "medium" is selected, the system will tolerate an impairment to the air throughput in the external circuit of approximately 35% before the system message "Change filter" appears in the display.

- Click on the "Alarm tolerance" symbol.
- Change the alarm tolerance ("very small" – "very large"), or deactivate filter monitoring using the "Up" or "Down" arrows.
- Alternatively, select the required level directly (factory setting: "Medium" level).
- Confirm your entry with "OK".



Note:

The more the air throughput in the external circuit is impaired, the lower the maximum cooling output and energy efficiency of the cooling unit will be.

The following diagram illustrates the development of cooling output depending on the air throughput in the external circuit and the alarm limit (fig. 21).

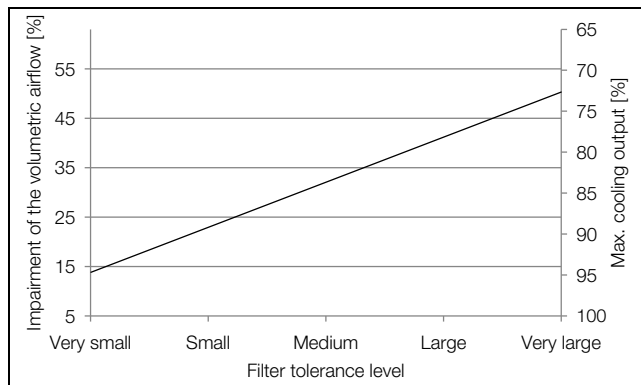


Fig. 21: Sample cooling output development



Note:

- If filter mat monitoring is deactivated ("Deactivate" level), it is still possible to select a filter tolerance level. If the limit is exceeded, the system message "Clean condenser" appears in the display instead of "Change filter".
- If filter mat monitoring is deactivated and no filter tolerance level is selected, no system message will be output.

7.4.5 Language settings

All displays on the unit are available in 21 different languages.

- Click on the "Display language" symbol.
- Page through to the required language using the "Up" and "Down" arrows.
- Confirm the chosen language with "OK".

The language will change over immediately, and all menu displays will appear in the chosen language.

7.4.6 Self-test

In the event of a malfunction in the unit which fails to produce an error message, it may be useful to check the key functions of all components with a self-test. You

may continue to operate the unit as normal while the self-test is being carried out.

- Click on the "Self-test" symbol.
- Confirm the start of the self-test with "OK".

While the self-test is being carried out, a progress indicator will appear on the display. Once the test is complete, either the message "Unit OK" or "Check error" will be displayed.

- If applicable, use the error list to determine which malfunction applies.

7.5 System messages

We distinguish between three different types of system messages on the unit:

- Malfunctions ⚠
- Errors ⚠
- Servicing 🛠

If a corresponding message applies, the "System messages" symbol is displayed in the menu bar (fig. 18, item 13). A list of all possible system messages may be found in section 7.6 "List of system messages".

- Click on the "System messages" symbol.

A list of all active system messages will be displayed. The individual messages are arranged in ascending order as they occur according to the above three categories.

If an error message can only be resolved by the Rittal Service team, the "Service" symbol Ⓢ will additionally appear after the error message.

- In such cases, please contact Rittal Service (see section 14 "Customer service addresses").

7.5.1 Occurrence of a malfunction

In the event of a malfunction, the start screen will be superimposed with an error message.

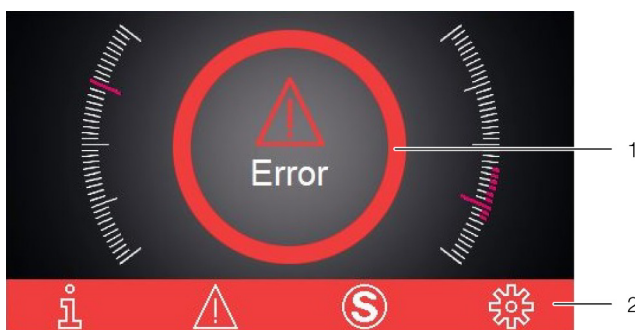


Fig. 22: Screen in the event of a malfunction

Key

- 1 Superimposed
- 2 Menu bar in red

The start screen is superimposed with a message in the following three cases:

1. There is a malfunction on the unit itself.
2. There is a malfunction on one of the units in the master-slave combination.
3. The enclosure door is open and a connected door contact is emitting a corresponding message.

If the malfunctions cannot be resolved by the operator himself, the Service symbol will additionally be displayed (fig. 18, item 14).

- Contact the Rittal Service team if you are unable to resolve the malfunction yourself (see section 14 "Customer service addresses").

7.5.2 Display in case of errors

If errors have occurred or servicing is required, the "System messages" symbol will appear in the menu bar (see section 7.5 "System messages").

Most system messages are reset automatically once the fault has been resolved.

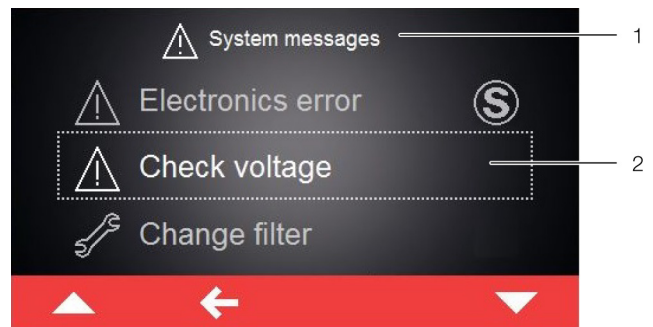


Fig. 23: Screen showing error messages

Key

- 1 "Errors" menu
- 2 Error message

If an error message applies that cannot be resolved by the operator himself and which is not reset automatically, the "Service" symbol will appear after the error message and in the control bar next to the symbol for system messages (fig. 24, item 2).

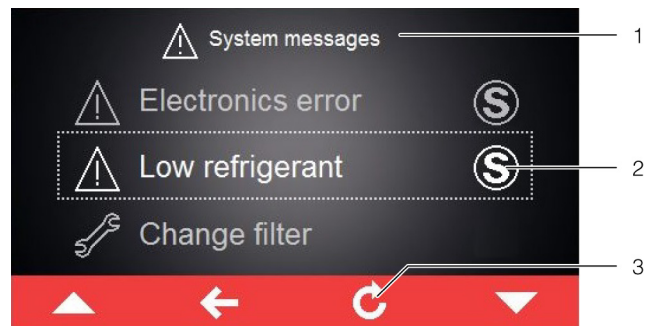


Fig. 24: Screen showing error messages

Key

- 1 "Errors" menu
- 2 Error message
- 3 "Return" button

- Contact Rittal Service (see section 14 "Customer service addresses").

- Acknowledge the error message by pressing the "Return" button.

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7.6 List of system messages













The applicable error messages are displayed with the corresponding symbol in the Errors list (see section 7.5

"System messages"). Extended information for resolving individual faults may be found in this section.

Contact details for the Rittal Service team can be found in section 14 "Customer service addresses".

System message	Alarm relay output (factory setting)	Troubleshooting measures/solutions
Door open 	–	Please close the enclosure door and check the door contact switch. The error message will terminate automatically approximately 30 seconds after it has been resolved.
Int.temp too high 	–	The measured interior temperature exceeds the set alarm limit for your cooling unit. Please check any maintenance and error messages, and check the rating of your cooling unit. For any further questions, please contact Rittal Service directly.
Change filter 	–	The filter mat in your cooling unit is dirty. Please replace or clean the filter mat and confirm this by pressing reset in the list of system messages on the cooling unit display.
Clean condenser 	–	The condenser in your cooling unit is dirty. Please remove the top louvred grille and clean the heat exchanger, e.g. using compressed air. The error message will terminate automatically approximately 30 seconds after it has been resolved.
Ext. air circuit 	1	The air inlet or outlet in the external circuit is blocked. Please remove the blockage and ensure that minimum distances from the air inlet or outlet are observed.
Int. air circuit 	–	The air inlet or outlet in the internal circuit is blocked. Please remove the blockage and ensure that minimum distances from the air inlet or outlet to components inside the enclosure are observed.
Exp. valve defect 	–	A malfunction has been detected in the electronic expansion valve. Please contact your Rittal Service.
Ext.temp too high 	–	Your cooling unit is being operated outside of the admissible ambient temperature. Please ensure that the ambient temperature does not exceed the admissible range (-20 °C...+60 °C).
Low refrigerant 	2	Your cooling unit is reporting a lack of cooling in the active refrigerant cycle. Please contact the Rittal Service team immediately. The system message will need to be acknowledged manually once the cause has been rectified.
Int. fan alarm 1 	1	The fan in the internal circuit of your cooling unit is blocked. Please check if you can see a blockage and remove it. If no blockage is visible, please replace the fan in the internal circuit. The required spare part may be ordered directly from Rittal using the Blue e+ app. Please use the contact form "Generate service order".




Tab. 25: Error messages

System message	Alarm relay output (factory setting)	Troubleshooting measures/solutions
Int. fan alarm 2 	1	The fan in the internal circuit of your cooling unit is defective. Please replace the fan in the internal circuit. The required spare part may be ordered directly from Rittal using the Blue e+ app. Please use the contact form "Generate malfunction report".
Ext. fan alarm 1 	1	The fan in the external circuit of your cooling unit is blocked. Please check if you can see a blockage and remove it. If no blockage is visible, please replace the fan in the external circuit. The required spare part may be ordered directly from Rittal using the Blue e+ app. Please use the contact form "Generate service order".
Ext. fan alarm 2 	1	The fan in the external circuit of your cooling unit is defective. Please replace the fan in the external circuit. The required spare part may be ordered directly from Rittal using the Blue e+ app. Please use the contact form "Prepare malfunction report".
Inverter cooler 	–	The cooling body of the inverter in your cooling unit is dirty. Please remove the filter grille and the cover at the front and clean the cooling body, e.g. using compressed air. The error message will terminate automatically approximately 30 seconds after it has been resolved.
Compressor defect 	2	The compressor in your cooling unit is reporting a malfunction. Please contact the Rittal Service team immediately.
Sensor xx defect 	1	Sensor xx in your cooling unit is reporting a sensor failure. Please contact the Rittal Service team.
Ext.sens. missing 	1	The external sensor is not connected or has a malfunction. Please check the connection or select another control mode.
Check voltage 	1	You are operating your cooling unit outside of the admissible voltage ranges. Please check the power supply to the cooling unit and observe the specifications on the rating plate. With a three-phase infeed, please also check that all three phases are correctly connected.
Electronics error 	2	The electronics in your cooling unit are reporting an electronic fault. Please contact the Rittal Service team.
Check parameters 	–	Due to an error, the cooling unit has been reset to the factory defaults. Please check the current messages or contact your Rittal Service team.
Inverter fault 	2	The inverter in your cooling unit is reporting a malfunction. Please contact the Rittal Service team.
Alarm mode active 	–	Due to a previous error your cooling unit is only operating with a performance of 50%. Please remedy this error and/or contact your Rittal Service team.

Tab. 25: Error messages

7 Operation

EN

System message	Alarm relay output (factory setting)	Troubleshooting measures/solutions
Compressor phase 	2	The compressor in your cooling unit is reporting a malfunction. Please contact your Rittal Service team.
Overload 	1	Please check the rating of your cooling unit. For any further questions, please contact your Rittal Service team directly.
Alarm act.cooling 	–	The active cooling function of your unit is defective. Please contact the Rittal Service team immediately, and/or check the rating of your cooling unit.

Tab. 25: Error messages

8 Inspection and maintenance

8.1 Safety instructions for maintenance work

The unit must be opened in order to carry out maintenance work. There is a risk of injury from electric shock.

- Switch off the power supply before carrying out maintenance work.
- Secure the power supply to prevent it being switched back on accidentally.
- Disconnect the electrical connection cable of the cooling unit from the power supply.
- Wait at least five minutes before handling the unit. Only then will the capacitors built into the unit have discharged themselves.
- When handling the enclosure, be aware of any exposed power sources, where applicable.
- If possible, disconnect the entire enclosure from the power.

There is also a risk of injury from sharp edges, such as the louvres of the heat exchanger.

- Wear cut-resistant gloves for all maintenance work. After removing the cover, there is a risk of burn injuries from hot surfaces on the components inside the unit.
- Before carrying out any work on the interior of the unit, allow it to cool down for at least ten minutes.

8.2 Notes on the refrigerant circuit

The cooling unit is filled with the amount of refrigerant required at the factory, checked for leaks, and subjected to a functional test run. The refrigerant circuit is designed in the form of a maintenance-free, hermetically sealed system. For this reason, the operator should not carry out any maintenance work on the refrigerant circuit.



Caution!

Maintenance tasks on the refrigerant circuit must only be undertaken by a qualified refrigeration specialist.

8.3 Maintenance work on the cooling unit



Note:

The maintenance intervals given below depend to a large extent on the level of contamination in the ambient air. For heavily contaminated air, the maintenance intervals will be reduced accordingly.

8.3.1 Cleaning the cooling unit

- Clean the exterior of the cooling unit at least every 5000-8000 operating hours.
- Any stubborn, oily stains may additionally be removed using a non-flammable detergent, such as degreaser.



Caution!

Never use flammable liquids for cleaning the unit.

8.3.2 Replacing the pleated filter



Caution!

There is the risk of being cut by the louvres when the pleated filter is replaced. Wear cut-resistant gloves.

The pleated filter must be replaced regularly.

- At the top of the louvred grille labelled "Torx 30", turn the fasteners at the left and right to the "Open" position.

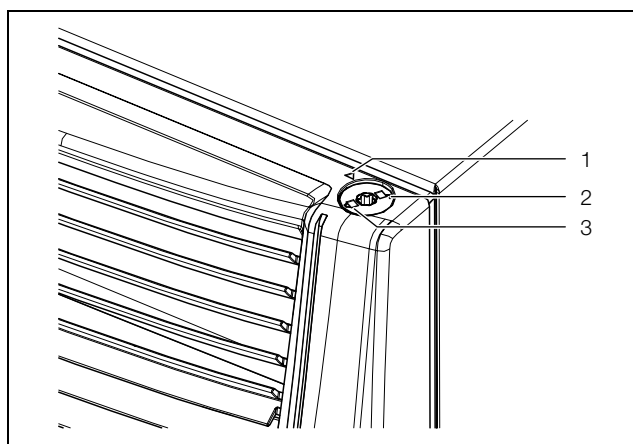


Fig. 25: Open a fastener

Key

- 1 Position display
- 2 "Open" symbol
- 3 "Closed" symbol

- Extend the louvred grille.

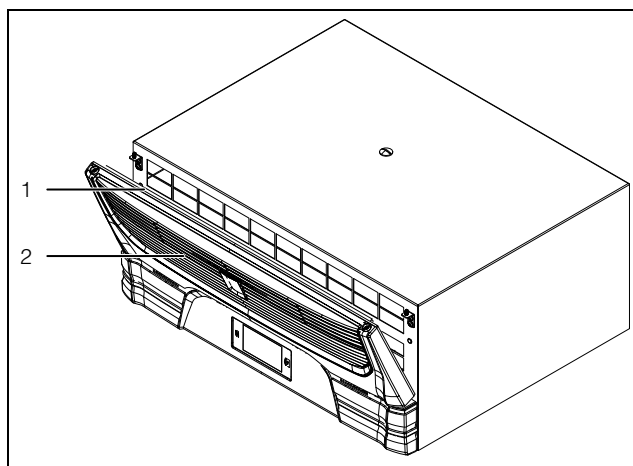


Fig. 26: Extending the louvred grille

Key

- 1 Pleated filter at the rear of the louvred grille
- 2 Louvred grille

- Remove the pleated filter at the rear of the louvred grille.

9 Storage and disposal

EN

- Place the new pleated filter (3285.700) at the rear of the louvred grille.
- Extend the louvred grille to the rear and at the top of the louvred grille labelled "Torx 30", turn the fasteners at the left and right to the "Closed" position.

8.3.3 Maintenance of the fans

The installed maintenance-free fans are mounted on ball bearings, protected against moisture and dust, and fitted with a temperature monitor.

- Rittal recommends that the cooling unit fans should be checked e.g. for unusual running noises after around 40,000 operating hours.

8.4 For the integration solution, remove the cooling module

For service purposes and for its replacement, the cooling module can be removed completely from the integration solution.



Warning!

When removing the cooling module from the integration solution, there is the risk of tipping caused by the centre of gravity being moved forwards.

- First, disconnect all electrical connection cables from the cooling unit.
- Loosen each of the two fastening screws on the left and right (fig. 27, item 2) used to secure the cooling unit onto the support rails.

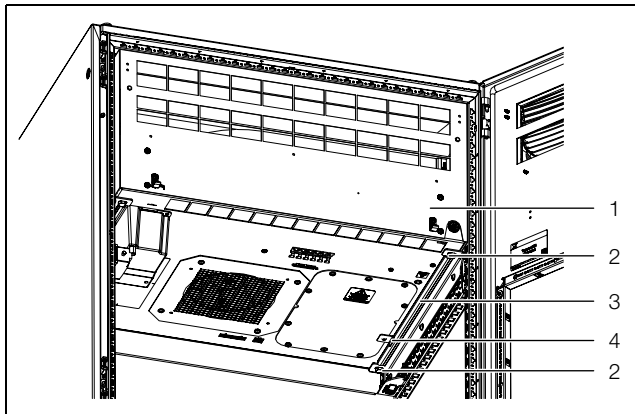


Fig. 27: Cooling unit fastening

Key

- 1 Cooling unit
- 2 Fastening screws (4x)
- 3 Support rail
- 4 Limit stop

- Pull the cooling unit forwards to the limit stop.
- Mount an eyebolt centred at the top of the cooling unit (fig. 4).
- Secure the cooling unit with lifting gear and crane.
- Ensure that no persons are standing under a suspended load, even briefly, during crane transportation.

- Fasten the lifting gear to the crane hook to prevent the load from moving because the centre of gravity of the load can be eccentric.
- Finally, loosen the limit stop below the unit so you can move the unit completely from the enclosure forwards.

9 Storage and disposal



Note:

When storing the cooling unit, please observe the temperature range given in the technical specifications.

- Store the cooling unit in the appropriate position for transport.

The closed refrigerant circuit contains refrigerant and oil which must be properly disposed of for the sake of the environment. Facilities for disposal are available at the Rittal plant or a specialist company. Give us a call (see section 14 "Customer service addresses").

10 Technical specifications

Technical specifications		SK 3185030	SK 3185730
General specifications			
Model number		SK 3185030	SK 3185730
Dimensions (width x height x depth) [mm]		800 x 2200 x 600	700 x 308 x 560
Cooling output			
Total cooling output P_c to EN 14511 [kW]	L35 L35	1.30	
	L35 L50	0.60	
Sensible cooling capacity P_c to EN 14511 [kW]	L35 L35	1.30	
Power consumption P_{el} to EN 14511 [kW]	L35 L35	0.67	
	L35 L50	0.61	
Energy efficiency ratio (EER)	L35 L35	2.04	
Electrical specifications			
Rated voltage [V, ~], tolerance	+10%/-10%	110...240, 1	
	+5%/-15%	380...480, 3	
Rated frequency [Hz]		50/60	
Rated insulation voltage U_i [V]		500	
Rated input [kW]		0.75	
Rating of over current protective device [A]		≥15	
Minimum circuit ampacity [A]		15	
Input ampere range [A]		6.8@110 V – 1.2@380 V	
Pre-fuse T [A]	EN 61439	≥16	
	UL 508A*	≥15	
SCCR [kA]		5*	
Cable cross-section [mm ²]	EN 61439	≥1.5	
	UL 508A	≥2.1 or ≤14 AWG	
Overvoltage category		III	
Level of contamination		III	
Protection category			
IP Rating (for installed pleated filter)		54	
Degree of protection of the enclosure for assembled unit			
IP Rating (for installed pleated filter)		54	
UL Tperating		12	
Electromagnetic compatibility			
Immunity to interference		For industrial areas to EN 61000-6-2	

Tab. 26: Technical specifications

11 List of spare parts

EN

Technical specifications		SK 3185030	SK 3185730
Emitted interference		For residential, business and commercial areas and small companies to EN 61000-6-3	
Refrigerant circuit			
Admissible pressure (PS) HP/LP [MPa]		2.4	
Operating temperature range [°C]		-20...+55	
Heat pipe active mode [°C]		0...+55	
Refrigerant cycle active mode [°C]		+10...+55	
Setting range set value [°C]		+20...+50	
Refrigerant identification		R134a, Tetrafluorethane (CH ₂ FCF ₃)	
Refrigerant filling mass compression system/heat pipe system [g]		390/200	
GWP		1430	
CO ₂ e [t]		0.85	
Other			
Weight [kg]		180	38
Storage temperature range [°C]		-40...+70	
Noise pressure level Lp [dB(A)]		<67	<70

Tab. 26: Technical specifications

* Type of pre-fuse: "Time delay fuse type CCMR" or one of the following UL-listed circuit-breakers (DIVQ/7):

- 3RV2711-4AD10 by SIEMENS (E235044) rated 15 A (SCCR = 65 kA)
- FAZ-C15/3-NA by EATON (E235139) Class curve C rated 15 A (SCCR = 14 kA)
- FAZ-D15/3-NA by EATON Class curve D rated 15 A (SCCR = 14 kA)

11 List of spare parts

Spare parts may be ordered directly from the Rittal website.



Note:

The components used are Rittal-specific components. We recommend using only original Rittal spare parts to ensure the guaranteed unit properties (output).

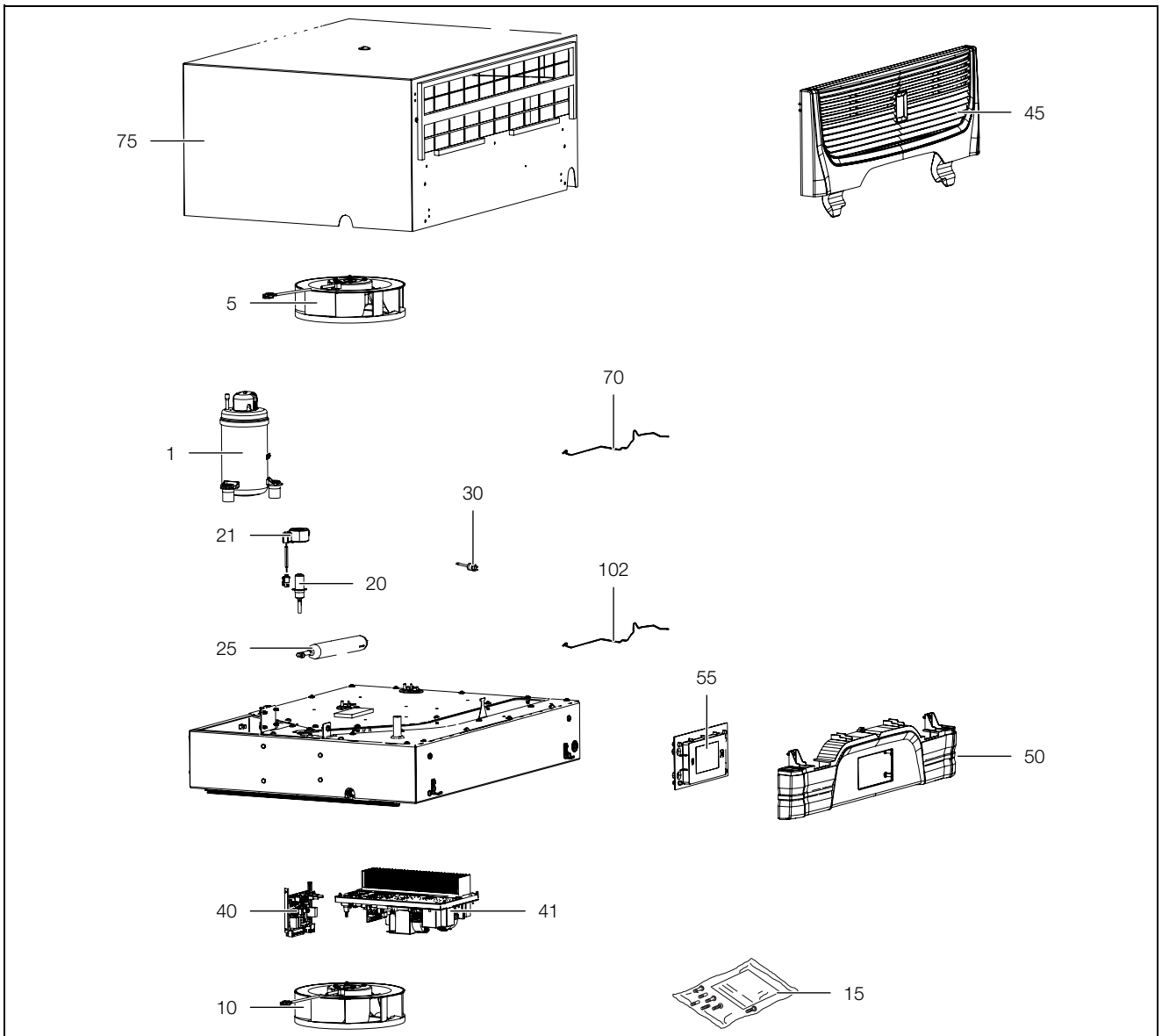


Fig. 28: Spare parts

Key

- 1 Compressor
- 5 Condenser fan
- 10 Evaporator coil fan
- 15 Shipping bag as accessories bag (only for 3185730)
- 20 Expansion valve
- 21 Coil for expansion valve
- 25 Filter dryer
- 30 PSA^H pressure-operated switch as pressostat
- 40 I/O-board
- 41 Inverter
- 45 Louvred grille
- 50 Infill panel
- 55 Display/controller
- 70 Temperature sensor kit
- 75 Cover
- 90 Evaporator coil
- 100 Condenser
- 101 Condensate water evaporator
- 102 Display cable

12 Drawings

12.1 Mounting cut-out representation SK 3185730

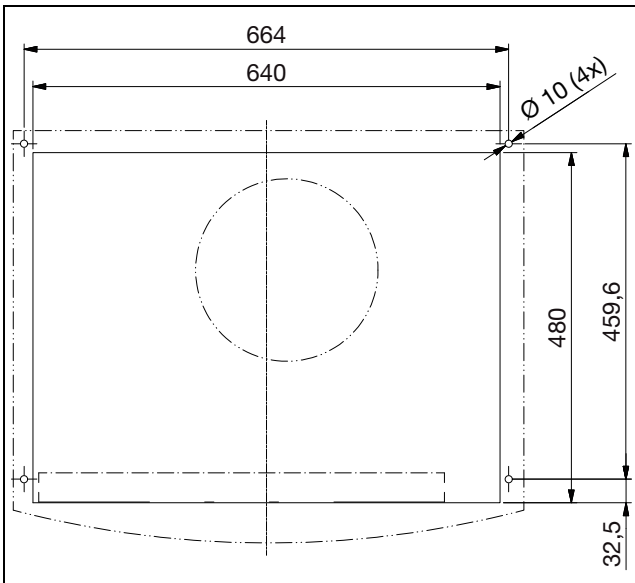


Fig. 29: Mounting cut-out

12.2 Dimensions SK 3185730

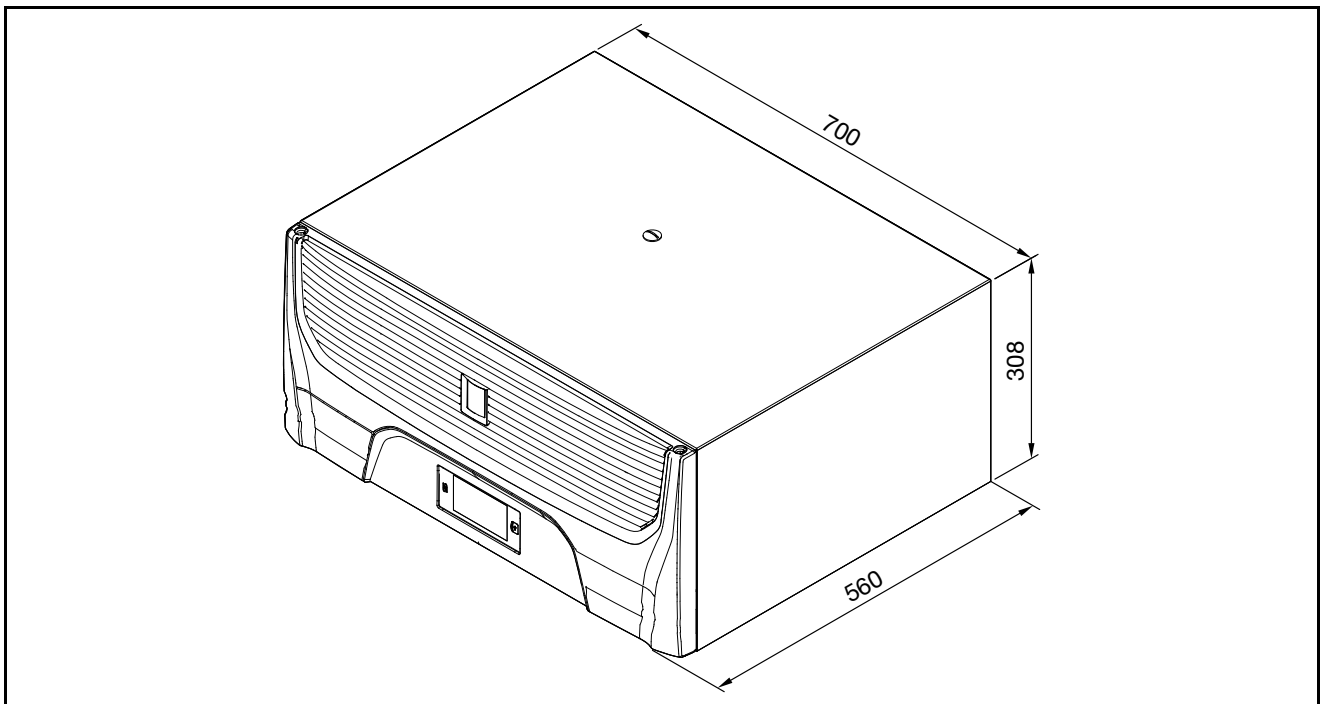


Fig. 30: Dimensions SK 3185730

SK 3185030

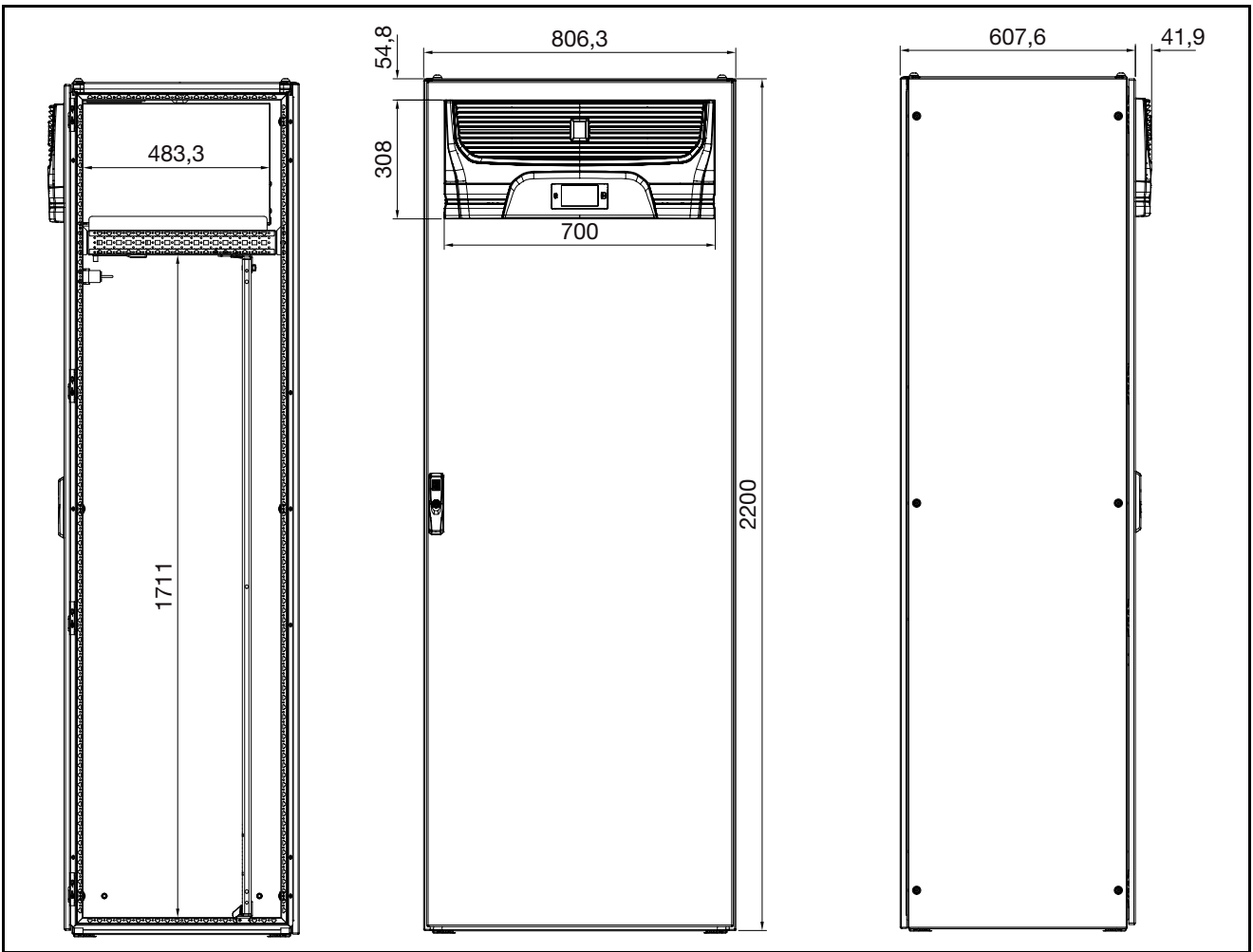


Fig. 31: Dimensions SK 3185030

13 Accessories

As well as the components listed below, a detailed list of the entire range of accessories may be found on the website given in section 14 "Customer service addresses".

Item	Model No.
Door limit switch	SK 4127.010
M12 eyebolt	SK 4568.000
Pleated filter	SK 3285.700
Electrical condensate evaporator for Blue e+ roof-mounted cooling unit	SK 3355.720
External temperature sensor	SK 3124.400
IoT Interface	SK 3124.300
RiDiag III	SK 3159.300
Baying plate for VX25 Blue e+ integration solution	SK 3355.710

Tab. 27: List of accessories

Item	Model No.
Display frame	SK 3355.700

Tab. 27: List of accessories

14 Customer service addresses

EN

14 Customer service addresses

■ For technical queries, please contact:

Phone: +49(0)2772 505-9052

E-mail: info@rittal.com

Homepage: www.rittal.com

■ For complaints or service requests, please contact your local Rittal organisation.

Argentina

Phone: +54 (11) 4760 6660

E-mail: service@rittal.com.ar

Australia

Phone: +61 (2) 95 25 27 66

E-mail: service@rittal.com.au

Austria

Phone: +43 (0) 599 40 -0

E-mail: service@rittal.at

Belarus

■ Please contact Lithuania.

E-mail: service@rittal.lt

Belgium

Phone: +32 (9) 353 91 45

E-mail: service@rittal.be

Bosnia-Herzegovina

■ Please contact the headquarters in Germany.

Phone: +49 (0) 2772 505 1855

E-mail: service@rittal.de

Brazil

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Chile

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■ Please contact Mexico.

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E-mail: service@rittal.hr

Cyprus

■ Please contact the headquarters in Germany.

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E-mail: servis@rittal.cz

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E-mail: info@rittal.dk

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Ecuador

■ Please contact Brazil.

E-mail: service@rittal.com.br

El Salvador

■ Please contact Mexico.

E-mail: servicemx@rittal.com.mx

Estonia

■ Please contact Lithuania.

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E-mail: service@rittal.fi

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E-mail: service@rittal.de

14 Customer service addresses

EN

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Guatemala

■ Please contact Mexico.
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Honduras

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Japan

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E-mail: service@rittal.co.jp

Jordan

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Kazakhstan

■ Please contact Lithuania.
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Latvia

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Lebanon

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14 Customer service addresses

EN

Oman

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Pakistan

■ Please contact Dubai.
E-mail: service@rittal-middle-east.com

Peru

■ Please contact Brazil.
E-mail: service@rittal.com.br

Philippines

■ Please contact Singapore.
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Portugal

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Qatar

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USA

Phone: +1 800-477-4000, option 3
E-mail: rittal@rittal.us

Uzbekistan

■ Please contact Lithuania.
E-mail: service@rittal.lt

Venezuela

■ Please contact Brazil.
E-mail: service@rittal.com.br

Vietnam

■ Please contact Singapore.
E-mail: service@rittal.com.sg

15 Compact service information

EN

15 Compact service information

Step	See	OK/comment
Assembly and connection		
– Installation site requirements taken into account	Section 5.2	
Assembly instructions		
– Observe the relevant assembly instructions	Section 5.3.1	
– Condensate water discharge connected	Section 5.3.4	
– Electrical installation (overvoltage protection, door limit switch)	Section 5.4	
Commissioning		
Check the assembly		
– All attachments checked, filter mat fitted		
Commissioning		
– At least 30 minutes after assembly	Section 6	
– Download the Blue e+ app to support commissioning and subsequent operation		
– Commissioning check carried out via Blue e+ app		
Operation		
– Check the device status during operation using the Blue e+ app		
– Read maintenance instructions and warnings or fault messages using the Blue e+ app		

Tab. 28: Quick installation check

For all other service enquiries:

Original spare parts	Maintenance, warranty extensions (up to 5 years), service contracts
<ul style="list-style-type: none"> – Enquire directly via Blue e+ app – http://www.rittal.com 	<ul style="list-style-type: none"> – Enquire directly via Blue e+ app – http://www.rittal.com – Enquire at the relevant national company – http://www.rittal.com/de_de/service_contact/index.asp
Other service contacts worldwide: Rittal International Service HUBs (see section 14 "Customer service addresses")	

Tab. 29: Service contacts worldwide

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

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



www.rittal.com/contact

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