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DK 7998.406

RiMatrix S

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ENCLOSURES | POWER DISTRIBUTION | CLIMATE CONTROL | IT INFRASTRUCTURE | SOFTWARE & SERVICES

FRIEDHELM LOH GROUP

DK 7998.406 - RiMatrix S Standard room

The standardised data centre is assembled at your premises within the context of hot aisle / cold aisle containment.

Features

Model No.	DK 7998.406
Product description	The standardised data centre is assembled at your premises within the context of hot aisle / cold aisle containment.
Benefits	Enhanced energy efficiency Aisle containment is a combination of door and roof components which allow consistent separation of the hot and cold air
Supply includes	Advice and ROI calculation Delivery and integration into the customer infrastructure Commissioning and handover Documentation, training and instruction Hotline and service/service agreements Precise-fit aisle containment
Clearance depth	7.000 mm
Clearance height	2.722 mm
Clearance width	2.750 mm
Climate control (ZUCS)	90 kW + 10 kW n+1 redundant
Number of low-voltage main distributors	1
No. of PDU Basic	18

Features

Serverracks (600x2000x1200mm)	8
Combined network/server rack (800 x 2000 x 1200 mm)	1
Design burglar protection	Yes
Humidification and dehumidification system	optional
Room extinguisher system	optional
Version	Single 9
Dimensions	Width: 2,807 mm Height: 2,750 mm Depth: 7,067 mm
Packs of	1 pc(s).
Customs tariff number	73089059
EAN	4028177702516
ETIM 9	EC002499
ECLASS 8.0	27180207

Tender text

Standard data centre 90 kW, 8+1 racks, including cooling, for installation in a standard room„

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Fully functional standard data centre comprising a rack suite (depth 1200 mm) with 8 server racks and a network rack, installed in a fully enclosed housing.

The standard data centre is enclosed by a complete housing of double-panelled, foamed wall and roof elements with a total thickness of 30 mm.
The 600 mm wide hot aisle is partitioned within the room and provided with a sliding door.
The cold aisle is 950 mm wide and connects to the access area on the air side.

The standard data centre incorporates a fully functional raised-floor construction, with air intake and outlet grilles in the form of dip-galvanised gratings.

Air-circulating cooling units (CRAC systems) are installed in the cavity space of the raised floor. The CRAC systems do not occupy space within the rack (Zero U-Space Cooling Systems)

A CRAC system is installed under each server rack.
Each CRAC system offers a nominal output of 11 kW; the average heat load capacity per rack is thus 9.5 kW, taking into account n+1 redundancy over the total number of CRAC systems. The intake temperature for cooling is 20°C, observing temperature limit values according to ASHRAE 2008 (max. 27°C) within the cold aisle.

The cooled intake air is blown into the cold aisle by EC fans under the floor gratings.

The intake temperature and speed of the EC fans are

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regulated by a controller in the standard data centre, which communicates with the controller of a chiller station via a system bus for purposes of energy efficiency optimisation The controller is not accommodated in the IT racks and thus does not occupy rack installation space.

The standard data centre is equipped ready for use with a cold piping system comprising polypropylene piping; the individual heat exchangers are connected by way of high-pressure hoses.

Required chiller set provided by the customer:
The standard data centre must be equipped with a straight ball valve to regulate the air intake temperature to the target value, a flowmeter and two temperature sensors to measure the coolant flow volume and the feed and return temperatures, as well as to calculate the heat output.

Required chiller set must be supplied:
The standard data centre must be supplied without ball valve and sensors for the coolant.
The volume of the medium is regulated by the variable-speed pump of the chiller station of the standard data centre, and the sensors are fitted in the chiller station.

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The standard data centre incorporates switchgear with fused feeders for the rack suite. The switchgear spreads the feeders over two panels to establish an A/B power supply.

From the switchgear, the distribution busbars of the individual racks are wired ready for use and comprise Power Distribution Units with 24 C13 and 6 C19 sockets. Each rack is provided with two PDUs to establish an A/B power supply.

The power supply is routed above the racks. The data cables are routed to the IT racks separately from the

power supply cables. The installation of the data cables is to be performed by the site operator/customer.

Lighting and service socket are protected by way of an RCCB. Emergency lighting is installed.

The standard data centre is equipped with an early fire detection system. To this end, air is drawn from the raised floor of the hot aisle via a perforated plastic pipe. The alarm is given by a monitoring system with Web access and SNMP interface.

The standard data centre is installed and commissioned ready for use (with the exception of data cabling), including installation of the operating power supply and cooling system.

Standard data centre version with 8+1 racks for a standard room
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Outside dimensions„Inside dimensions„
Length:„7060 mm„Length:„7000 mm„
Width:„2810 mm„Width:„2750 mm„
Height:„2740 mm„Height:„2710 mm„
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Walls without door require an assembly clearance of 100 mm to the building walls. The roof of the enclosures requires an assembly clearance of 200 mm to the building ceiling.
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