Rittal – The System.

Faster – better – everywhere.

VX SE Floormount enclosure system

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

FRIEDHELM LOH GROUP

Rittal and EPLAN

Your benefits at a glance

Rittal is one of the world's leading system suppliers of enclosures, power distribution, climate control, IT infrastructure, automation solutions and software & services

1. Engineering

- Error-free, flexible processes throughout the entire value chain with the digital twin
- High-quality 3D data in the EPLAN Data Portal
- 3D-assisted design with EPLAN Pro Panel

2. Sourcing

- Error-free product configuration with the Rittal Configuration System
- Interfaces with EPLAN engineering tools
- Simple ordering and fast delivery of Rittal standard products

More productive – with digitalization and prototyping
Faster – with online configurators
More reliable – with our smart, global service
Better – with Industry 4.0 and automation

3. Manufacturing

- Rittal's fully automated production processes help guarantee precision machining, population and wire assembly
- Straightforward wiring with EPLAN Smart Wiring
- All work stations can be linked together with the digital twin

4. Operations

- Minimized downtimes and efficient production with the Rittal Global Service
- Predictive maintenance via IoT linking of Rittal cooling units
- The cloud-based solution EPLAN eVIEW allows a cross-locational overview of all project data

ENCLOSURES POWER DISTRIBUTION CLIMATE CONTROL

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VX SE – the solution

Reap the benefits of the VX SE Floormount Enclosure for your project:

- Minimal ordering and assembly work, thanks to the solid side panels and roof
- Body produced from a single piece for maximum stability and torsional rigidity
- High protection category up to IP 55/NEMA 12/3R
- The smart enclosure design from a single piece to help ensure good EMC properties
- Internally fastened rear walls and solid base maintain a secure seal
- 7 standard sizes to accommodate most floor mount applications
- Accepts common VX SE system accessories

Extra Protection
Added full width drip shield provides additional protection for the upper door area and the door gasket and requires no enclosure modification

Reliable pre-fixing
The clip at the top of the mounting plate holds it in place during one-person assembly until the plate can be screwed into position. The mounting plate is depth-adjustable on a 25 mm pitch pattern without the need for tools.

Ease of placement
The printed pitch pattern allows components to be easily and quickly positioned on the mounting plate – no measuring required.

Digitalization
Fully automated incorporation into the production workflow is easy with the QR code, for seamless digital monitoring at every stage, from incoming materials right through to the finished product.

Flexible interior installation
Interior installation with regard to depth couldn't be simpler, thanks to punched sections with mounting flanges 17 x 73 mm.

Installation options
The continuous pattern of square punchings supports the use of base accessories to create more mounting options at all levels.

Mounting Panel Slide Rails
Provide rigid support for full size mounting panel installation and can be used elsewhere with the enclosure as additional component support

Solid Base
The full size internally fastened solid base allows plenty of space for cable entry and come pre-punched to accept standard leg kits

Reliable engineering
Rittal's customers are aided throughout the automated production process and when working with virtual prototypes, by accessing a comprehensive selection of conversion and planning tools:
– EPLAN Pro Panel
– 2D/3D CAD data
– ecl@ss Advanced
– Technical documentation
– Data for planners

Carbon steel
The three-stage surface treatment process guarantees maximum protection against corrosion and is resistant to mineral oils, lubricants, machining emulsions and most solvents.

High level of protection
Solid side panels and roof. Eliminating the gaps between the roof, side panel and frame helps to prevent dirt deposits.

Reliable engineering
Rittal's customers are aided throughout the automated production process and when working with virtual prototypes, by accessing a comprehensive selection of conversion and planning tools:
– EPLAN Pro Panel
– 2D/3D CAD data
– ecl@ss Advanced
– Technical documentation
– Data for planners

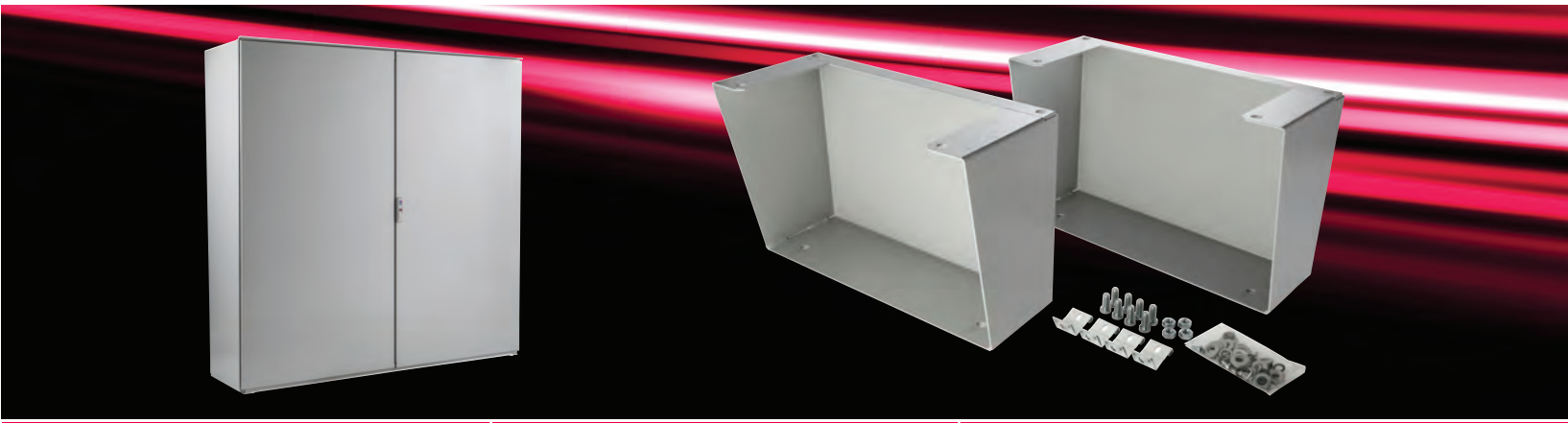
Safety
With this smart design, the side panels, roof and enclosure frame are conductively connected, so that no additional earthing is required. When using Rittal climate control equipment and Rittal fan-and-filter units in the the rear panel, no additional earthing is required.

Effective shielding
Good EMC properties are realized due to the smart enclosure construction from one single piece.

Optional Flexibility
Bolt-on leg kit accessory can be quickly added during integration or on site in the field for safer transportation and easier configurations

Secure Mounting
Heavy guage leg kits provide a secure means to bolt down the complete floormount assembly

VX SE Floormount enclosure system, carbon steel



Basic enclosure, carbon steel

Material and surface finish:
- Enclosure: Carbon steel, 1.5 mm, dipcoat-primed, powder-coated on the outside, textured paint
- Door: Carbon steel, 2 mm, dipcoat-primed, powder-coated, textured paint
- Rear panel: Carbon steel, 1.5 mm, dipcoat-primed, powder-coated on the outside, textured paint, internally fastened
- Mounting plate: Carbon steel, 3 mm, zinc-plated, passivated
- Gland plates: Carbon steel, 1.5 mm, zinc-plated, passivated
- Solid base plate pre-punched for leg kits

Color:
- RAL 7035

Protection category IP to IEC 60 529:
- IP 55

Protection category to UL 50E:
- Type 12 (NEMA 12), 3R

Supply includes:
- Enclosure, solid top and sides
- Installable full width drip shield
- Rear panel, internally fastened
- Lock: 3 mm double-bit
- 2 punched rails 18 x 39 mm

Approvals: UL, cUL

Floorstand Kits

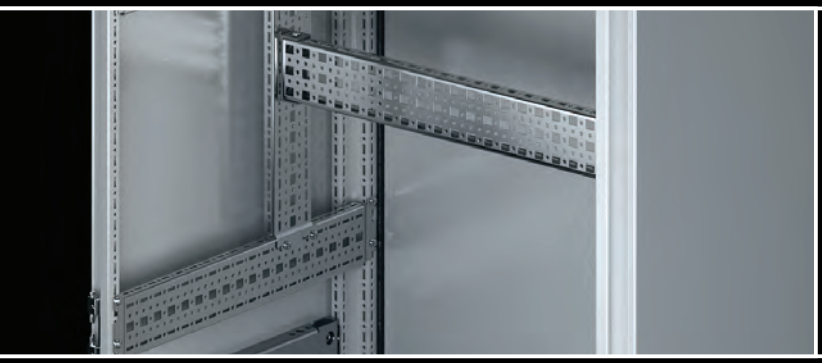
Material and surface finish:
- Carbon steel, 3.0 mm, Powder-coated

Color:
- Ral 7035

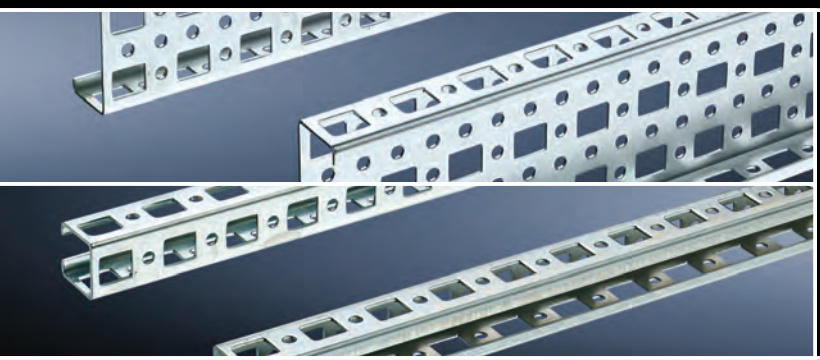
Supply includes:
- 1 pair of floorstands
- All Attachment hardware

Height mm	Width mm	Depth mm	Doors	Rear panel	Model No.	Leg Kit No.
1600	1200	300	1	one-piece	**5860.600**	**9963.546**
1600	1200	400	1	one-piece	**5861.600**	**9963.522**
1600	1200	500	1	one-piece	**5862.600**	**9963.523**
1600	1600	400	1	two-piece	**5863.600**	**9963.522**
1600	1600	500	1	two-piece	**5864.600**	**9963.523**
1800	1800	400	1	two-piece	**5866.600**	**9963.522**
1800	1800	500	1	two-piece	**5867.600**	**9963.523**

System accessories



Punched sections with mounting flanges, 23 x 73 mm
Flexible interior installation on a 25 mm pitch pattern. With the system punchings, cage nuts up to M8 can be used across three levels. This allows you to securely fasten your own components with metric screws.



Punched sections without mounting flanges 23 x 73 mm and mounting rails 23 x 23 mm
For fixing at variable intervals and individually to the inner mounting surface of the enclosure frame. When mounted, the punched sections and rails sit flush to the enclosure frame. Due to the additional mounting bracket, they can be used with a pre-installed mounting plate and can also be cut to any required length.

Punched sections with mounting flanges, 17 x 73 mm
Ideal for straightforward configuration of the enclosure system or for cable routing from the door to the mounting plate. May be fitted directly to the profile.

Partial mounting plate

The partial mounting plates create additional mounting surfaces at all places in the enclosure. Suitable for use as a component shelf or hinged.

Threaded block

The threaded block enables simple metric screw-fastening. It may be used on the enclosure section as well as on punched sections and rails with square 12.5 x 11 mm punchings.

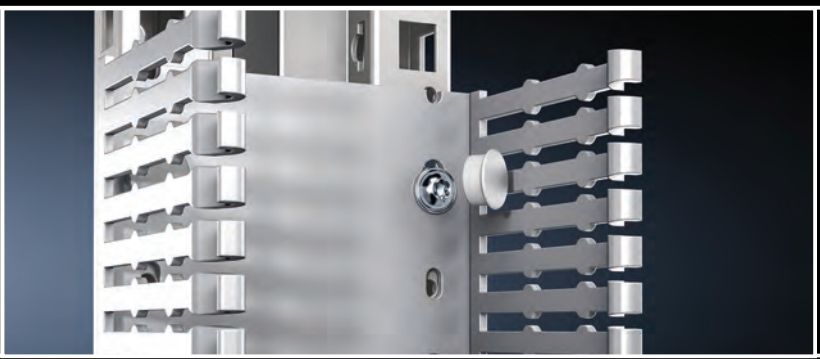
System accessories

LED system light

Connection is just as straightforward as assembly. The rotating connectors allow user-friendly connection, even in tight spaces. The wide ranging power supply unit means that the light can be used anywhere in the world.

Cable conduit and cable conduit holder

Allows crush-proof cable routing to moving parts such as doors or swing frames with minimal assembly work



Cable duct

Cable ducts are ideal for managing large volumes of cables inside the enclosure. Components are simply screw-fastened. The screw heads may be securely covered with an isolator cap for insulation purposes. Cable ducts for vertical extrusions may be fitted directly onto the enclosure section, to save space on the mounting plate.

Sealing frame, modular

For universal use on all surfaces and walls, for inserting pre-assembled cables with connectors. Can also be mounted onto 24-pole or 16-pole connector cut-outs.

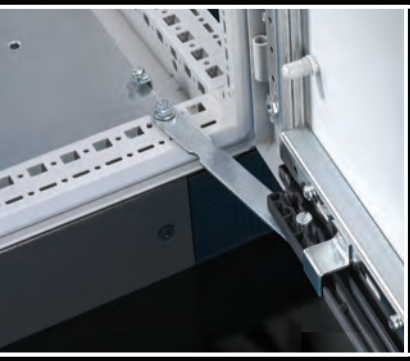
System accessories

Punched sections with mounting flanges, 17 x 73 mm
The punched section with mounting flange, 17 x 73 mm, allows completely flexible installation on the tubular door frame, no machining required.

Wiring plan lectern
During maintenance work, the wiring plan lectern folds out easily to hold circuit diagrams and documents.
The integral punchings provide temporary accommodation for tools.

Spacers
Spacer bolts allow a mounting level to be quickly and easily created at the correct distance, onto which a top hat rail or a contact hazard protection cover for built-in components can be easily installed in the door.

Tubular door frame
The all-round T-head punchings allow simple, fast attachment of cables with standard commercially available cable ties.



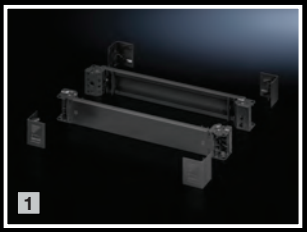
Door stay for escape routes
The door stay for escape routes guarantees convenience and safety. The enclosure door is securely locked into position for assembly work. In dangerous situations, the stay is released automatically under pressure, and by using 180° hinges, escape routes can be kept clear in both directions.

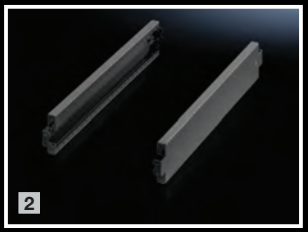
Climate control
When using Rittal climate control devices and Rittal fan-and-filter units on the rear panel, no additional earthing is required. With this smart design, the side panels, roof and enclosure frame are conductively connected, so that no additional earthing is required.

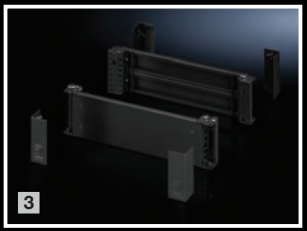
Ride-up roller
Even the heaviest populated door is easily opened and closed with the ride-up roller.

Comfort handle
For retro-fitting lock systems such as profile half-cylinders or lock inserts. As the handle does not take up any swing space, due to its folding action, the door surface area available for installed equipment is maximized.

Accessories







Leg Kits

1	
For Enclosure Depth mm	**Model No.**
300	9963546
400	9963522
500	9963523

Base/plinth

1 **Base/plinth corner piece with base/plinth trim panel, front and rear, 100 mm**	
For enclosure width mm	**Model No.**
1200	8640.007
1600	8640.008
1800	8640.009
2 **Base/plinth trim panels, side, 100 mm**	
For enclosure depth mm	**Model No.**
300	8640.030
400	8640.031
500	8640.032
3 **Base/plinth corner piece with base/plinth trim panel, front and rear, 200 mm**	
For enclosure width mm	**Model No.**
1200	8640.025
1600	8640.026
1800	8640.027
4 **Base/plinth trim panels, side, 200 mm**	
For enclosure depth mm	**Model No.**
300	8640.040
400	8640.041
500	8640.042

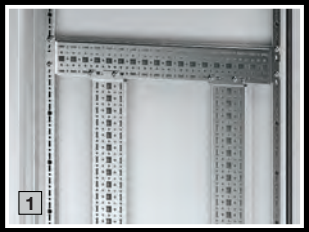
Doors/locks

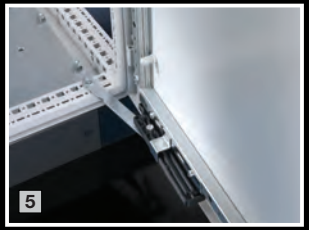
1 **Comfort handle**	
For	**Model No.**
Lock inserts, RAL 7035	8611.020
Lock inserts, matt, chrome-plated	8611.330
Lock inserts and padlock, RAL 7035	8611.290
Profile half-cylinders, RAL 7035	8611.070
Profile half-cylinders, matt, chrome-plated	8611.340
2 **180° hinges**	
Color	**Model No.**
RAL 7035	8800.190
2 **180° hinge for doors with high dynamic loads**	
Color	**Model No.**
RAL 7035	8800.710

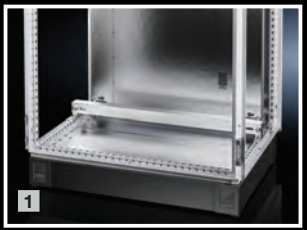
Installation accessories for doors

1 Punched section with mounting flange, 17 x 73|mm	
For door width mm	**Model No.**
600	8612.050
800	8612.070
900	8612.080
2 Carbon steel wiring plan pocket, depth 90 mm	
For door width mm	**Model No.**
600	4116.000
800	4118.000
900	4123.000
3 Utility lectern	
For door width mm	**Model No.**
600	4638.600
800	4638.800
4 Door stay	
For all VX SE enclosures	**Model No.**
	4583.000
5 Door stay for escape routes	
For all VX SE enclosures	**Model No.**
	4583.500
6 Ride-up roller	
For all VX SE enclosures	**Model No.**
	4538.000
7 Wiring plan lectern	
For door width mm	**Model No.**
600[1)]	4120.000
800[1)]	4120.000
8 Support strip	
For door width mm	**Model No.**
600	4596.000
800	4598.000
1000	4599.000

[1)] At least two lecterns are required for a width of 600 and 800 mm.





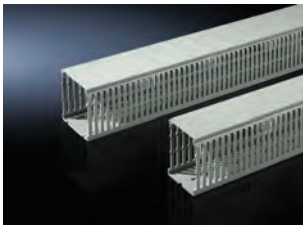


Cable management

1 Cable clamp rail, right-angle section	
For enclosure width mm	**Model No.**
1200	8619.440
1600	8619.450
1800	8619.460

2 Sealing frame, modular[1)]	
For all VX SE free-standing enclosures	**Model No.**
	2583.100 for 24-pole cut-out
	2583.080 for 16-pole cut-out

[1)] Also required: Seal inserts and inlays



Cable duct

Cable conduit

Cable conduit holder

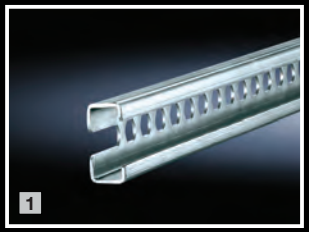
Cable ties

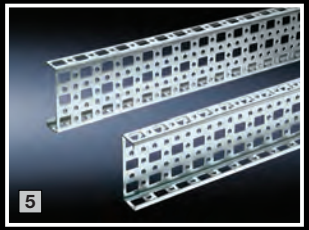
Interior installation

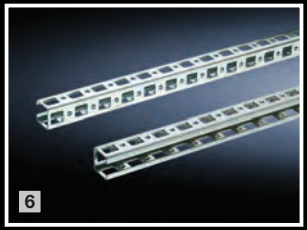
1 C-rail 30/15, for direct installation	
For enclosure width/depth mm	**Model No.**
600	4944.000
800	4945.000
1000	4946.000
1200	4947.000
2 Punched section with mounting flange 17 x 73 mm for the outer mounting level for installation in the depth	
For enclosure width/depth mm	**Model No.**
300	8612.130
400	8612.140
500	8612.150
3 Punched section with mounting flange 17 x 73 mm for the inner mounting level for installation in the depth	
For enclosure width/depth mm	**Model No.**
300	8612.030
400	8612.040
500	8612.050
600	8612.060
4 Punched section with mounting flange 23 x 73 mm for installation in the depth	
For enclosure width/height/depth mm	**Model No.**
500	8612.550
600	8612.560
800	8612.580
1000	8612.500
1200	8612.520
5 Punched section without mounting flange 23 x 73 mm[1)]	
For enclosure width/height/depth mm	**Model No.**
400	4374.000
500	4375.000
600	4376.000
800	4344.000
1000	4382.000
1200	4378.000
1800	4379.000
2000	4380.000
6 Punched rail 23 x 23 mm[2)]	
For enclosure width/height/depth mm	**Model No.**
400	4169.000
500	4170.000
600	4171.000
800	4172.000
1000	4173.000
1200	4174.000
1400	4393.000
1600	4175.000
1800	4176.000
2000	4177.000

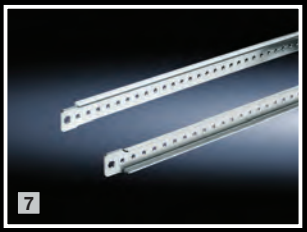
[1)] Also required:
- Support bracket 8800.330 for mounting on the vertical section or
- Support bracket 4183.000 for mounting on punched sections without mounting flanges or on punched rails

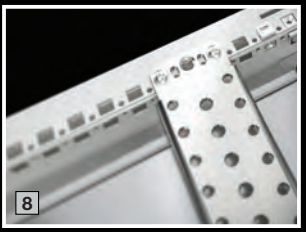
[2)] Also required:
- Mounting bracket 8800.370 for mounting on the vertical section or
- Mounting bracket 4182.000 for mounting on the bottom of the enclosure section and at the top in the depth or on punched sections
- U nut M4/M5/M6/M8











Interior installation

7 Support strip	
For enclosure width/depth mm	**Model No.**
Inner level	
400	4309.000
500	4596.000
600	8800.130
800	4579.000
Outer level	
400	4694.000
500	4695.000
600	4696.600
800	4697.000

8 Support rail 75 x 20 mm	
For enclosure width/depth mm	**Model No.**
slotted	
400	4394.000
500	4395.000
600	4396.000
800	4398.000
unslotted	
600	4396.500
800	4398.500

9 Partial mounting plate

For installation in									Door width mm	Dimensions mm	**Model No.**
Enclosure width mm					Enclosure depth (side) mm						
400	600	800	1000	1200	400	500	600	800			
■	■	–	–	–	■	–	■	–	600	500 x 300	8614.640
–	■	–	–	–	–	■	■	–	600	500 x 400	8614.650
–	■	–	–	–	–	–	■	–	600	500 x 500	8614.660
–	■	■	–	–	–	–	■	■	600	500 x 700	8614.680
–	■	–	–	–	–	–	■	–	600	500 x 775	8614.675[1)]
■	–	■	–	–	■	–	–	■	800	700 x 300	8614.840
–	–	■	–	–	–	■	–	■	800	700 x 400	8614.850
–	–	■	–	–	–	–	–	■	800	700 x 700	8614.880
■	–	–	■	–	■	–	–	–	1000	900 x 300	8614.040
–	–	–	■	–	–	■	–	–	1000	900 x 400	8614.050
–	■	–	■	–	–	–	■	–	1000	900 x 500	8614.060
■	–	–	–	■	■	–	–	–	–	1100 x 300	8614.240
–	–	–	–	■	–	■	–	–	–	1100 x 400	8614.250
–	■	–	–	■	–	–	■	–	–	1100 x 500	8614.260

LED system light

1 LED system light[1)]		
Lumen lm	Version	**Model No.**
900	without socket	2500.200
900	without socket, 24 V (DC)	2500.220
1200	with motion detector	2500.300
1200	with motion detector, 24 V (DC)	2500.320

[1)] Also required:
– Connection accessories

Socket box

1 Socket box for LED system light[1)]			
	Socket	UL	**Model No.**
	D, earthing-pin	–	2500.710
	GB	–	2500.711
	F/B	–	2500.712
	CH	–	2500.713
	US	■	2500.714
	CN	–	2500.715

[1)] Also required:
– Connection accessories

Spacers

RiLine Busbar

Levelling feet

Climate control

Flexible manufacturing

VX SE Floormount enclosures can be machined directly at the Rittal factory.
Use your own engineering data and order the enclosures with cut-outs e.g. for cooling units, fan-and-filter units or gland plates. In this way, you can boost the efficiency of your own manufacturing process.

Versatile solutions

The VX SE Floormount enclosure system is versatile, just like our clients. For your projects in different sectors, take advantage of all the benefits of the VX SE such as high protection categories, a wide range of sizes from 300 mm depth to 1800 mm width, different material options, simple and complete engineering and a comprehensive range of accessories.

Machine and plant engineering
With its high level of torsional rigidity, the VX SE is particularly well-suited to cope with dynamic loads and stresses when used with mobile lifting and operating equipment in a production plant or warehouse.

Building services (heating, climate control, ventilation)
With depths of 300 mm, the VX SE is the tailor-made solution where space is limited. Accessories such as the 180° hinge and the door stay make it easy to keep escape routes clear.

Notes:

Notes:

Rittal – The System.

Faster – better – everywhere.

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

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