### Rittal – The System.

Faster – better – everywhere.

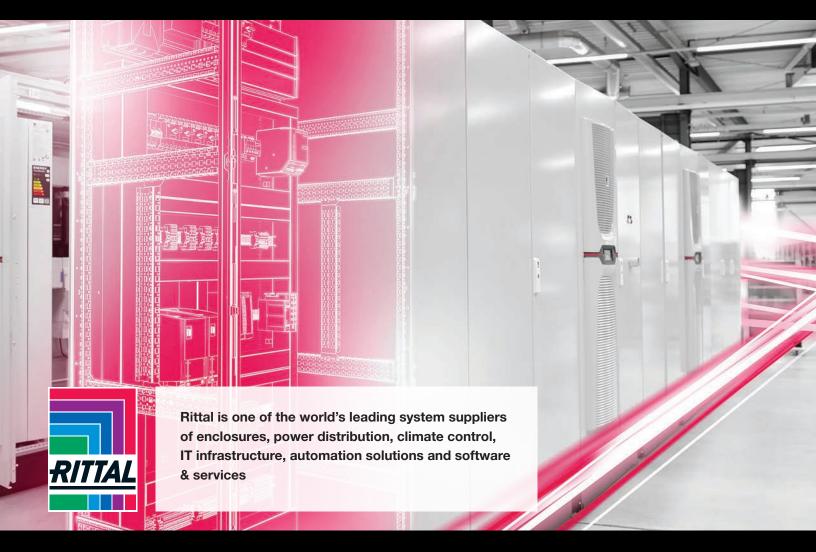
# VX SE Floormount Enclosure System



# **Rittal and EPLAN**

Your benefits at a glance





# 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



FRIEDHELM LOH GROUP

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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



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### Extra Protection

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

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### **Reliable pre-fixing**

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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.

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### 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

### 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:

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- EPLAN Pro Panel – 2D/3D CAD data
- ecl@ss Advanced
- Technical documentation

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- Data for planners

### 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

### 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.

### 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.

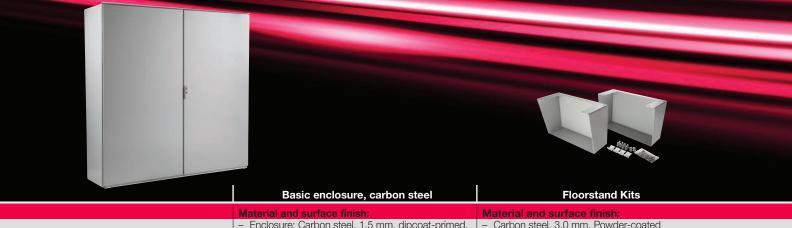
### **Optional Flexibility**

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



	,,	
	Material and surface finish:	Material and surface finish:
	<ul> <li>Enclosure: Carbon steel, 1.5 mm, dipcoat-primed, powder-coated on the outside, textured paint</li> <li>Door: Carbon steel, 2 mm, dipcoat-primed, powder-coated, textured paint</li> <li>Rear panel: Carbon steel, 1.5 mm, dipcoat-primed, powder-coated, powder-coated on the outside, textured paint, internally fastened</li> <li>Mounting plate: Carbon steel, 3 mm, zinc-plated, passivated</li> <li>Gland plates: Carbon steel, 1.5 mm, zinc-plated, passivated</li> <li>Solid base plate pre-punched for leg kits</li> <li>Color: <ul> <li>RAL 7035</li> </ul> </li> <li>Protection category IP to IEC 60 529: <ul> <li>IP 55</li> </ul> </li> <li>Protection category to UL 50E: <ul> <li>Type 12 (NEMA 12), 3R</li> </ul> </li> <li>Supply includes: <ul> <li>Enclosure, solid top and sides</li> <li>Installable full width drip shield</li> <li>Rear panel, internally fastened</li> <li>Lock: 3 mm double-bit</li> <li>2 punched rails 18 x 39 mm</li> </ul> </li> </ul>	<ul> <li>Carbon steel, 3.0 mm, Powder-coated</li> <li>Color: <ul> <li>Ral 7035</li> </ul> </li> <li>Supply includes: <ul> <li>1 pair of floorstands</li> <li>All Attachment hardware</li> </ul> </li> </ul>
Rear panel	Model No.	Leg Kit No.
	NOUGI NO.	Leg Kit No.

Height mm	Width mm	Depth mm	Doors	Rear panel	Model No.	Leg Kit No.
1600	1200	300	2	one-piece	5860.600	9963.546
1600	1200	400	2	one-piece	5861.600	9963.522
1600	1200	500	2	one-piece	5862.600	9963.523
1600	1600	400	2	two-piece	5863.600	9963.522
1600	1600	500	2	two-piece	5864.600	9963.523
1800	1800	400	2	two-piece	5866.600	9963.522
1800	1800	500	2	two-piece	5867.600	9963.523

# System accessories



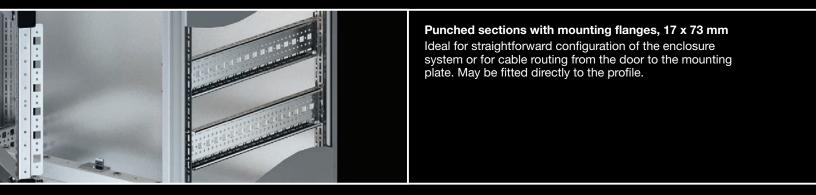
### Punched sections with mounting flanges, 23 x 73 mm

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.





### 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  $12.5 \times 11$  mm punchings.

# System accessories



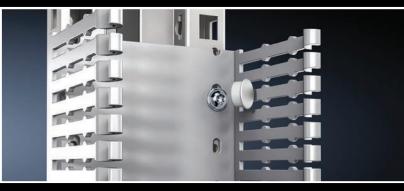
### LED system light

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

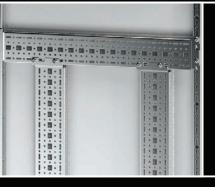
Cable ducts are ideal for managing large volumes of cables inside the enclosure. Components are simply screw-fastened. The screw heads may be securely covered with an isolator cap for insulation purposes. Cable ducts for vertical extrusions may be fitted directly onto the enclosure section, to save space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



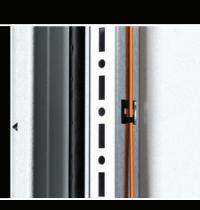
### Wiring plan lectern

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.













### Leg Kits

Model No.
9963546
9963522
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	8660.007				
1600	8660.008				
1800	8660.009				
2 Base/plinth trim panels, side, 100 r	nm				
For enclosure depth mm	Model No.				
300	8660.030				
400	8660.031				
500	8660.032				
3 Base/plinth corner piece with base front and rear, 200 mm	e/plinth trim panel,				
For enclosure width mm	Model No.				
1200	8660.025				
1600	8660.026				
1800	8660.027				
4 Base/plinth trim panels, side, 200 r	nm				
For enclosure depth mm Model No.					
300	8660.040				
400	8660.041				
500	8660.042				



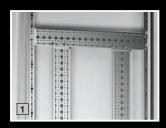


### Doors/locks

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					

unched section with mounting fl	ange, 17 x 73 mm
For door width mm	Model No.
600	8612.050
800	8612.070
900	8612.080
Carbon steel wiring plan pocket, o	depth 90 mm
For door width mm	Model No.
600	4116.000
800	4118.000
900	4123.000
Jtility lectern	
For door width mm	Model No.
600	4638.600
800	4638.800
loor stay	
For all VX SE	Model No.
enclosures	4583.000
Door stay for escape routes	
For all VX SE	Model No.
enclosures	4583.500
Ride-up roller	
For all VX SE	Model No.
enclosures	4538.000
Wiring plan lectern	
For door width mm	Model No.
600 <sup>1)</sup>	4120.000
8001)	4120.000
Support strip	
For door width mm	Model No.
600	4596.000
800	4598.000
1000	4599.000

 $^{\rm 1)}$  At least two lecterns are required for a width of 600 and 800 mm.

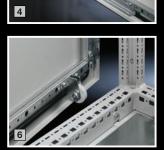


















### Cable management

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 <sup>1)</sup>						
	Model No.					
For all VX SE free-standing enclosures	2583.100 for 24-pole cut-out					
	2583.080 for 16-pole cut-out					

<sup>1)</sup> Also required: Seal inserts and inlays



Cable duct



Cable conduit



Cable conduit holder



Cable ties

### Interior installation

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	
Punched section with mounting flar for the outer mounting level for inst		
For enclosure width/depth mm	Model No.	
300	8612.130	
400	8612.140	
500	8612.150	
Punched section with mounting flar for the inner mounting level for inst		
For enclosure width/depth mm	Model No.	
300	8612.030	
400	8612.040	
500	8612.050	
600	8612.060	
Punched section with mounting flar for installation in the depth	nge 23 x 73 mm	
or enclosure width/height/depth mm	Model No.	
500	8612.550	
600	8612.560	
800	8612.580 8612.500	
1000		
1200	8612.520	
Punched section without mounting	flange 23 x 73 mm <sup>1)</sup>	
r 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	
Punched rail 23 x 23 mm <sup>2)</sup>		
or 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	

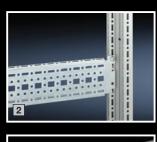
 Also required:
 – Support bracket 8800.330 for mounting on the vertical section or
 – Support bracket 4183.000 for mounting on punched sections without mounting flanges or on punched rails

 <sup>2)</sup> 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





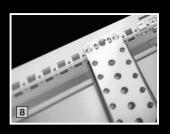


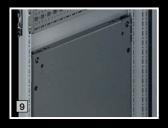




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### Interior installation

7 Support strip			
For enclosure width/depth mm	Model No.		
Inner leve	el		
400	4309.000		
500	4596.000		
600	8800.130		
800	4579.000		
Outer leve	el		
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	k		
600	4396.500		
800	4398.500		

### 9 Partial mounting plate

For installation in											
Enclosure width mm					Enclosure depth (side) mm			Door width mm	Dimensions mm	Model No.	
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 <sup>1)</sup>
	-		-	-		-	-		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 <sup>1)</sup>							
Lumen Im	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					

<sup>1)</sup> Also required: – Connection accessories

### Socket box

1 Socket box for LED system light <sup>1)</sup>							
	Socket	UL	Model No.				
	D, earthing-pin	-	2500.710				
	GB	-	2500.711				
•••	F/B	-	2500.712				
000	СН	-	2500.713				
	US	•	2500.714				
	CN	_	2500.715				
1) Aloo ro							





<sup>1)</sup> Also required: – Connection accessories







Levelling feet



RiLine Busbar



**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.



# One for all. Especially for you! "Rittal – The System."

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