

# Rittal – The System.

Faster – better – everywhere.



## TS 8

TS 8004.500	TS 8284.500	TS 8485.510	TS 8804.500
TS 8005.500	TS 8285.500	TS 8486.510	TS 8805.500
TS 8006.500	TS 8286.500	TS 8604.500	TS 8806.500
TS 8080.500	TS 8405.510	TS 8605.500	TS 8808.500
TS 8084.500	TS 8406.510	TS 8606.500	TS 8815.500
TS 8204.500	TS 8450.600	TS 8608.500	TS 8826.500
TS 8205.500	TS 8451.600	TS 8615.500	TS 8845.500
TS 8206.500	TS 8452.600	TS 8626.500	TS 8865.500
TS 8208.500	TS 8453.600	TS 8645.500	TS 8880.500
TS 8215.500	TS 8454.600	TS 8665.500	TS 8881.500
TS 8226.500	TS 8455.600	TS 8684.500	TS 8884.500
TS 8245.500	TS 8456.600	TS 8685.500	TS 8885.500
TS 8265.500	TS 8457.600	TS 8686.500	TS 8886.500

**Montage- und Bedienungsanleitung**  
**Assembly and operating instructions**  
组装和操作说明

机箱机柜

配电组件

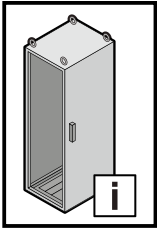
温控系统

IT基础设施

软件与服务

FRIEDHELM LOH GROUP





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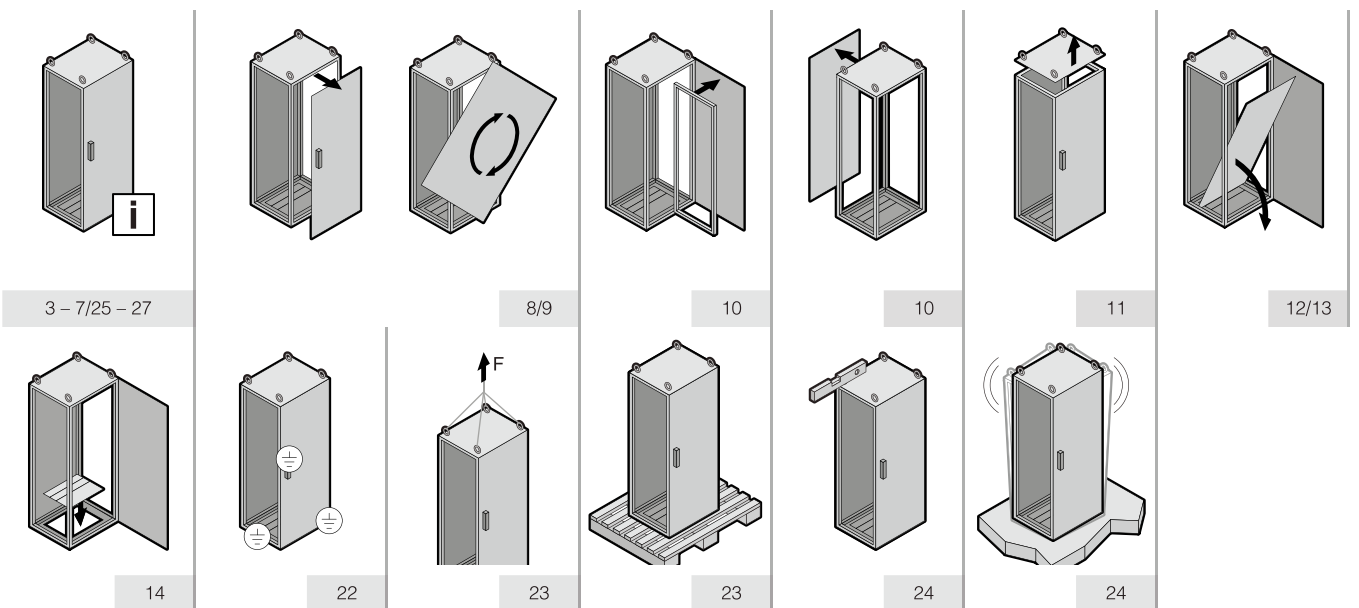
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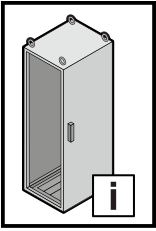
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**D**

Der Anreih-Schrank TS 8 ist als Stand-schrank geeignet für die Aufnahme von elektrischen, elektronischen, mechanischen oder pneumatischen Betriebsmitteln und Geräten im industriellen Innenbereich. Durch die hohe Schutzart bis IP 55 (nach EN 60 529) ist der Schrank staubgeschützt und geschützt gegen Strahlwasser.

**Lieferumfang und technische Informationen**

- 1 Anreih-Schrank TS 8 mit Tür(en), Doppelbart-Verschluss-Einsatz
  - 1 Rückwand
  - Mehrfach geteilte Bodenbleche
  - 1 Montageplatte (im Schrank befestigt)
  - 1 Dachblech
  - 1 Zubehörbeutel (Inhalt siehe Seite 4)
  - 4 Transportösen
- Prüfen Sie den Lieferumfang auf Vollständigkeit.

**EN**

The TS 8 baying enclosure is a standard enclosure suitable to accommodate electrical, electronic, mechanical and pneumatic equipment and components for indoor industrial applications. Thanks to the high degree of protection of up to IP 55 (to EN 60 529), the enclosure is both dust-proof and resistant to hose water.

**Scope of delivery and technical information**

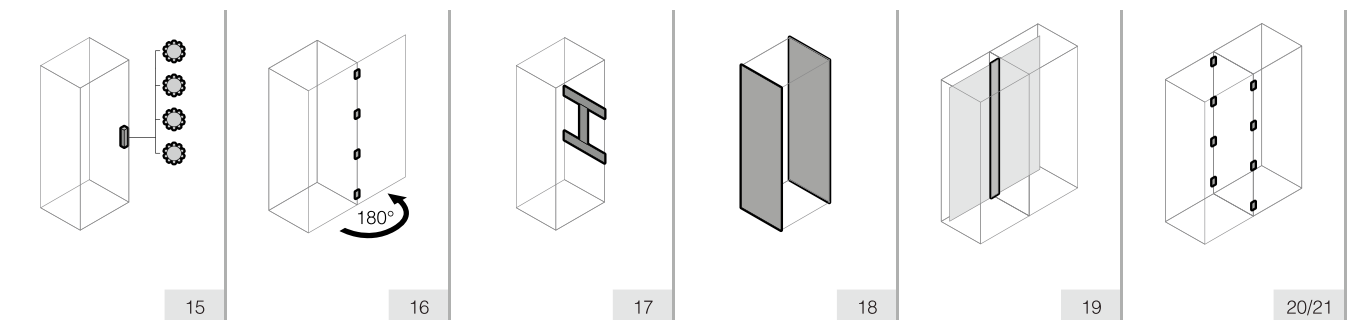
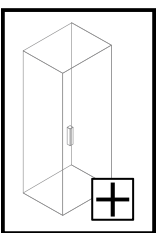
- 1 TS 8 baying enclosure with door(s), double-bit lock insert
  - 1 rear panel
  - Multi-part gland plates
  - 1 mounting plate (fitted in enclosure)
  - 1 roof plate
  - 1 accessory pack (for contents see page 4)
  - 4 eyebolts
- Check the completeness of the delivery upon receipt.

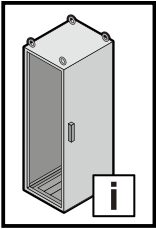
**CN**

TS 8并联柜是一款适用于安装电气、电子、机械与气动设备部件的室内工业应用标准箱体。它的防护等级高达IP55（根据EN 60 529标准），兼具防尘与防喷射水功能。

**供应范围与技术资料**

- 1台TS 8并联柜，带柜门与双齿锁芯
  - 1块后板
  - 多段式底板
  - 1块安装板（附于柜中）
  - 1块顶盖
  - 1个附件包（内含物品见第4页）
  - 4个运输吊环
- 接收时请检查确认货品完整。





W		400	600	800	1000	800	1000	1200	
Best.-Nr. TS Model No. TS 型号TS Stahlblech Sheet steel 钢板			8615.500 8645.500 8665.500 8684.500 8685.500 8686.500 8604.500 8605.500 8606.500 8608.500 8626.500	8815.500 8845.500 8865.500 8884.500 8885.500 8886.500 8804.500 8805.500 8806.500 8808.500 8826.500	8084.500	8880.500 8881.500	8080.500 8004.500 8005.500 8006.500	8215.500 8245.500 8265.500 8284.500 8285.500 8286.500 8204.500 8205.500 8206.500 8208.500 8226.500	
Best.-Nr. TS Model No. TS 型号TS Material: 1.4301 Material: 1.4301 材料: 1.4301	W	400	600	800	1000	800	1000	1200	
		-	8457.600 8452.600	8454.600 8455.600 8450.600	-	-	-	-	8456.600 8453.600 8451.600
IP		55							14
NEMA		12							
IK		9							
	A	↓ 14.000 <sup>1)</sup> N							
	B	↓ 5.000 <sup>2)</sup> N							
	C	↓ 900 N							
		1	1	1	1	1	1	1	9
	8 x 6	11 m	11 m	11 m	11 m	14 m	14 m	14 m	20
	Ø 16	4	4	4	4	4	4	4	14
	Ø 13	4	4	4	4	4	4	4	14
	Ø 7	5	5	5	5	10	10	10	14
	A 8,2	5	5	5	5	9	9	9	22
	A 8,4	9	9	9	9	14	14	14	22
	A 8,1	4	4	4	4	5	5	5	22
	M8	4	4	4	4	5	5	5	22
	M8	1	1	1	1	1	1	1	22
	M8	1	1	1	1	1	1	1	22
	M8 x 20	5	5	5	5	9	9	9	22
	M8 x 30	1	1	1	1	1	1	1	22
		9	9	9	9	14	14	14	22

1) Max. Belastung inkl. Schrankgewicht

1) Max. load including enclosure weight

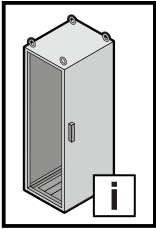
1) 最大荷重包括箱体重量

2) Montageplatte in hinterster Stellung:  
6000 N

2) Mounting plate in rearmost position:  
6000 N

2) 安装板在最后方时: 6000 N





## Hinweise zur Dokumentation/Notes on documentation/ 编写说明

D

Die **Montageanleitung** richtet sich an alle Personen, die über eine entsprechende Fachausbildung verfügen, um Schaltschränke normgerecht mit elektrischen, elektronischen, mechanischen oder pneumatischen Betriebsmitteln auszurüsten, am Bestimmungsort aufzustellen bzw. zu montieren und betriebsfertig anzuschließen.

Die **Bedienungsanleitung** richtet sich an das Bedienpersonal und entsprechend ausgebildete Fachkräfte für elektrotechnische und mechanische Instandhaltung.

### Mitgeltende Unterlagen

Für die hier beschriebenen Schaltschränke existiert die Montage- und Bedienungsanleitung als Papierdokument dem Gerät beiliegend.

Für Schäden, die durch Nichtbeachtung dieser Anleitungen entstehen, übernehmen wir keine Haftung. Zusätzlich gelten auch die Anleitungen des verwendeten Zubehörs.

### CE-Kennzeichnung

Die Konformitätserklärung nach EN 62 208 steht als Download auf der Homepage von Rittal zur Verfügung.

### Aufbewahrung der Unterlagen

Diese Anleitung sowie alle mitgeltenden Unterlagen sind Teil des Produktes. Sie müssen dem Anlagenbetreiber ausgehändigt werden. Dieser übernimmt die Aufbewahrung, damit die Unterlagen im Bedarfsfall zur Verfügung stehen.

EN

The **assembly instructions** are aimed at personnel who have completed corresponding technical training and are thus qualified to set up enclosures with electrical, electronic, mechanical and pneumatic equipment in accordance with applicable standards and to erect, assemble and connect such enclosures at the place of use.

The **operating instructions** are aimed at operating personnel and correspondingly trained specialists for electrical and mechanical maintenance.

### Other applicable documents

Assembly and operating instructions exist as paper documents for the enclosures described here and are enclosed with the equipment.

No liability can be accepted for damage resulting from failure to observe these instructions or the instructions of any accessories used.

### CE labelling

The declaration of conformity in accordance with EN 62 208 is provided for download on the Rittal website.

### Retention of documents

These instructions and all other applicable documents are inherent parts of the product. They must be handed over to the plant operator. The operator is then responsible for storage such that the documents are readily available when required.

CN

组装说明适用于已完成相关技术培训并具备资质安装电气、电子、机械与气动设备箱体的人员，他们必须能够在使用现场根据相关标准安装、组装与连接该箱体。

操作说明适用于操作人员以及受过相应培训的电气与机械维护专业人员。

### 其它适用文档

组装与操作说明作为此处所述的机柜纸质文档，随设备一起提供。

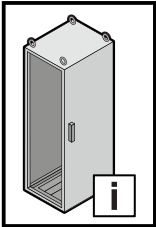
因未能遵守这些说明或附件说明而造成的损坏，威图公司概不负责。

### CE标志

EN 62 208符合性声明可在威图公司网站下载。

### 文档存留

组装与操作说明书以及所有其它适用文档均为产品不可分割的一部分，必须交到工厂操作员的手上并由其妥善保管，确保可随时取用。



## Hinweise zur Dokumentation/Notes on documentation/ 编写说明

D

### Verwendete Symbole

Beachten Sie folgende Sicherheits- und sonstige Hinweise in der Anleitung:

#### Symbol für eine Handlungsanweisung:

- Der Blickfangpunkt zeigt an, dass Sie eine Handlung durchführen sollen.

#### Sicherheits- und andere Hinweise:



**Gefahr!**  
Unmittelbare Gefahr für Leib und Leben.



**Achtung!**  
Mögliche Gefahr für Produkt und Umwelt.



**Hinweis:**  
Nützliche Information und Besonderheiten.

EN

### Symbols used

Observe the following safety and other notes in the instructions:

#### Symbol identifying required actions:

- The bullet point indicates an action to be performed.

#### Safety and other notes:



**Danger!**  
Immediate danger to life and limb.



**Caution!**  
Potential threat to the product and its environment.



**Note:**  
Useful information and special features.

CN

### 所用符号

遵守以下安全须知及其它注意事项：

#### 需要采取措施的符号：

- 项目符号表示需要采取相应措施

#### 安全须知及其它注意事项：



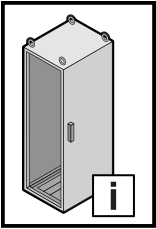
**危险!**  
面临生命危险或肢体伤害。



**警告!**  
对产品及其环境有潜在危险。



**注意:**  
有用信息与特殊特性。



## Sicherheitshinweise/Safety notes/安全须知

D

Bei der Entwicklung des Anreih-Schranks TS 8 wurden bereits im Konstruktionsstadium sicherheitskritische Punkte über eine Risikobeurteilung nach DIN EN ISO 14121 bewertet und vermieden. Da sich einige wenige Restrisiken nicht ausschließen lassen, sind folgende Hinweise zu beachten.



**Gefahr!**  
**Unmittelbare Gefahr für Leib und Leben.**

- Um ein evtl. Kippen des Schaltschranks in Folge ungleicher Lastverteilung beim Innenausbau zu verhindern, muss dieser unbedingt am Boden verschraubt werden. Eine zusätzliche Fixierung an einer Wand kann mittels Wandhalter erfolgen.
- Schrank-/Pult-/Standssysteme, Bediengehäuse müssen stets, insbesondere auch während Transport, Auf- und Ausbau sowie Bearbeitung durch geeignete Maßnahmen gegen kippen gesichert werden. Hier sind auch die Hinweise in der Anleitung des verwendeten Systemzubehörs zu berücksichtigen. Bei Verwendung eines Sockelsystems bzw. des Flex-Blocks ist beim Transport einschließlich dem Anheben und dem Absetzen darauf zu achten, dass die Last immer auf den Sockel-Eckstücken lastet und niemals auf den Sockelblenden.
- Durch unsachgemäßen Transport oder durch ungesichertes Aufstellen des Schrankes besteht die Möglichkeit, dass der Schrank umstürzt und damit eine Gefahr für Gesundheit und Leben entsteht.
- Die Drehmomentangaben zum Befestigen von Montageplatte und weiteren Innenaussteilen sind unbedingt einzuhalten.
- Konstruktiv ist ein automatischer Potenzialausgleich von Rückwand, Dachblech, Seitenwand (Zubehör) und Tür zum Grundgehäuse und den Bodenblechen zum Grundgehäuse berücksichtigt. Zusätzlich sind diese Flachteile mit Erdungsbolzen bzw. Durchzügen für Erdungsschrauben ausgestattet, um einen systemgerechten Potenzialausgleich vorzunehmen, wenn dies ausbaubedingt notwendig ist.

EN

Safety-critical points were already assessed and eliminated by way of a risk assessment to DIN EN ISO 14121 at the design stage of development of the TS 8 baying enclosure. As certain residual risks cannot be excluded, the following notes must be observed at all times.



**Danger!**  
**Immediate danger to life and limb.**

- It is imperative to bolt the enclosure to the floor to prevent possible tilting due to an uneven load distribution when installing the components. An additional wall fixing can be provided by way of a wall bracket.
- Enclosure/console/stand systems and operating housings must be secured at all times by suitable means to prevent them from tipping over, particularly during transportation, assembly, dismantling and machining. The instructions supplied with the system accessories should also be observed. When using a base/plinth system or the Flex-Block, during transportation, including lifting and setting down, care must be taken to ensure that the load is always resting on the base/plinth corner pieces and never on the base/plinth trim panels.
- Incorrect transportation or unsecured assembly of the enclosure could potentially cause the enclosure to tip over, causing a threat to life and limb.
- Observe all tightening torques specified for the fixing of mounting plates and other installation parts.
- The design provides for automatic potential equalisation between the rear panel, roof plate, side panel (accessories), door and the basic enclosure, as well as between the gland plates and the basic enclosure. These panel parts are additionally provided with earthing bolts or through-holes for earthing screws to permit system-specific potential equalisation where this is required by the installation.

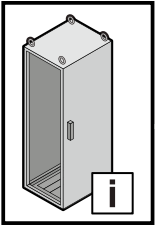
CN

在TS 8并联柜的开发、设计阶段，我们就根据DIN EN ISO 14121对其安全关键点进行了危险评估，消除了安全隐患。考虑存在某些无法排除的其它风险，必须始终遵循以下注意事项。



**危险!**  
**面临生命危险或肢体伤害。**

- 必须将箱体用螺栓固定在地板上，以防止安装部件时由于负载分布不均而可能造成的倾斜。另外，也可通过墙壁支架将其固定在墙壁上。
- 机柜/控制台/立式系统和操作箱体必须使用适当方法始终牢固固定以防止翻倒，特别是在运输、组装、拆卸和加工过程中。
- 必须遵守随系统附件供应的说明书要求。当使用带底座系统或Flex-Block时，在运输过程中，包括起吊和放下时都必须注意确保负载始终处于底座角件处，绝不能让负载施加在底座护板上。
- 不正确运输或者没有固定箱体可能会导致箱体倾翻，从而导致生命危险或肢体伤害。
- 在固定安装板及其它安装部件时，严格遵守规定的紧固扭矩。
- 该设计的目的在于实现后背、顶盖、侧板（附件）、箱门与箱体以及在底板与箱体之间的自动电位平衡。这些面板部件都是额外供应部件，并附带接地螺栓或安装接地螺钉的通孔，以便在安装需要时实现系统指定的电位平衡。



## Montage und Aufstellung/Assembly and siting/ 组装与安置

D

### Anforderungen an den Aufstellort

Beachten Sie die nachfolgenden allgemeinen Hinweise bei Montage und Bedienung des Schaltschranks:

#### Vor der Montage ist zu beachten, dass:

- der Aufstellort frei von starkem Schmutz und Feuchtigkeit ist.
- die Umgebungstemperatur am Aufstellort nicht höher als +80°C ist.
- die Umgebungstemperatur am Aufstellort nicht niedriger als -20°C ist.
- der Schaltschrank nach dem Aufstellen waagrecht steht. Eventuelle Unebenheiten am Aufstellort können mittels Nivellierfüßen ausgeglichen werden.
- IP 55 nach IEC 60 529 in Verbindung mit Seitenwänden verschraubt.

#### Hinweise zur Montage



**Gefahr!**  
**Unmittelbare Gefahr für Leib und Leben.**

- Halten Sie die auf Seite 4 vorgegebenen Belastungsangaben ein.
- Halten Sie alle vorgegebenen Drehmomentangaben ein. Ein Über- bzw. Unterschreiten der in dieser Anleitung vorgegebenen Anzugsdrehmomente kann zu Anlagenschäden oder zu schweren bis hin zu tödlichen Verletzungen führen.
- Vermeiden Sie nicht notwendige Öffnungen am Schaltschrank. Jede nicht sorgfältig eingebrachte und abgedichtete Öffnung kann zu einer Reduzierung der Schutzart führen.
- Die bestückte Montageplatte ist für den Transport zu sichern!



**Hinweise zur Bedienung**

- Der Vierpunkt-Stangenverschluss ist leichtgängig und wird ausschließlich über den Verschluss oder einen nachträglich eingebauten Komfortgriff bedient. Ein zusätzliches Zudrücken der Tür ist nicht notwendig und kann zu Quetschverletzungen an Hand oder Finger führen.
- Vermeiden Sie unnötig langes Offenstehen der Türen, da Staub, Luftfeuchte oder mit Schadstoffen belastete Luft in den Schaltschrank eindringen kann.
- Überprüfen Sie nach Arbeiten am Schaltschrank, dass die Tür ordnungsgemäß verschlossen ist.

EN

### Installation requirements

Observe the following general notes on assembly and operation of the enclosure:

#### Before assembly, ensure that:

- the site is free from excessive dirt and moisture.
- the ambient temperature at the site is not higher than +80°C.
- the ambient temperature at the site is not lower than -20°C.
- the enclosure stands level after erection. Any unevenness at the site can be compensated by way of levelling feet.
- IP 55 to IEC 60 529 when fitted with side panels, screw-fastened.

#### Notes on assembly



**Danger!**  
**Immediate danger to life and limb.**

- Observe the load specifications given on page 4.
- Observe all specified tightening torques. If screws or bolts are tightened with torques greater or less than those specified in these instructions, this may result in damage and serious or even fatal injuries.
- Avoid all unnecessary openings in the enclosure. Openings which are not made and sealed properly may reduce the degree of protection.
- The equipped mounting plate must be secured for transportation!



**Notes on operation**

- The four-point locking rod guarantees ease of movement and is actuated exclusively by way of the closure or a retrofitted comfort handle. It is not necessary to press the door closed; this could lead to crushing injuries to hands or fingers.
- Avoid leaving the door open for longer periods than necessary, as dust, humidity and contaminated air can enter the enclosure.
- Check that the enclosure door is properly closed after working on the enclosure.

CN

### 安装要求

组装及操作箱体时遵守以下一般注意事项:

#### 组装前必须确保:

- 安装场所不得有过量尘土与水分。
- 安装场所环境温度不得高于+80 °C。
- 安装场所环境温度不得低于-20 °C。
- 安装好之后箱体应是水平的。如现场不平,可用水平支脚补偿调平。
- 安装侧板并用螺钉紧固时,根据IEC 60 529标准,防护等级可达IP 55。

#### 组装须知



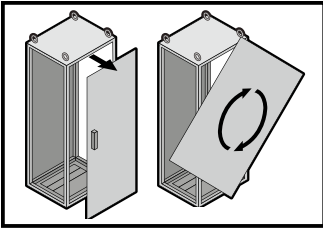
**危险!**  
面临生命危险或肢体伤害。

- 务必遵循第4页上的负载规范。
- 务必遵循所有规定的紧固扭矩。如果螺丝或螺栓紧固时扭矩大于或小于说明中的规定值,可能会导致设备损坏以及严重人身伤害甚至死亡。
- 非必要时切勿打开箱体。打开后未密封或密封不当可能导致防护等级降低。
- 所配安装板在运输时必须固定好!

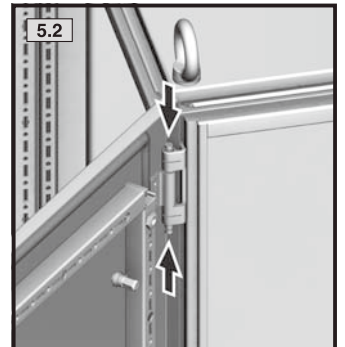
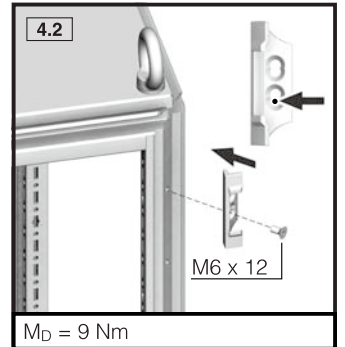
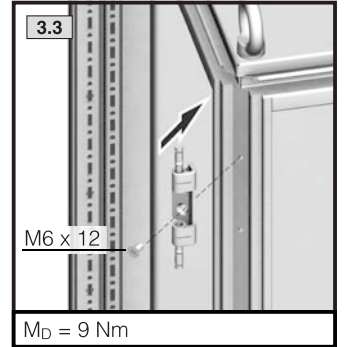
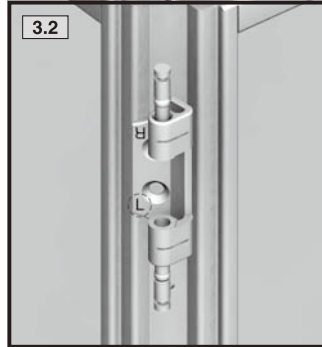
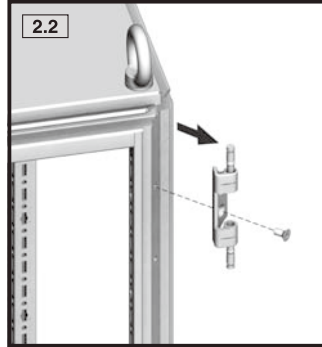
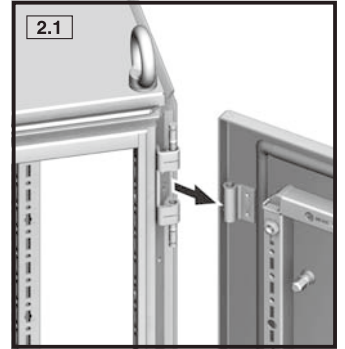
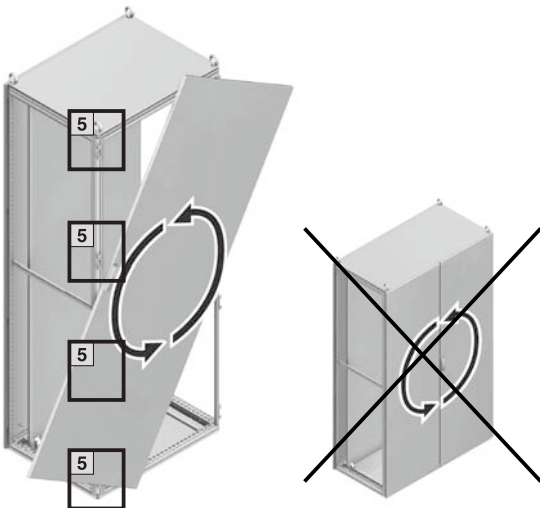
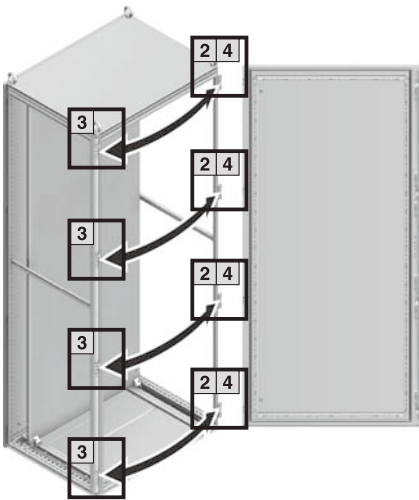
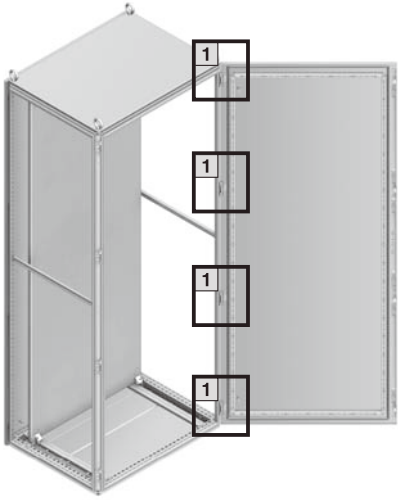
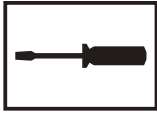


**操作须知**

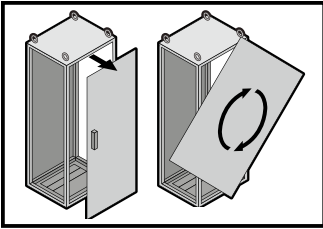
- 四点锁可确保灵活移动,且只能通过关闭或改进的舒适型手柄操作。箱门无需按住即可关闭;按住箱门可能导致手或手指压伤。
- 避免箱门打开时间过长,以防灰尘、湿气与污染空气进入箱体。
- 对箱体实施操作后检查确保箱体门已关好。



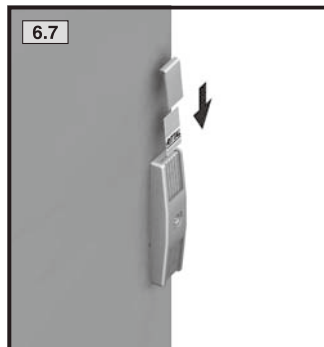
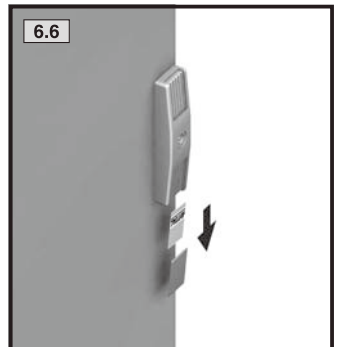
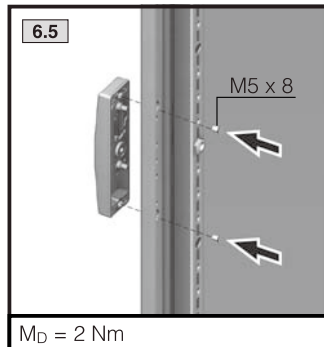
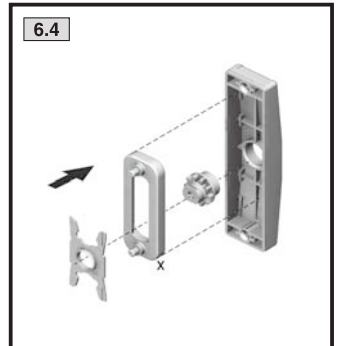
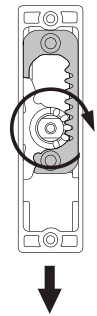
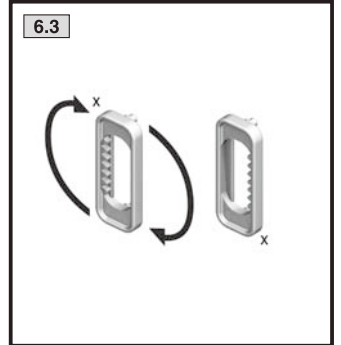
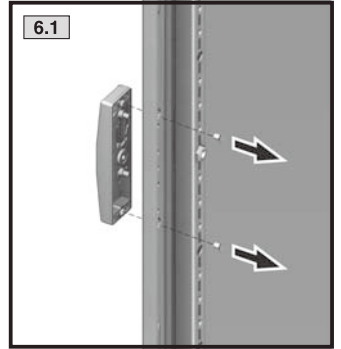
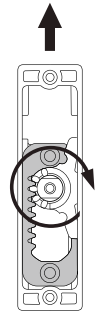
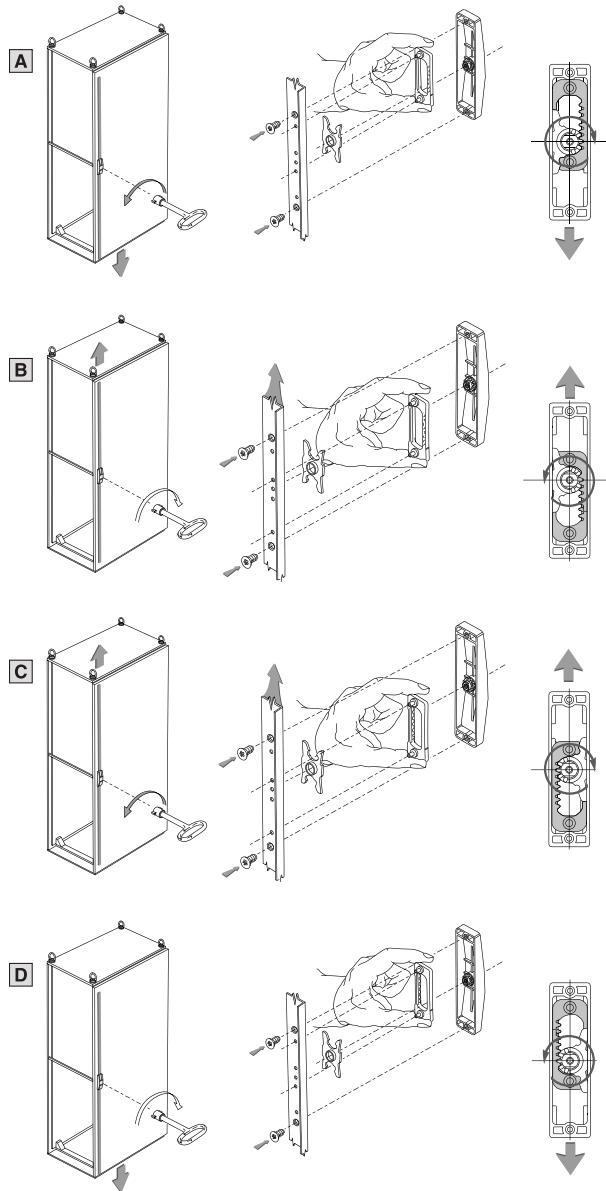
TX30

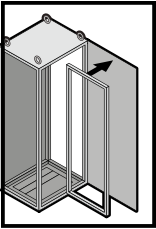




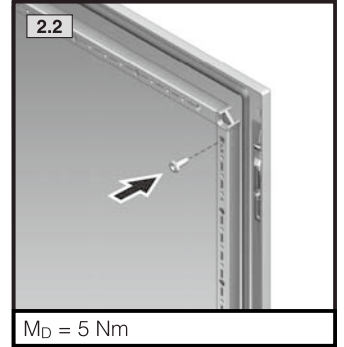
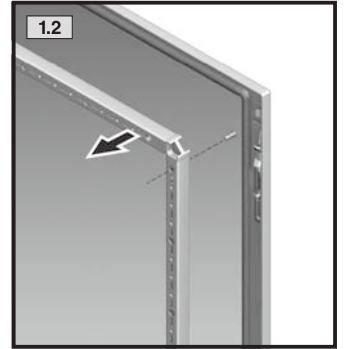
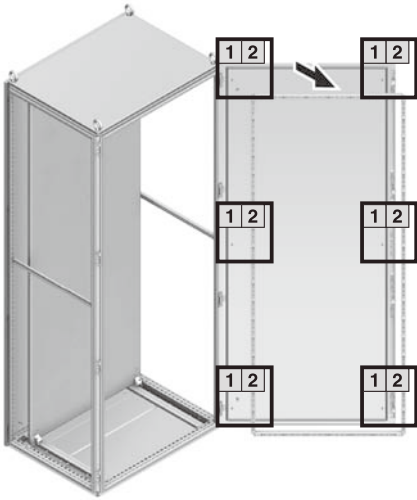


**TX25**

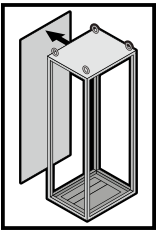




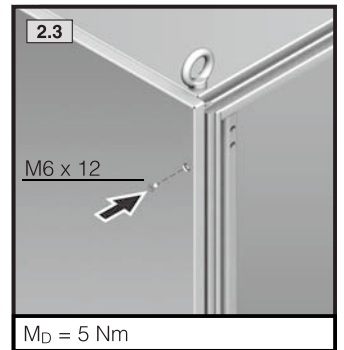
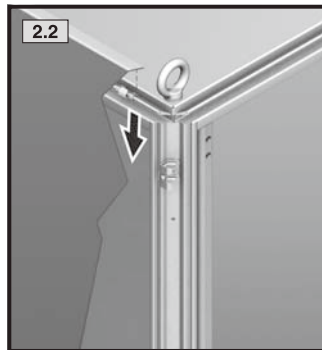
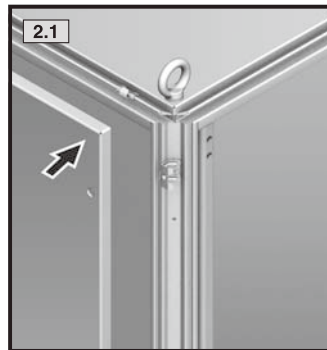
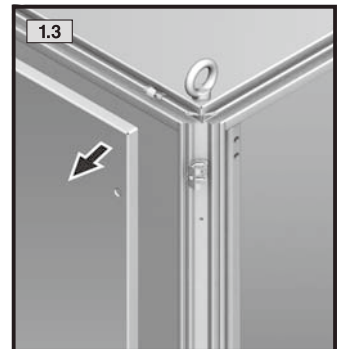
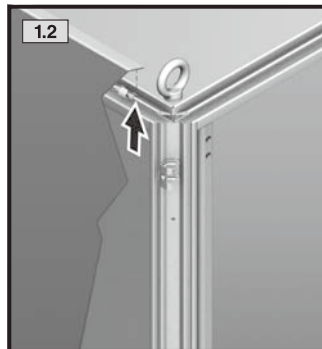
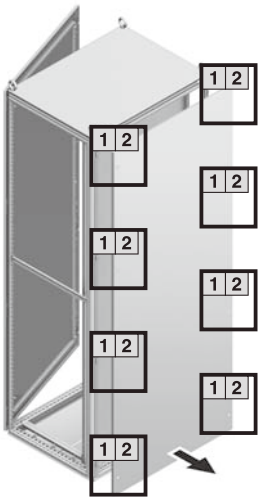
**SW13**



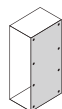
$M_D = 5 \text{ Nm}$



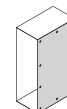
**TX30**



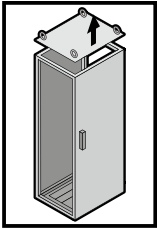
$M_D = 5 \text{ Nm}$



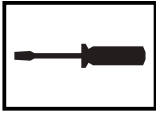
400/600/800 (8 x)



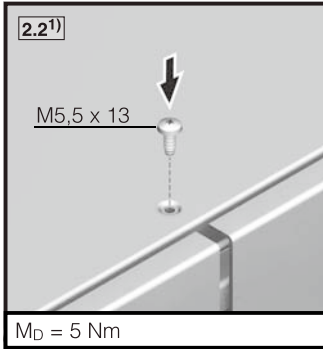
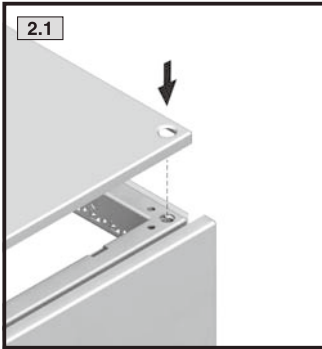
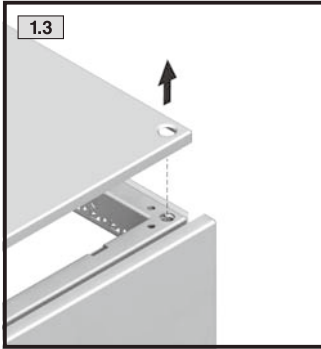
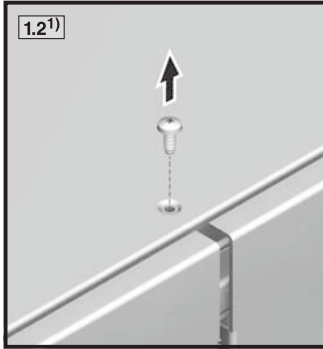
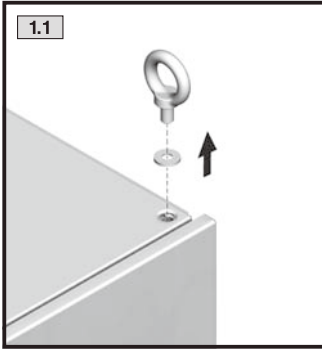
1000/1200 (10 x)



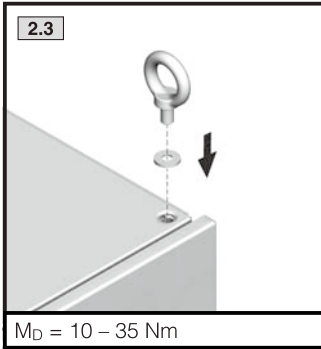
TX25



D EN CN

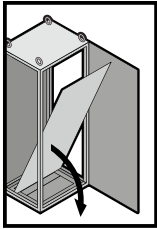


M<sub>D</sub> = 5 Nm



M<sub>D</sub> = 10 - 35 Nm

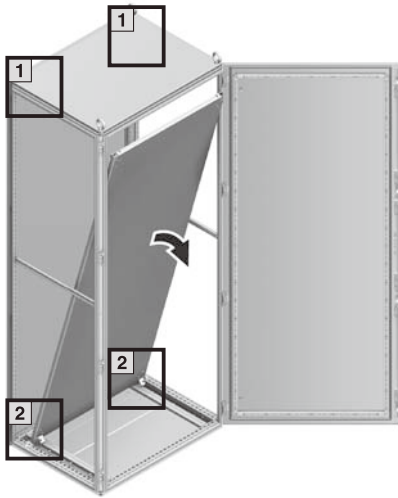
<sup>1)</sup> Zusätzlich bei Breite 1000/1200 / Additionally for width 1000/1200 / 宽1000/1200的箱体有此附加安装螺钉



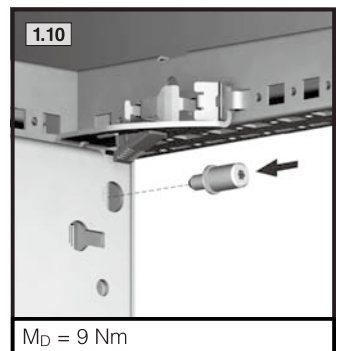
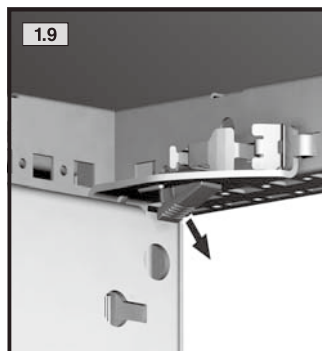
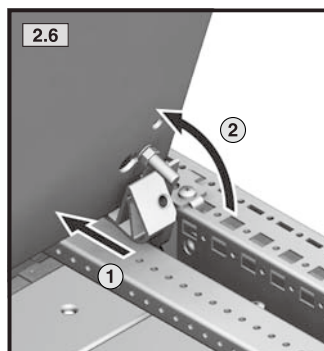
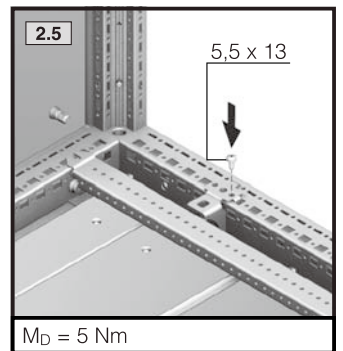
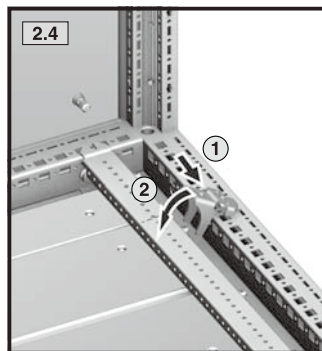
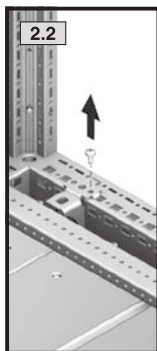
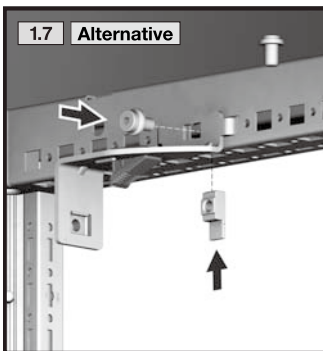
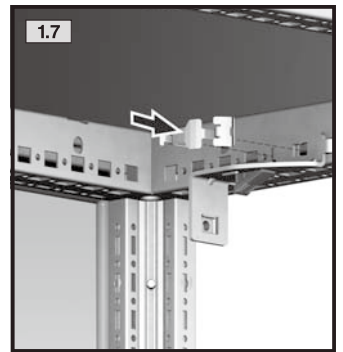
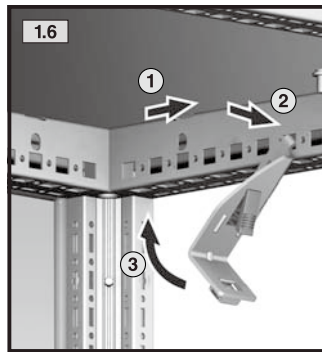
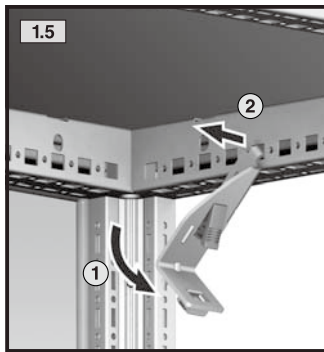
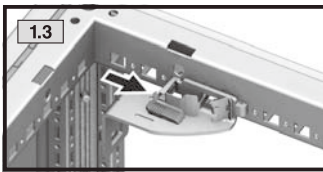
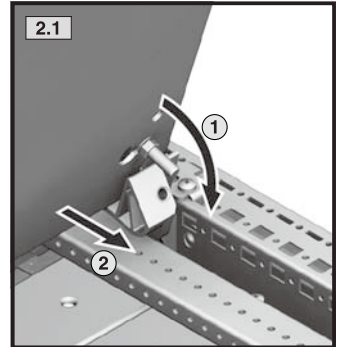
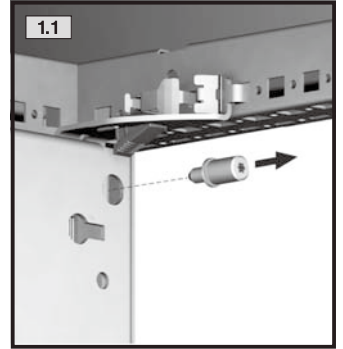
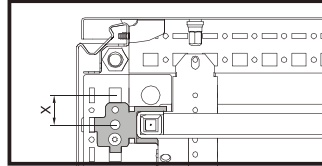
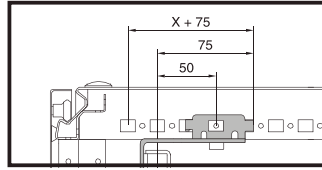
TX25

TX30

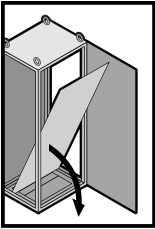
mm



**Transportsicherung**  
**Shipping brace**  
运输支脚



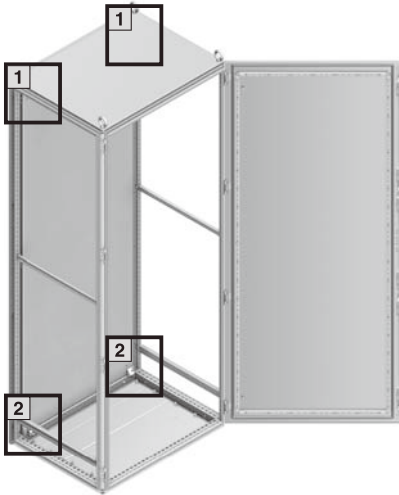




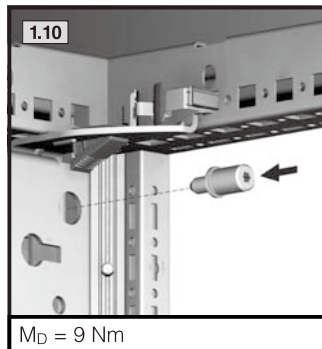
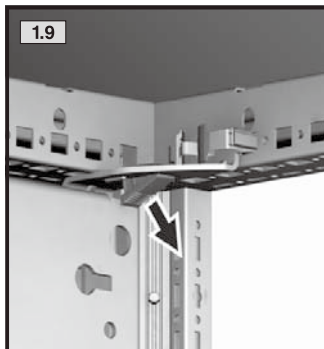
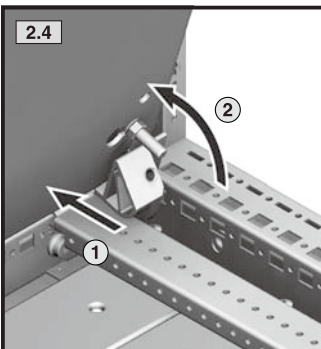
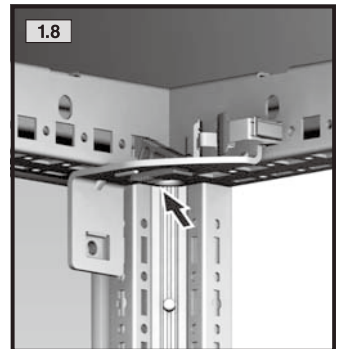
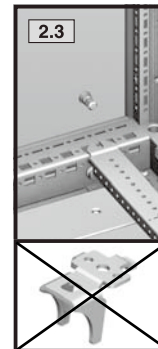
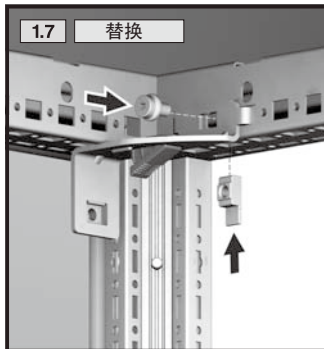
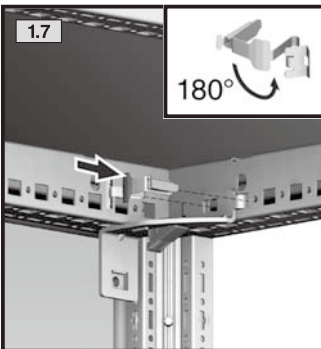
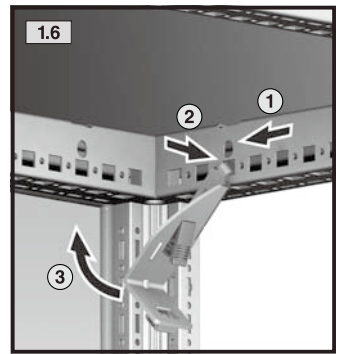
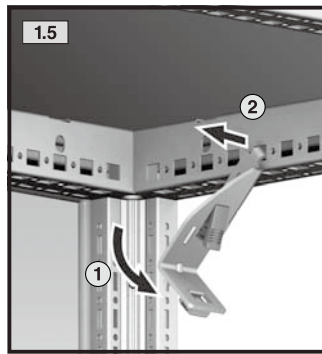
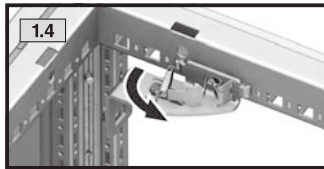
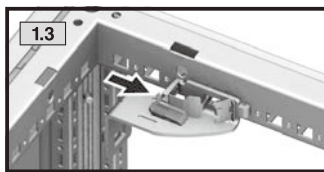
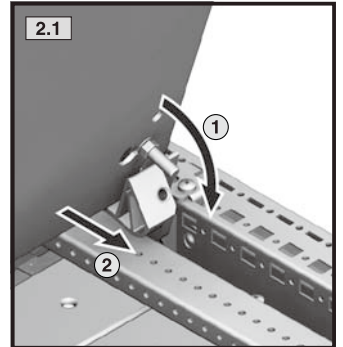
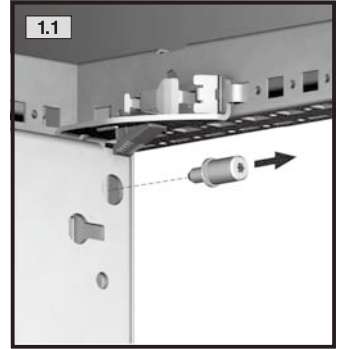
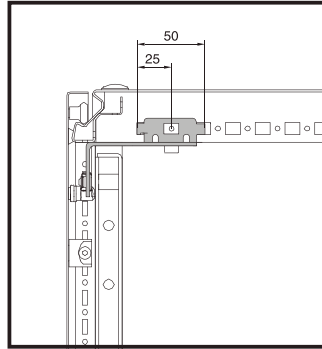
TX25

TX30

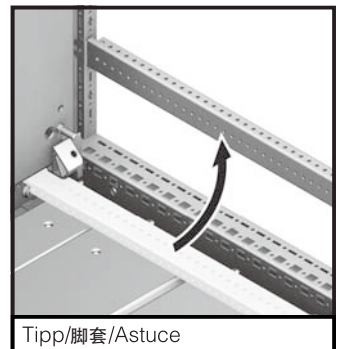
**Montageplatteneinbau in hinterster Stellung**  
**Fitting the mounting plate in the rearmost position**  
 将安装板固定在最后方位置



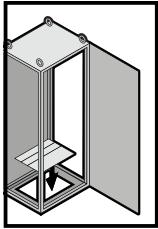
**Transportsicherung**  
**Shipping brace**  
 运输支脚



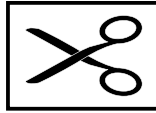
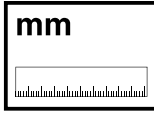
$M_D = 9 \text{ Nm}$



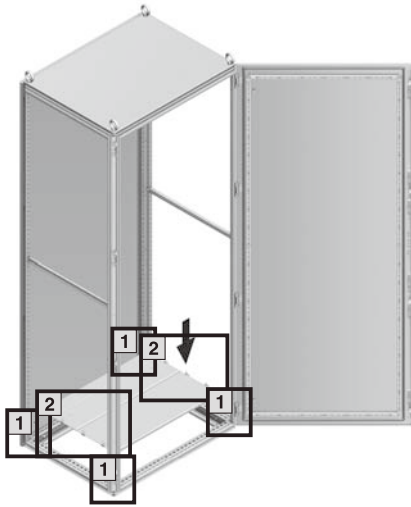
Tipp/脚套/Astuce



TX25/30



IP



**Drei Beispiele aus einer Vielzahl von Möglichkeiten**

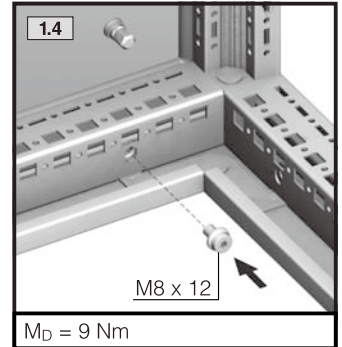
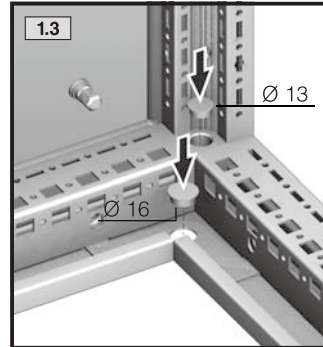
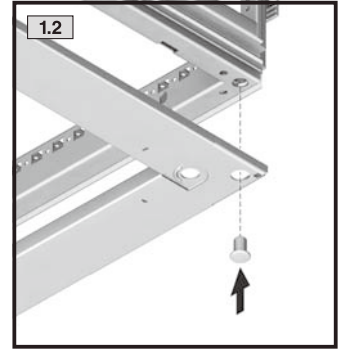
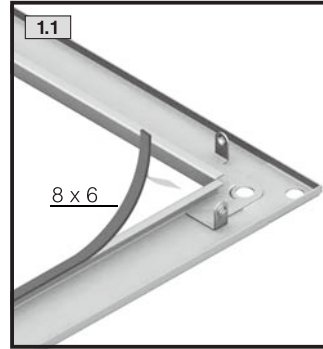
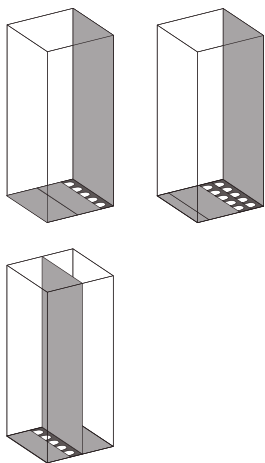
Die Grafiken zeigen drei TS 8 Beispiele für die Positionierung von Kabeleinführungsblechen anstelle von Segmenten der serienmäßigen dreigeteilten Bodenbleche. So ist eine Positionierung passend zur Montageplatte möglich. Durch die Schranksymmetrie sind die Kabeleinführungsbleche analog der Bodenbleche bei entsprechenden Maßen auch in Schranktiefe, rechts und links, einsetzbar.

**Three examples from the multitude of possibilities**

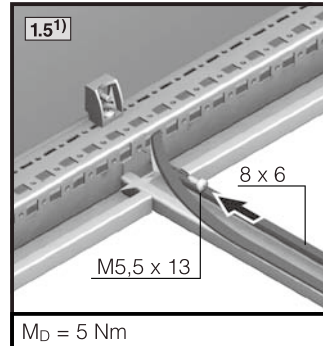
The illustrations here show three examples for the fitting of cable entry plates in place of the standard three-part gland plates of the TS 8 enclosure. Positioning can thus be matched to the mounting plate. The symmetrical enclosure design permits the cable entry plates to be installed on either the right or left, in the same way as the gland plates – variation in the enclosure depth is similarly possible with appropriate dimensions.

三个示例 (另有多种可能, 不限于此)

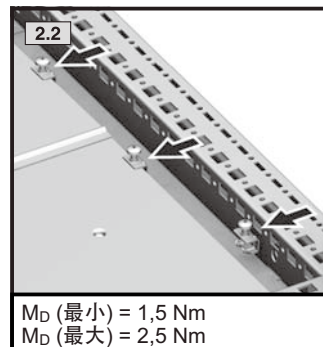
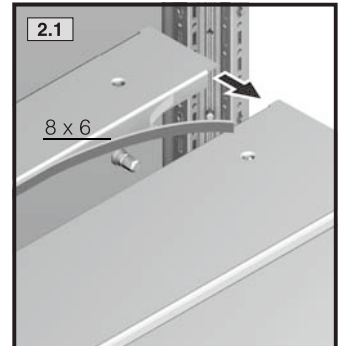
下图为在TS 8箱体的标准三段式底板上安装电缆导入板的三种方法, 以便与安装板相匹配。箱体为对称设计, 允许电缆导入板既可安装在左侧, 也可安装在右侧, 与底板类似, 同样也可选择不同的箱体深度。



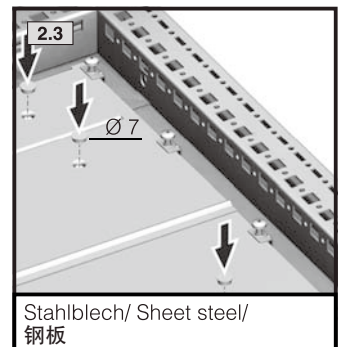
M<sub>D</sub> = 9 Nm



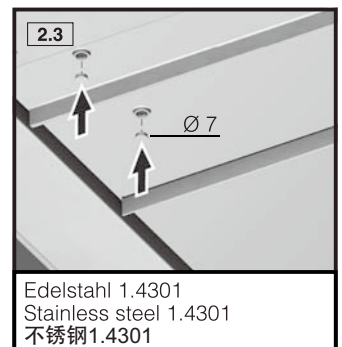
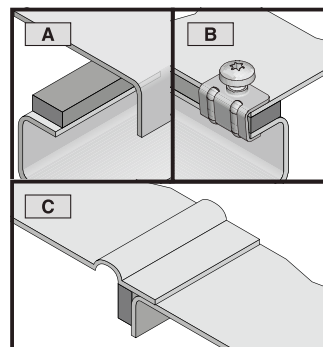
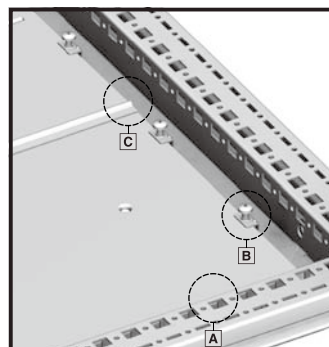
M<sub>D</sub> = 5 Nm



M<sub>D</sub> (最小) = 1,5 Nm  
M<sub>D</sub> (最大) = 2,5 Nm

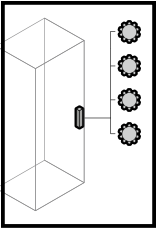


Stahlblech/ Sheet steel/  
钢板

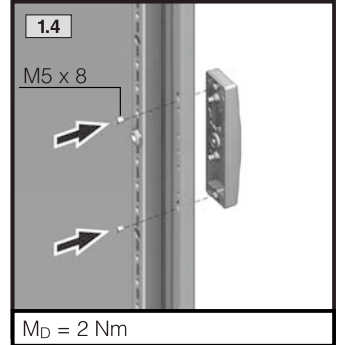
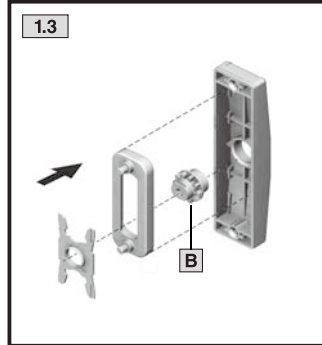
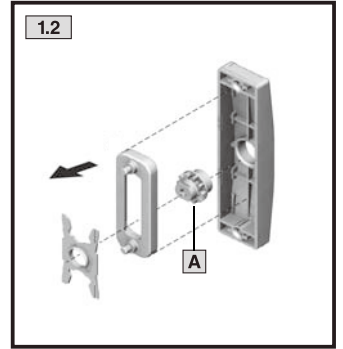
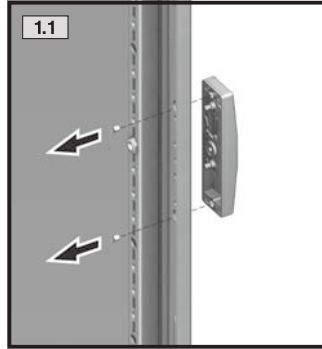


Edelstahl 1.4301  
Stainless steel 1.4301  
不锈钢 1.4301

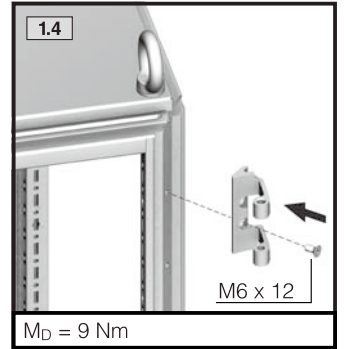
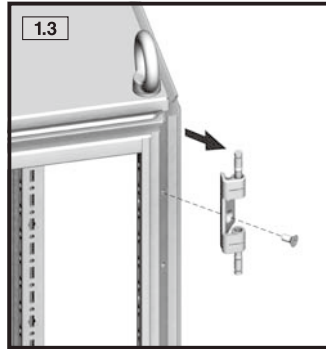
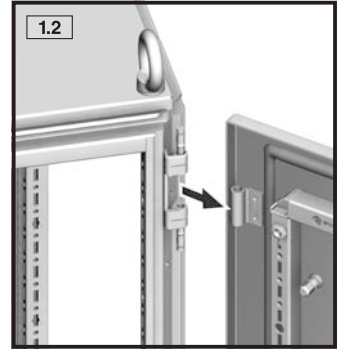
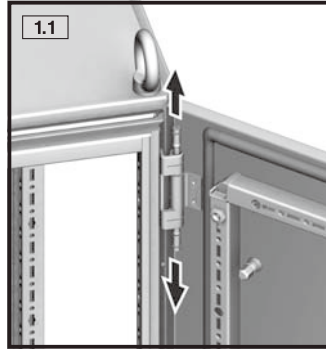
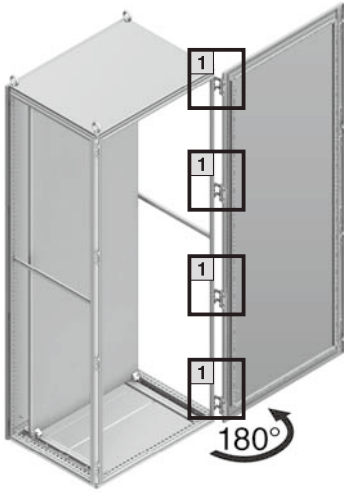
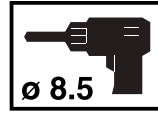
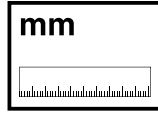
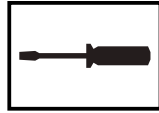
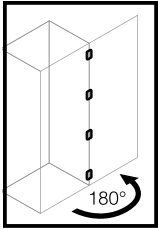
<sup>1)</sup> Zusätzlich bei Breite 1000/1200 / Additionally for width 1000/1200 / 宽1000/1200的箱体有此附加安装螺钉

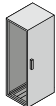
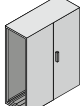


**TX25**

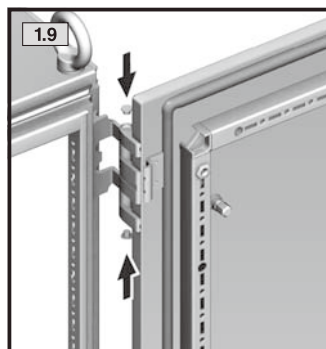
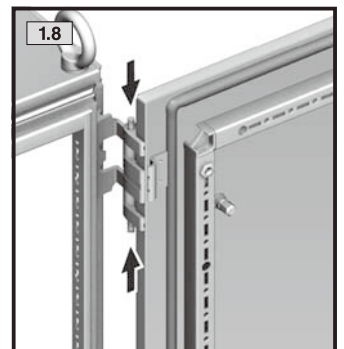
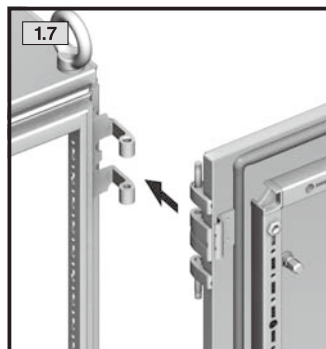
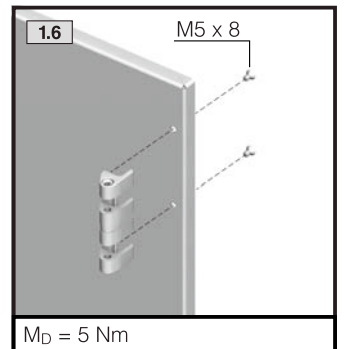
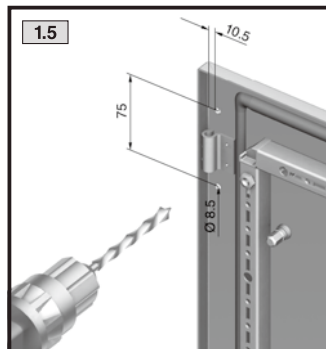


	<b>B</b>		
—		7 mm	8611.100
		8 mm	8611.110
—		6,5 mm	8611.220
		7 mm	8611.120
—		8 mm	8611.130
		7 mm	8611.140
—		戴姆勒	8611.150
—		3 mm	8611.160
—		菲亚特	8611.170

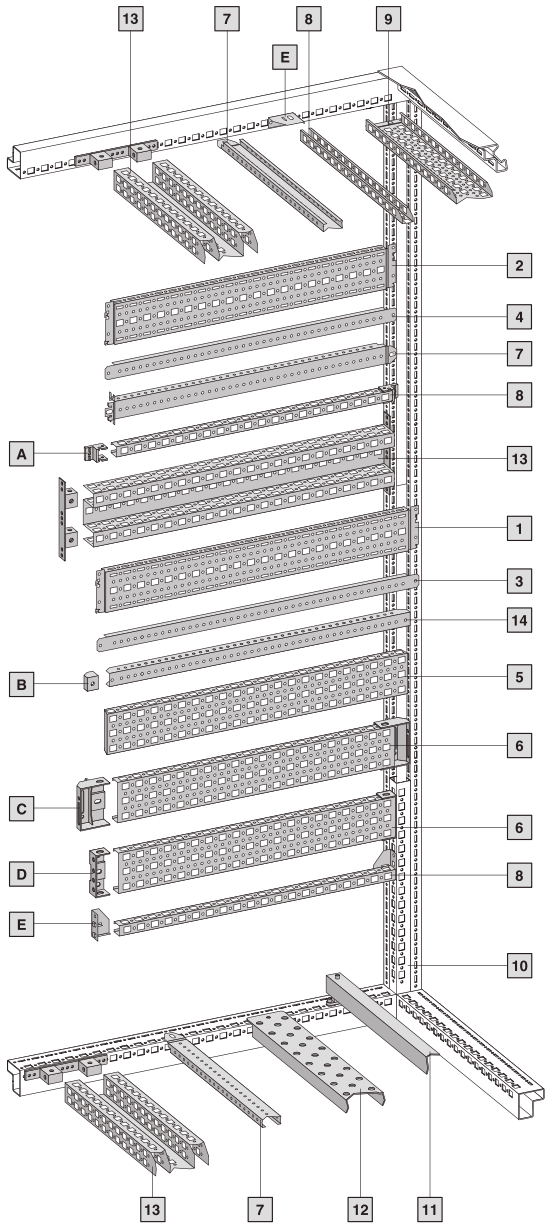
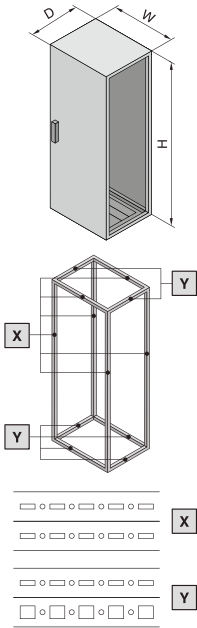
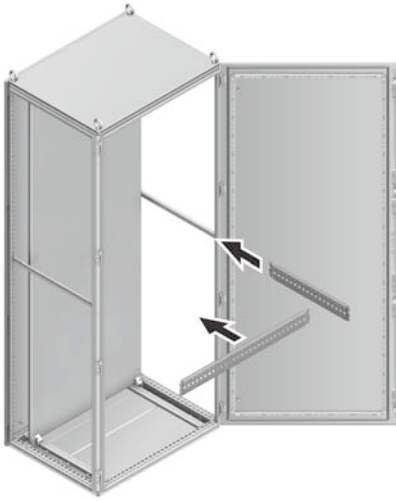
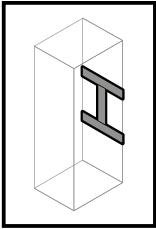


		Farbe Colour 颜色
1 x 8800.710 <sup>1)</sup>	2 x 8800.710 <sup>1)</sup>	RAL 7035
1 x 8800.190	2 x 8800.190	RAL 7035
1 x 8800.950	2 x 8800.950	RAL 9005
1 x 8701.180	2 x 8701.180	Matt vernickelt Matt nickel-plated 镀亚光镍

<sup>1)</sup> 900 N



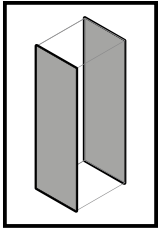




W/D	Best.-Nr./Model No./ 型号			
	Innere Ebene/ Inner level/ 内部层面	Äußere Ebene/ Outer level/ 外部层面	Rahmen-Profil/ Frame section/ 框架型材	
	<b>1</b>	<b>2</b>		
400	8612.040	8612.140	-	
500	8612.050	8612.150	-	
600	8612.060	8612.160	-	
800	8612.080	8612.180	-	
1000	8612.100	8612.100	-	
1200	8612.020	8612.120	-	
	<b>3</b>	<b>4</b>		
400	4309.000	4694.000	-	
500	4596.000	4695.000	-	
600	8800.130	4696.000	-	
800	4579.000	4697.000	-	
	<b>5</b>			
500	8612.550	-	-	
600	8612.560	-	-	
800	8612.580	-	-	
1000	8612.500	-	-	
1200	8612.520	-	-	
	<b>6</b>		<b>6</b>	
400	4374.000	-	4374.000	
500	4375.000	-	4375.000	
600	4376.000	-	4376.000	
800	4377.000	-	4377.000	
1000	4382.000	-	4382.000	
1200	4378.000	-	4378.000	
1800	4379.000	-	4379.000	
2000	4380.000	-	4380.000	
2200	4381.000	-	4381.000	
		<b>7</b>	<b>7</b>	
400	-	8612.240	8612.240	
500	-	8612.250	8612.250	
600	-	8612.260	8612.260	
800	-	8612.280	8612.280	
	<b>8</b>		<b>8</b>	
400	4169.000	-	4169.000	
500	4170.000	-	4170.000	
600	4171.000	-	4171.000	
800	4172.000	-	4172.000	
1000	4173.000	-	4173.000	
1200	4174.000	-	4174.000	
1800	4176.000	-	4176.000	
2000	4177.000	-	4177.000	
2200	4178.000	-	4178.000	

	Best.-Nr./Model No./ 型号
W	<b>9</b>
600	4364.000
800	4365.000
1000	4373.000
1200	4367.000
H	<b>10</b>
1800	8800.380
2000	8800.300
2200	8800.320
W/D	<b>11</b>
400	4193.000
600	4191.000
800	4192.000
1000	4336.000
1200	4196.000
W/D	<b>12</b>
400	4394.000
500	4395.000
600	4396.000
800	4398.000

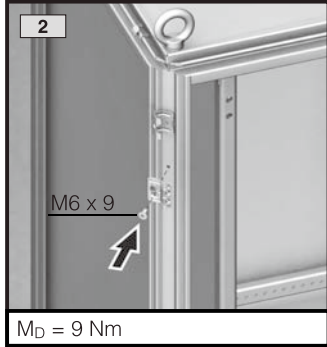
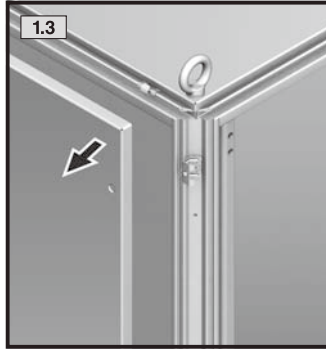
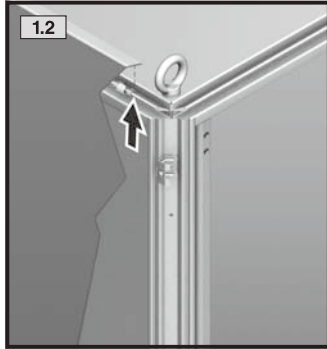
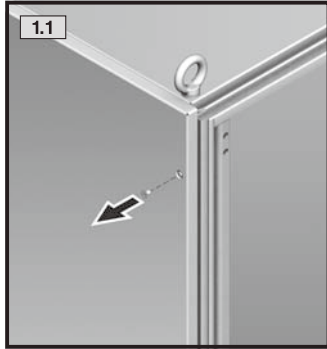
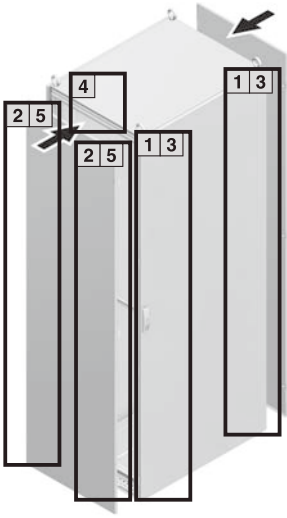
	Best.-Nr./Model No./ 型号
W/D	<b>13</b>
500	8612.650
600	8612.660
800	8612.680
	<b>Best.-Nr./Model No./ 型号</b>
W/D	<b>14</b>
400	8612.240
500	8612.250
600	8612.260
800	8612.280
	<b>Best.-Nr./Model No./ 型号</b>
	<b>A</b> 8800.370
M6	<b>B</b> 8800.806
M8	<b>B</b> 8800.808
	<b>C</b> 8800.330
	<b>D</b> 4183.000
	<b>E</b> 4181.000



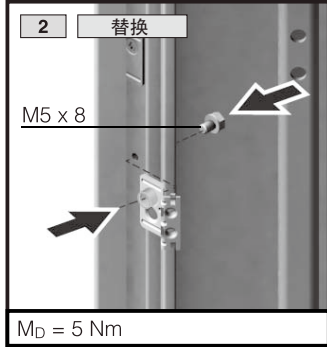
TX30 

SW8 

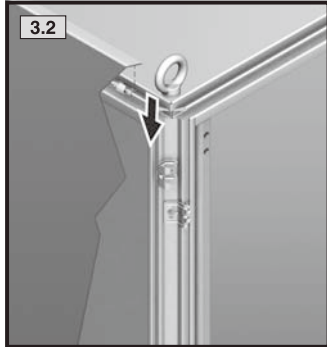
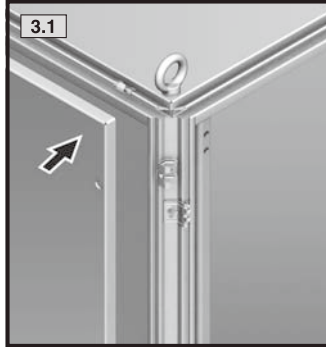
D EN CN



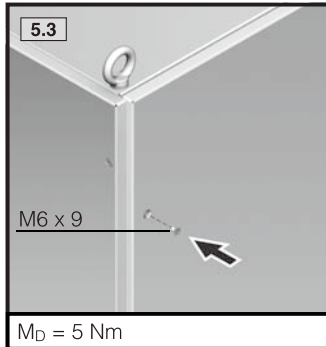
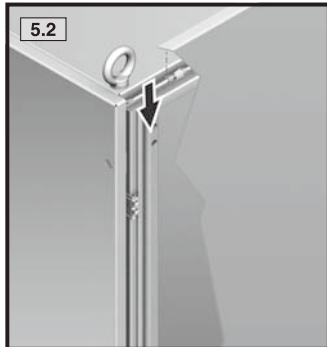
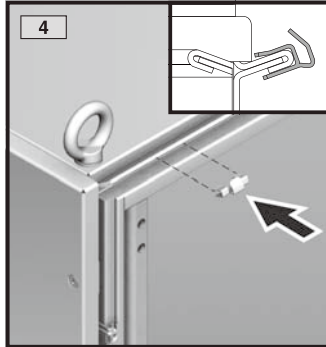
$M_D = 9 \text{ Nm}$



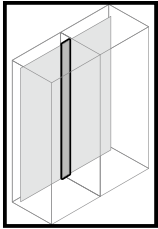
$M_D = 5 \text{ Nm}$



$M_D = 5 \text{ Nm}$



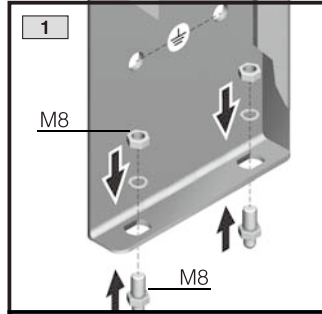
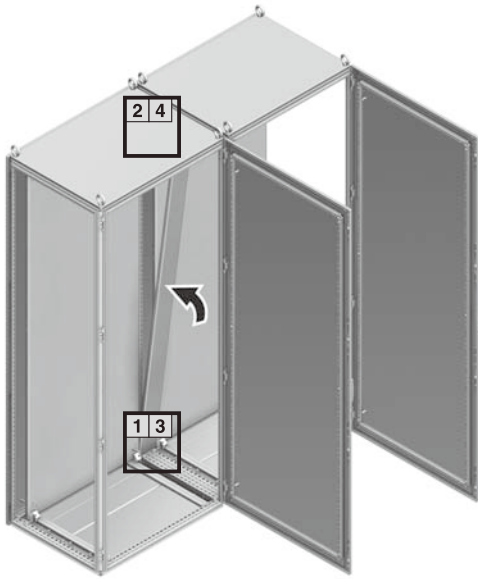
$M_D = 5 \text{ Nm}$



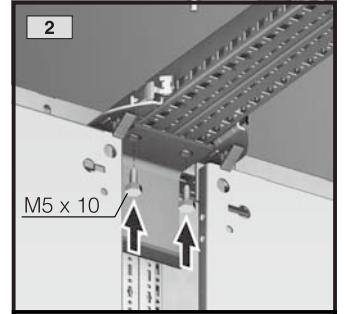
**TX30**  
★

**SW8/13**  
⬡

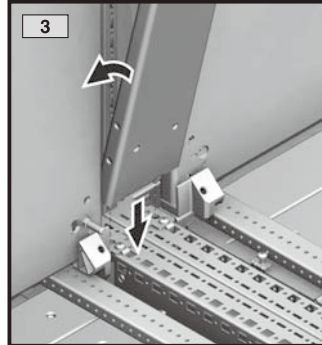
D EN CN



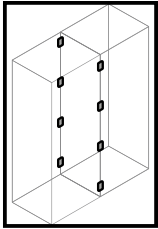
$M_D = 9 \text{ Nm}$



$M_D = 3 \text{ Nm}$



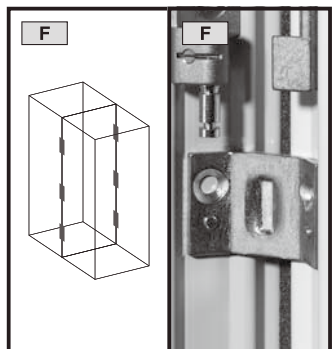
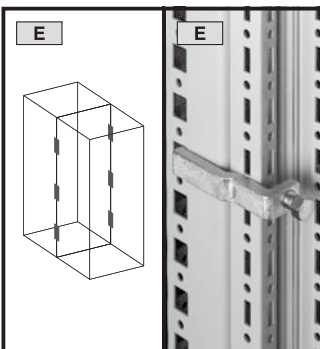
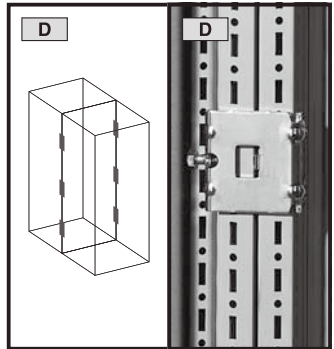
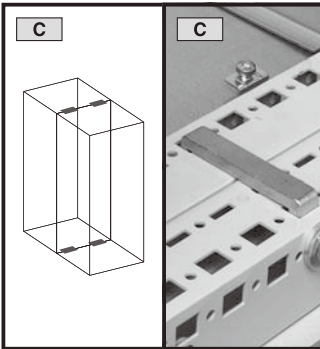
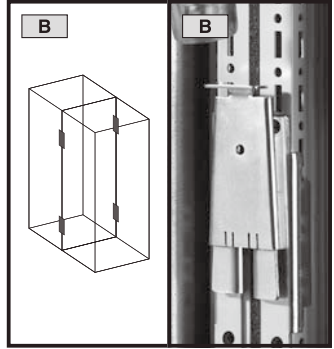
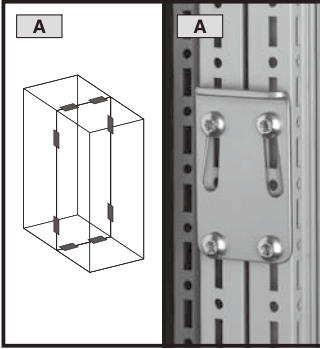
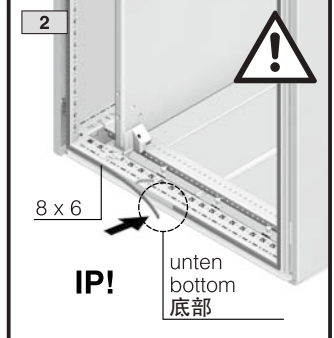
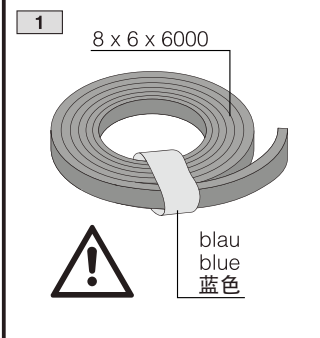
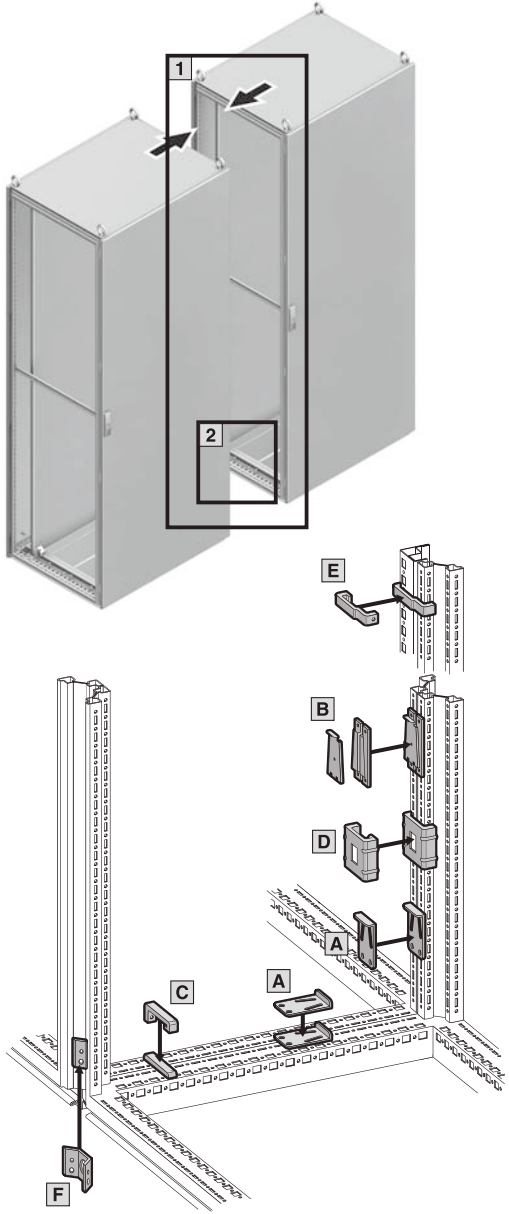
$M_D = 5 \text{ Nm}$



**TX30**  
★

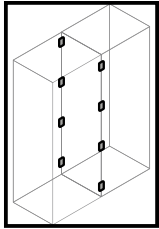
D EN CN

**Möglichkeiten der Anreihung**  
**Baying options**  
并柜的选项



		VE (St.) Packs of 每包	Best.-Nr./ Model No./ 型号
A	Anreih-Schnellverbinder, einteilig/Quick-fit baying clamp, one-piece/并柜快速连接, 单件式	6	8800.500
B	Anreih-Schnellverbinder, dreiteilig/Quick-fit baying clamp, three-piece/并柜快速连接, 三段式	6	8800.590
C	Anreihzwinde horizontal/Baying clamp, horizontal/水平并柜夹钳	4	8800.400
D	Anreihzwinde vertikal für TS/TS/Baying clamp, vertical for TS/TS/垂直并柜夹钳, 用于TS/TS	6	8800.410
E	Anreihzwinde vertikal für TS/PS/Baying clamp, vertical for TS/PS/垂直并柜夹钳, 用于TS/PS	6	8800.420
F	Anreihverbinder außen/Baying connector, external/外部并柜连接件	6	8800490



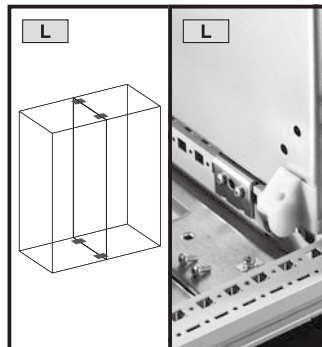
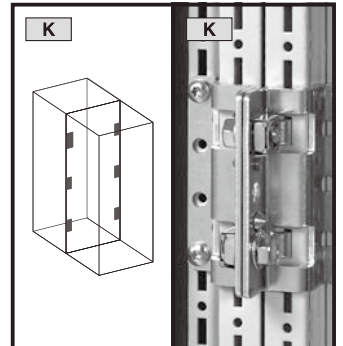
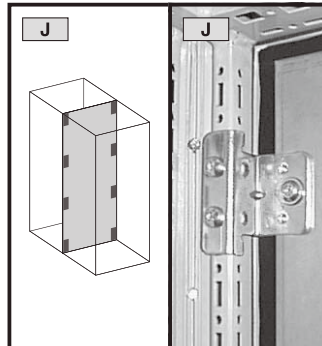
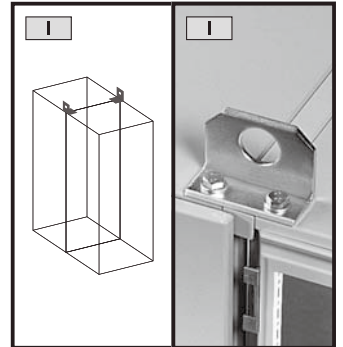
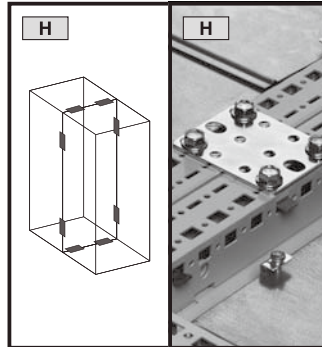
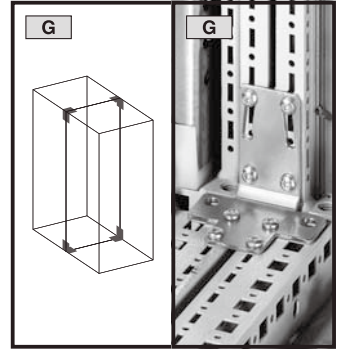
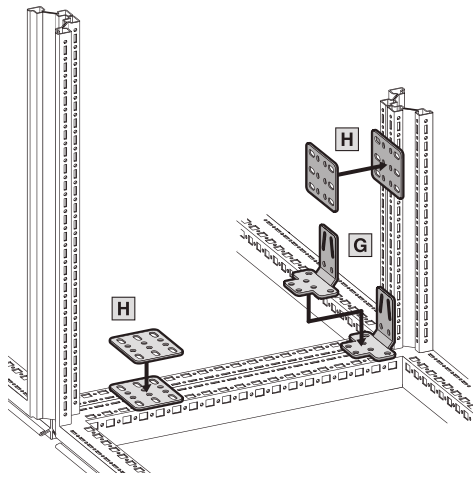
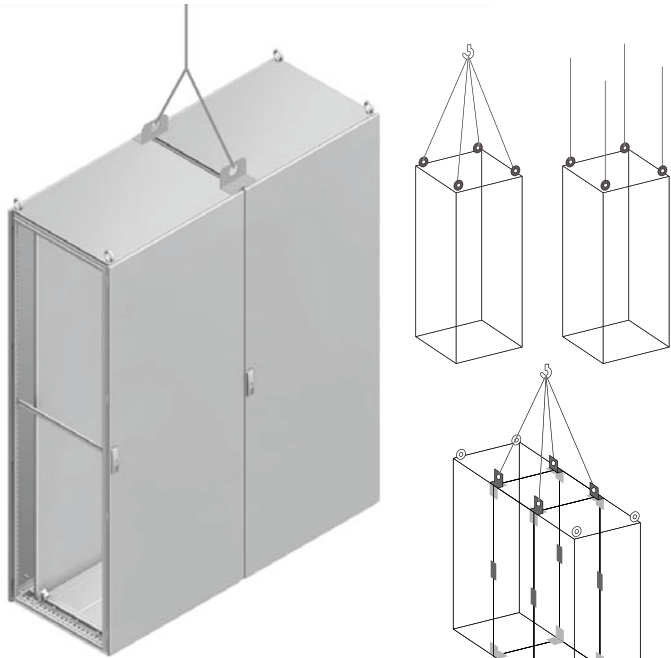


**TX30**

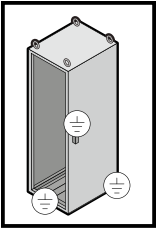


D EN CN

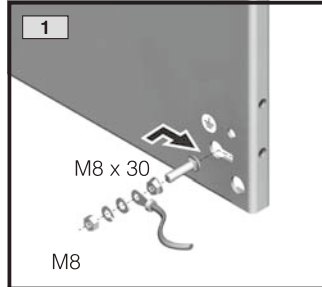
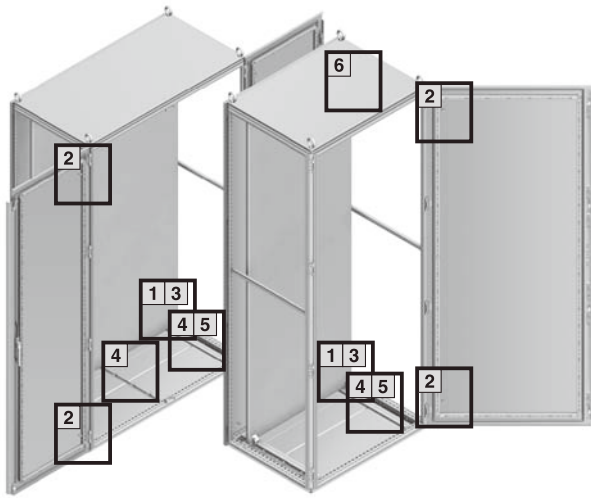
**Möglichkeiten der Transport-Anreihung**  
**Transport baying options**  
**并联柜运输选项**



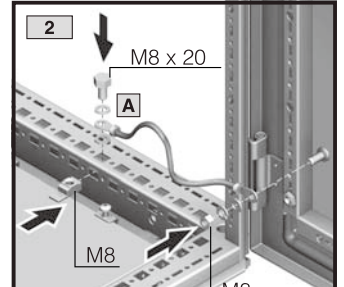
		VE (St.) Packs of 每包	Best.-Nr./ Model No./ 型号
<b>G</b>	Anreihwinkel für TS/TS/Angular baying bracket for TS/TS/并柜角固定件, 用于TS/TS	4	<b>8800.430</b>
<b>H</b>	Anreihlasche für TS/TS und TS/PS/Baying bracket for TS/TS and TS/PS/并柜角固定件, 用于TS/TS及TS/P	4	<b>4582.500</b>
<b>I</b>	Kombiwinkel/Combination angle/组合角	4	<b>4540.000</b>
<b>J</b>	Anreihbefestigung vertikal für TS/TS mit Trennwand/Baying attachment, vertical, for TS/TS with divider panel/ 垂直并柜固定件, 用于带隔板的TS/TS	8	<b>8800.470</b>
<b>K</b>	Anreihbefestigung vertikal für TS/TS/Baying attachment, vertical, for TS/TS/垂直并柜固定件, 用于TS/TS	6	<b>8800.670</b>
<b>L</b>	Anreihverbinder für Montage Rücken an Rücken/Baying clamp, for back-to-back mounting/ 并柜夹钳, 用于背靠背安装	4	<b>8800.170</b>



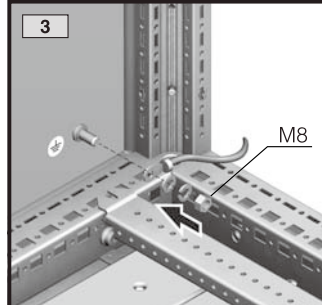
**SW13**



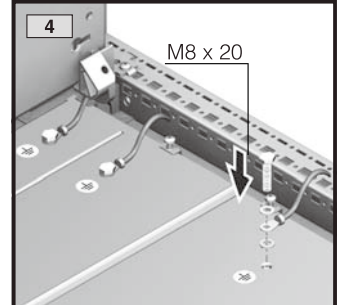
$M_D = 10 - 12 \text{ Nm}$   
 $I_{th}^2 \times TK = 92,3 \times 10^6 \text{ A}^2 \text{ s}$



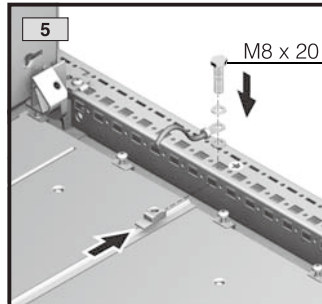
$M_D = 8 - 10 \text{ Nm}$



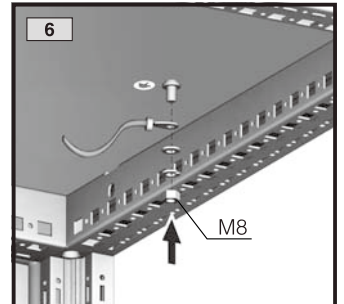
$M_D = 8 - 10 \text{ Nm}$



$M_D = 10 - 12 \text{ Nm}$



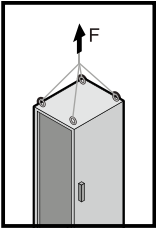
$M_D = 10 - 12 \text{ Nm}$



$M_D = 8 - 10 \text{ Nm}$

	Ø mm <sup>2</sup>	L mm	Best.-Nr. Model No. 型号
	4	170	<b>SZ 2564.000</b>
	16	170	<b>SZ 2565.000</b>
	25	170	<b>SZ 2566.000</b>
<b>A</b>	4	300	<b>SZ 2567.000</b>
	10	300	<b>SZ 2565.120</b>
	16	300	<b>SZ 2568.000</b>
	25	300	<b>SZ 2569.000</b>

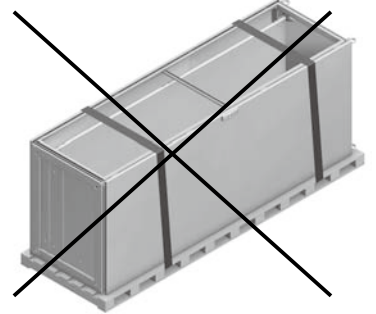
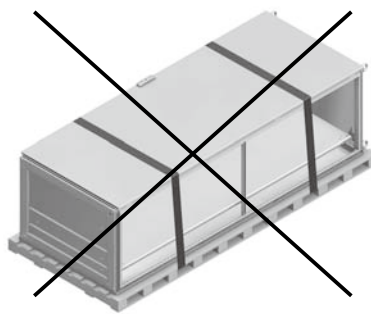
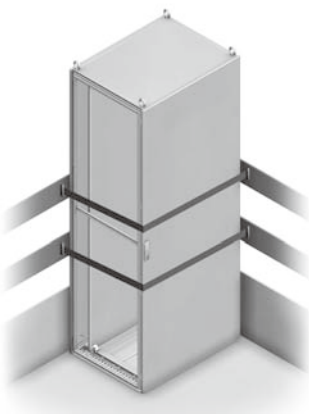
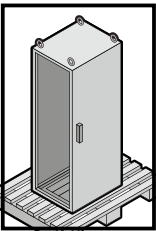
		1	2	3	4	5	6
	M8 x 30	1	-	-	-	-	-
	M8 x 20	-	-	-	4/8	1	-
	Ø 8,2	-	-	-	4/8	1	-
	M8	1	1/2	1	-	-	1
	M8	1	-	-	-	-	-
	M8	-	-	-	-	1	-
	A 8,4	1	1/2	1	4/8	1	1
	A8	1	1/2	1	-	-	1
		1	1/2	1	4/8	1	1

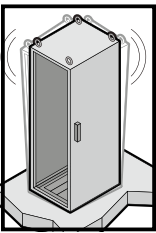
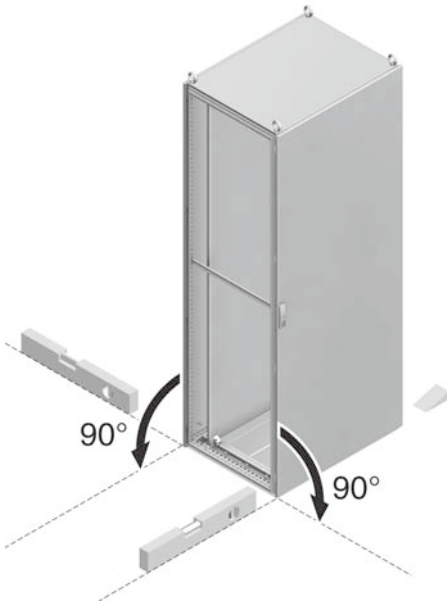
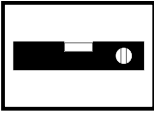
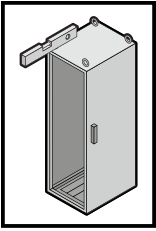


SZ 4568.000, SZ 4568.500

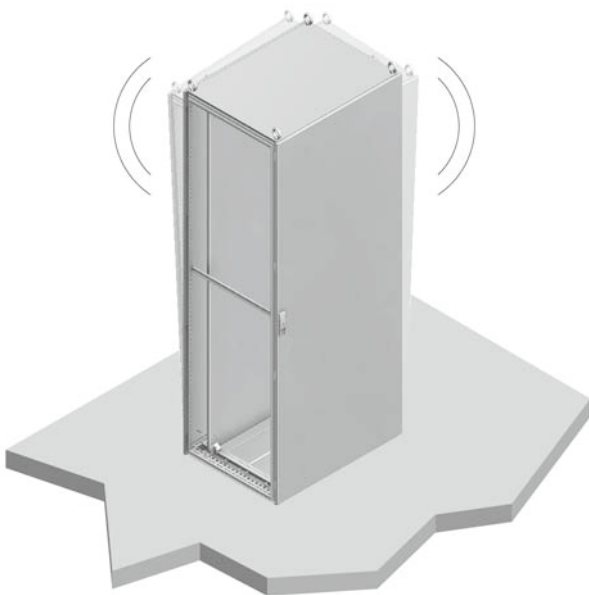
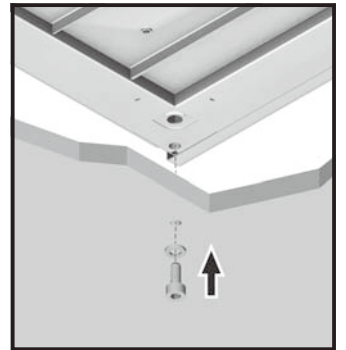
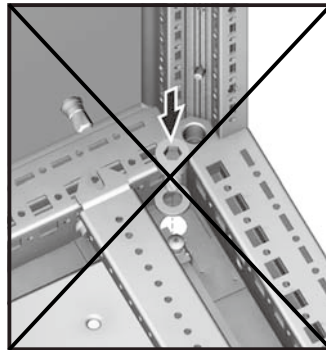


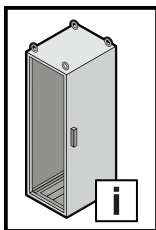
	90°	45°	60°
F	13.600 N	4.800 N	6.400 N
			最大14.000 N





**Dynamische Belastung**  
**Dynamic loads**  
动态负荷



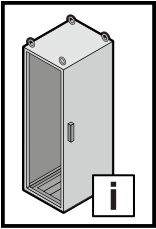


**Q<sub>s</sub> [W]**

**Technische Daten/Technical data/技术数据**

Best.-Nr. TS Model No. TS 型号SE	Material: 1.4301 Material: 1.4301 材料: 1.4301	W (ΔT = 20 K)					Schrank/ Enclosure/ 箱体			Montageplatte/ Mounting plate/ 安装板		
		W mm	H mm	D mm	F mm	G mm	Stärke Thickness 厚度					
8615.500	-	308	249	276	223	249	600	1200	500	499	1096	3
8815.500	-	370	302	328	275	302	800	1200	500	699	1096	3
8215.500	-	496	407	433	380	407	1200	1200	500	1099	1096	3
8645.500	-	351	283	314	253	283	600	1400	500	499	1296	3
8845.500	-	422	342	373	311	342	800	1400	500	699	1296	3
8245.500	-	564	459	490	428	459	1200	1400	500	1099	1096	3
8665.500	-	395	317	352	282	317	600	1600	500	499	1496	3
8865.500	-	473	382	417	347	382	800	1600	500	699	1496	3
8265.500	-	631	511	546	476	511	1200	1600	500	1099	1496	3
8684.500	-	393	314	346	282	314	600	1800	400	499	1696	3
8884.500	8454.600	477	382	414	350	382	800	1800	400	699	1696	3
8084.500	-	561	450	481	418	450	1000	1800	400	899	1696	3
8080.500	-	561	450	481	418	450	1000	1800	400	899	1696	3
8284.500	8456.600	644	517	549	486	517	1200	1800	400	1099	1696	3
8485.510	-	352	280	320	241	280	400	1800	500	-	-	-
8685.500	8457.600	438	351	391	312	351	600	1800	500	499	1696	3
8885.500	-	525	422	462	382	422	800	1800	500	699	1696	3
8880.500	8455.600	525	422	462	382	422	800	1800	500	699	1696	3
8285.500	8453.600	698	564	603	524	564	1200	1800	500	1099	1696	3
8486.510	-	393	314	362	267	314	400	1800	600	-	-	-
8686.500	-	483	388	436	341	388	600	1800	600	499	1696	3
8886.500	-	573	462	510	414	462	800	1800	600	699	1696	3
8881.500	-	573	462	510	414	462	800	1800	600	699	1696	3
8286.500	-	752	610	657	562	610	1200	1800	600	1099	1696	3
8604.500	-	433	345	380	310	345	600	2000	400	499	1896	3
8804.500	-	524	419	454	384	419	800	2000	400	699	1896	3
8004.500	-	616	493	528	458	493	1000	2000	400	899	1896	3
8204.500	-	708	567	602	532	567	1200	2000	400	1099	1896	3
8405.510	-	387	308	352	264	308	400	2000	500	-	-	-
8605.500	-	482	385	429	341	385	600	2000	500	499	1896	3
8805.500	-	576	462	506	418	462	800	2000	500	699	1896	3
8005.500	-	671	539	583	495	539	1000	2000	500	899	1896	3
8205.500	-	766	616	660	572	616	1200	2000	500	1099	1896	3
8406.510	-	433	345	398	292	345	400	2000	600	-	-	-
8606.500	8452.600	531	425	478	372	425	600	2000	600	499	1896	3
8806.500	8450.600	628	505	558	452	505	800	2000	600	699	1896	3
8006.500	-	726	585	638	532	585	1000	2000	600	899	1896	3
8206.500	8451.600	824	665	718	612	665	1200	2000	600	1099	1896	3
8608.500	-	628	505	576	435	505	600	2000	800	499	1896	3
8808.500	-	732	591	662	521	591	800	2000	800	699	1896	3
8208.500	-	940	764	834	693	764	1200	2000	800	1099	1896	3
8626.500	-	578	462	520	404	462	600	2200	600	499	2096	3
8826.500	-	684	548	606	490	548	800	2200	600	699	2096	3
8226.500	-	895	721	779	663	721	1200	2200	600	1099	2096	3





## Hinweise zur Wartung/Notes on maintenance/ 维护须知

**D**

Der Wartungsplan ist empfohlen für alle Anreih-Schränke TS 8.

### Wartungsintervall

Die Wartung muss regelmäßig in Abhängigkeit der Einsatz- und Umgebungsbedingungen, mindestens einmal jährlich durchgeführt und entsprechend dokumentiert werden.

Art und Umfang der durchzuführenden Arbeiten:

- Die Scharniere der Türen werden auf Leichtgängigkeit überprüft und mit einem geeigneten, wasserfreien Schmiermittel eingesprüht.
- Das Schloss wird auf Leichtgängigkeit überprüft. Alle beweglichen Verschluss- teile werden mit einem geeigneten, wasserfreien Schmiermittel eingesprüht.
- Dichtungen im Andruckkantenbereich müssen bei Beschädigung komplett ersetzt werden. Bei Beschädigung der Dichtung außerhalb der Andruckkanten ist i. d. R. noch eine ausreichende Dichtwirkung vorhanden.
- Um Beschädigungen durch temperatur- bedingtes Anfrieren der Dichtungen zu verhindern, können übliche Mittel wie Talkum, Vaseline oder Wachse eingesetzt werden. Alle Komponenten und Oberflächen werden auf äußere Beschädigungen untersucht.
- Stahlschränke werden zusätzlich auf Korrosionsspuren untersucht. Eventuelle Beschädigungen werden wie folgt repariert:
  - Kleinflächige Schäden, die nur einen Teil der Oberfläche betreffen (z. B. Kratzer):  
Oberfläche an der beschädigten Stelle leicht anschleifen und alle Korrosions- spuren sowie alle Verschmutzungen entfernen. Je nach Größe der Beschä- digung entweder mit einem Lackstift, einem Pinsel oder mit der Lackspray- dose den Rittal Ausbesserungslack auf- bringen (alternativ: 2K-PUR Acryllack)
  - Großflächige Schäden:  
Oberfläche gleichmäßig abreiben und mit Testbenzin reinigen; anschließend gesamte Fläche mit Rittal Ausbesse- rungslack überlackieren (alternativ: 2K-PUR Acryllack).
- Bei Edelstahlschränken werden Ober- flächenbeschädigungen wie Kratzer durch eine Oberflächenpolitur beseitigt.

**EN**

The maintenance plan is recommended for all TS 8 baying enclosures.

### Maintenance interval

Maintenance must be performed at regular intervals depending on use and ambient conditions, but in any case at least once annually. All maintenance work must be documented accordingly.

Nature and extent of the work to be performed:

- The hinges of the doors are to be checked for ease of movement and sprayed with a suitable, water-free lubricant.
- The lock is to be checked for ease of movement. All moving closure parts are to be sprayed with a suitable, water-free lubricant.
- Seals must be replaced as a whole if damaged in the area of the contact edges. If the seal is damaged away from the contact edges, the sealing effect will still be sufficient as a rule.
- Common agents such as talcum, vaseline or wax can be used to prevent damage due to seals freezing in cold conditions. All components and surfaces are to be examined for external damage.
- Steel enclosures must also be examined for traces of corrosion. Any damage is to be repaired as follows:
  - Damage affecting small areas and only part of the surface (e.g. scratches):  
Lightly sand off the surface around the damaged area and remove all traces of corrosion and contamination. Depend- ing on the extent of the damage, apply Rittal touch-up paint either with a pen, a brush or from a spray can (alternatively: two-component PUR acrylic paint)
  - Damage affecting large areas:  
Rub the surface off uniformly and clean with white spirit; then paint over the entire surface with Rittal touch-up paint (two-component PUR acrylic paint).
- Surface damage to stainless steel en- closures, e.g. scratches, can be rectified by polishing.

**CN**

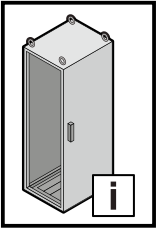
建议为所有TS 8并联柜制定维护计划。

### 维护间隔

必须依据使用情况与环境条件定期实施维护，但无论如何应至少每年维护一次，并如实记录维护工作。

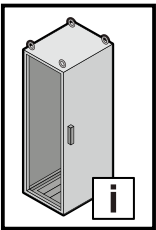
维护工作的性质与内容：

- 检查门铰链，确保箱门能自由活动，并喷涂适当的无水润滑剂。
- 检查确保锁能自由活动。对所有活动的合闭部件喷涂适当的无水润滑剂。
- 如接触边有损坏，必须整体更换密封条。如密封条损坏之处远离接触边，则原则上不影响密封效果。
- 为避免密封条在寒冷条件下冻结，可施加普通防冻剂，如滑石、凡士林或石蜡。检查所有部件和表面是否有外部损坏。
- 对于钢制箱体还须检查是否有腐蚀痕迹，如有损坏按如下方法修复：
  - 仅部分表面损坏（如擦痕）且影响区域不大：用砂纸轻轻打掉损坏区周围的表面，清除所有腐蚀与污染痕迹。视损坏程度用笔、刷或喷威图修补漆（或者双组分PUR亚克力漆）。
  - 损坏影响区域较大：均匀地擦掉表面并用石油溶剂油清洗，然后对整个表面喷威图修补漆（或双组分PUR亚克力漆）。
- 如果不锈钢箱体的表面损坏（刮擦等），可进行抛光处理。



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