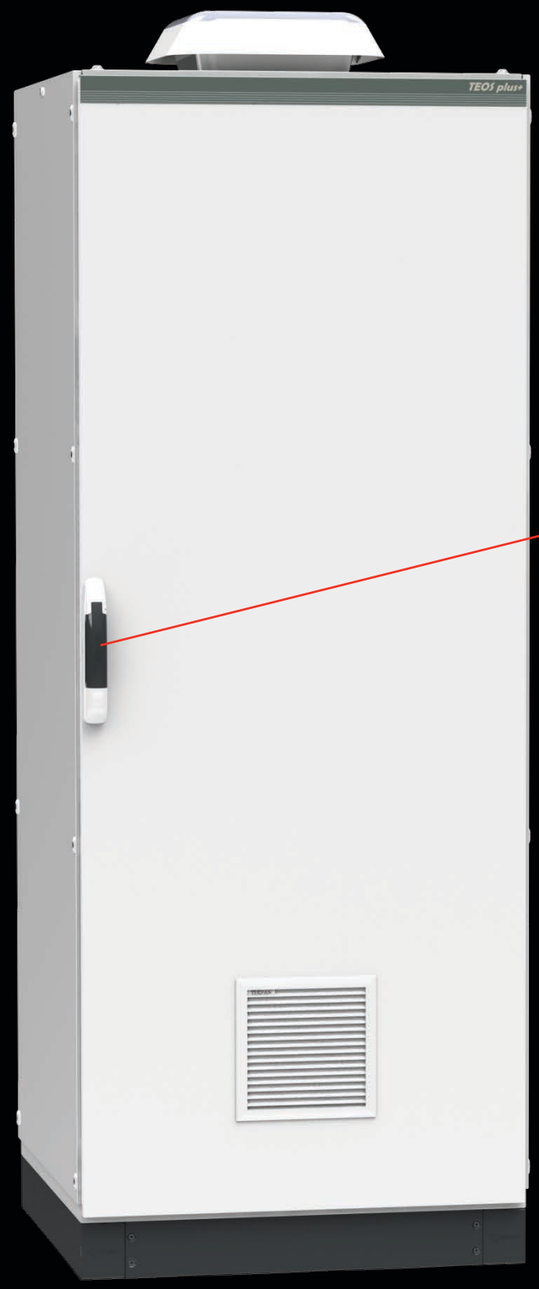
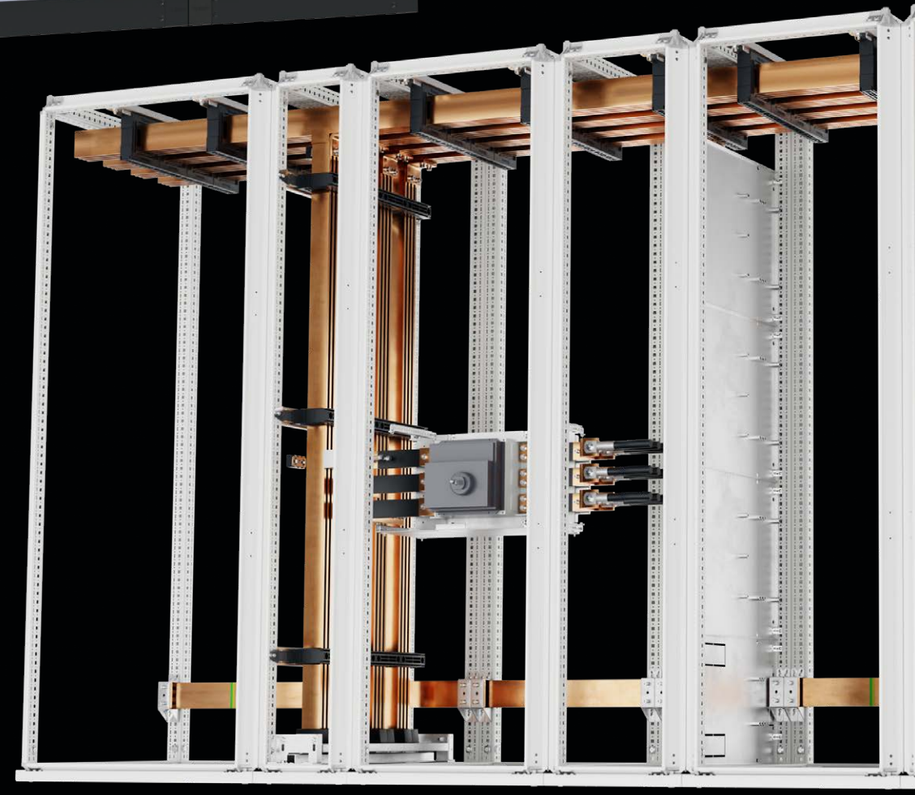
FLOORSTANDING MODULAR CABINET



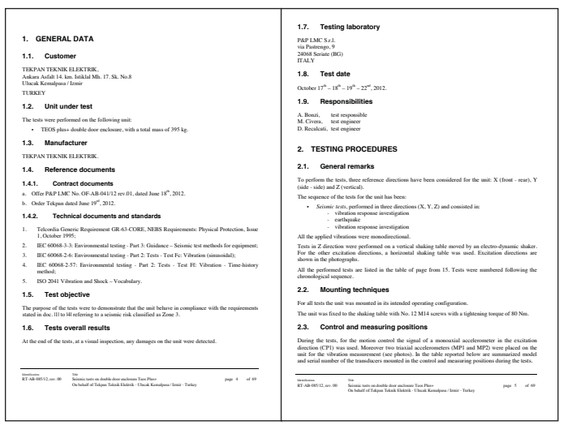
TEOS SERIES

FLOORSTANDING MODULAR CABINET



SEISMIC (EARTHQUAKE) RESISTANCE TEST REPORT

ZONE 3



1. GENERAL DATA

1.1. Customer

TEKPAN TEKNIK ELEKTRIK,
Ankara Asfalt 14. km. Istiklal Mh. 17. Sk. No:8
Ulucak Kemalpasa / Izmir
TURKEY

1.2. Unit under test

The tests were performed on the following unit:

- TEOS plus+ double door enclosure, with a total mass of 395 kg.

1.3. Manufacturer

TEKPAN TEKNIK ELEKTRIK.

1.4. Reference documents

1.4.1. Contract documents

a. Offer P&P LMC No. OF-AB-041/12 rev.01, dated June 18th, 2012.
b. Order Tekpan dated June 19th, 2012.

1.4.2. Technical documents and standards

1. Telcordia Generic Requirement GR-63-CORE, NEBS Requirements: Physical Protection, Issue 1, October 1995;
2. IEC 60068-3-3: Environmental testing - Part 3: Guidance – Seismic test methods for equipment;
3. IEC 60068-2-6: Environmental testing - Part 2: Tests - Test Fc: Vibration (sinusoidal);
4. IEC 60068-2-57: Environmental testing – Part 2: Tests – Test FF: Vibration – Time-history method;
5. ISO 2041 Vibration and Shock – Vocabulary.

1.5. Test objective

The purpose of the tests were to demonstrate that the unit behave in compliance with the requirements stated in doc. 11 to 40 referring to a seismic risk classified as Zone 3.

1.6. Tests overall results

At the end of the tests, at a visual inspection, any damages on the unit were detected.

Identification: RT-AB-041/12, rev. 00 — Title: Seismic tests on double-door enclosure Teos Plus+ — On behalf of Tekpan Teknik Elektrik - Ulucak Kemalpasa / Izmir - Turkey — page 4 of 69

1.7. Testing laboratory

P&P LMC S.r.l.
via Pastrengo, 9
24068 Seriate (BG)
ITALY

1.8. Test date

October 17th – 18th – 19th – 22nd, 2012.

1.9. Responsibilities

A. Bonzi, test responsible
M. Civera, test engineer
D. Recalcati, test engineer

2. TESTING PROCEDURES

2.1. General remarks

To perform the tests, three reference directions have been considered for the unit: X (front - rear), Y (side - side) and Z (vertical).

The sequence of the tests for the unit has been:

- *Seismic tests*, performed in three directions (X, Y, Z) and consisted in:
  - vibration response investigation
  - earthquake
  - vibration response investigation

All the applied vibrations were monodirectional.

Tests in Z direction were performed on a vertical shaking table moved by an electro-dynamic shaker. For the other excitation directions, a horizontal shaking table was used. Excitation directions are shown in the photographs.

All the performed tests are listed in the table of page from 15. Tests were numbered following the chronological sequence.

2.2. Mounting techniques

For all tests the unit was mounted in its intended operating configuration.

The unit was fixed to the shaking table with No. 12 M14 screws with a tightening torque of 80 Nm.

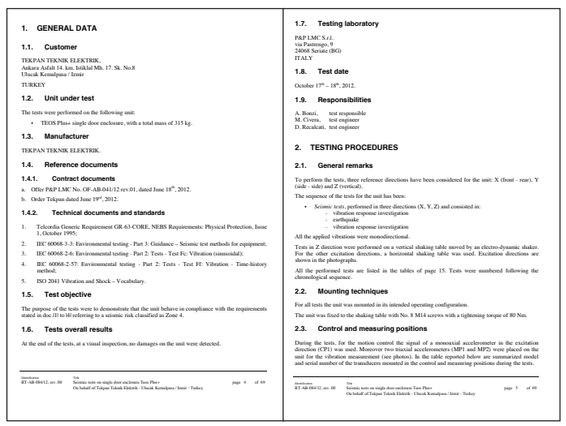
2.3. Control and measuring positions

During the tests, for the motion control the signal of a monoaxial accelerometer in the excitation direction (CP1) was used. Moreover two triaxial accelerometers (MP1 and MP2) were placed on the unit for the vibration measurement (see photos). In the table reported below are summarized model and serial number of the transducers mounted in the control and measuring positions during the tests.

Identification: RT-AB-041/12, rev. 00 — Title: Seismic tests on double-door enclosure Teos Plus+ — On behalf of Tekpan Teknik Elektrik - Ulucak Kemalpasa / Izmir - Turkey — page 5 of 69

- Zone3' All Teos series products are within the scope of Zone 3 seismic resistance tests.
- Zone3' test was conducted for double-door enclosures of size 1200 widthx2000+100 height and 600 mm depth, and covers all sizes and types of the Teos series.
- You can view the complete report on our websites.

ZONE 4



1. GENERAL DATA

1.1. Customer

TEKPAN TEKNIK ELEKTRIK,
Ankara Asfalt 14. km. Istiklal Mh. 17. Sk. No:8
Ulucak Kemalpasa / Izmir
TURKEY

1.2. Unit under test

The tests were performed on the following unit:

- TEOS Plus+ single door enclosure, with a total mass of 315 kg.

1.3. Manufacturer

TEKPAN TEKNIK ELEKTRIK.

1.4. Reference documents

1.4.1. Contract documents

a. Offer P&P LMC No. OF-AB-041/12 rev.01, dated June 18th, 2012.
b. Order Tekpan dated June 19th, 2012.

1.4.2. Technical documents and standards

1. Telcordia Generic Requirement GR-63-CORE, NEBS Requirements: Physical Protection, Issue 1, October 1995;
2. IEC 60068-3-3: Environmental testing - Part 3: Guidance – Seismic test methods for equipment;
3. IEC 60068-2-6: Environmental testing - Part 2: Tests - Test Fc: Vibration (sinusoidal);
4. IEC 60068-2-57: Environmental testing – Part 2: Tests – Test FF: Vibration – Time-history method;
5. ISO 2041 Vibration and Shock – Vocabulary.

1.5. Test objective

The purpose of the tests were to demonstrate that the unit behave in compliance with the requirements stated in doc.11 to 40 referring to a seismic risk classified as Zone 4.

1.6. Tests overall results

At the end of the tests, at a visual inspection, no damages on the unit were detected.

Identification: RT-AB-041/12, rev. 00 — Title: Seismic tests on single door enclosure Teos Plus+ — On behalf of Tekpan Teknik Elektrik - Ulucak Kemalpasa / Izmir - Turkey — page 4 of 69

1.7. Testing laboratory

P&P LMC S.r.l.
via Pastrengo, 9
24068 Seriate (BG)
ITALY

1.8. Test date

October 17th – 18th, 2012.

1.9. Responsibilities

A. Bonzi, test responsible
M. Civera, test engineer
D. Recalcati, test engineer

2. TESTING PROCEDURES

2.1. General remarks

To perform the tests, three reference directions have been considered for the unit: X (front - rear), Y (side - side) and Z (vertical).

The sequence of the tests for the unit has been:

- *Seismic tests*, performed in three directions (X, Y, Z) and consisted in:
  - vibration response investigation
  - earthquake
  - vibration response investigation

All the applied vibrations were monodirectional.

Tests in Z direction were performed on a vertical shaking table moved by an electro-dynamic shaker. For the other excitation directions, a horizontal shaking table was used. Excitation directions are shown in the photographs.

All the performed tests are listed in the tables of page 15. Tests were numbered following the chronological sequence.

2.2. Mounting techniques

For all tests the unit was mounted in its intended operating configuration.

The unit was fixed to the shaking table with No. 8 M14 screws with a tightening torque of 80 Nm.

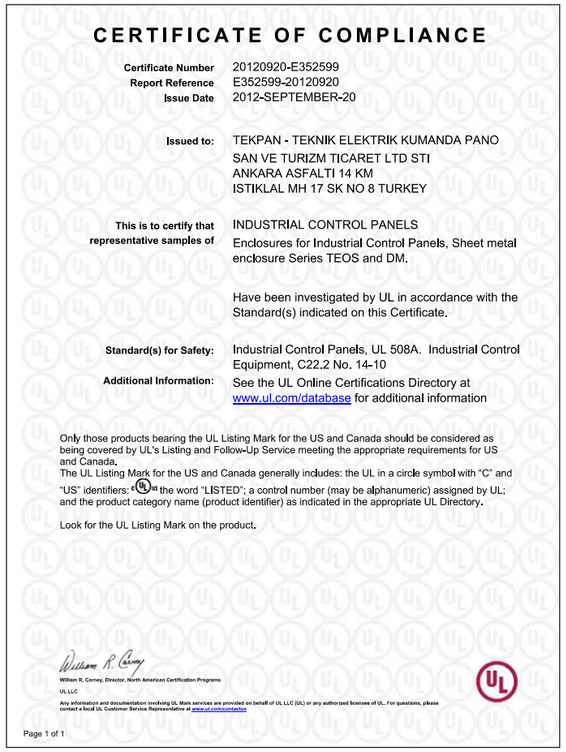
2.3. Control and measuring positions

During the tests, for the motion control the signal of a monoaxial accelerometer in the excitation direction (CP1) was used. Moreover two triaxial accelerometers (MP1 and MP2) were placed on the unit for the vibration measurement (see photos). In the table reported below are summarized model and serial number of the transducers mounted in the control and measuring positions during the tests.

Identification: RT-AB-041/12, rev. 00 — Title: Seismic tests on single door enclosure Teos Plus+ — On behalf of Tekpan Teknik Elektrik - Ulucak Kemalpasa / Izmir - Turkey — page 5 of 69

- 'For 'Zone 4' seismic resistance tests, an enclosure sized 800 width x 2000+100 height x 800 with an extra reinforced interior and welded plinth was used.
- The abovementioned size and structure are required for your needs within the scope of 'Zone 4'. Please contact our sales department for your needs.
- You can view the complete report on our websites

UL CERTIFICATE
VALID CERTIFICATE IN THE USA AND CANADA



CERTIFICATE OF COMPLIANCE

Certificate Number	20120920-E352599
Report Reference	E352599-20120920
Issue Date	2012-SEPTEMBER-20
Issued to:	TEKPAN - TEKNIK ELEKTRIK KUMANDA PANO SAN VE TURIZM TICARET LTD STI ANKARA ASFALTI 14 KM ISTIKLAL MH 17 SK NO 8 TURKEY
This is to certify that representative samples of	INDUSTRIAL CONTROL PANELS Enclosures for Industrial Control Panels, Sheet metal enclosure Series TEOS and DM.
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	Industrial Control Panels, UL 508A. Industrial Control Equipment, C22.2 No. 14-10
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.
The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: cULus the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

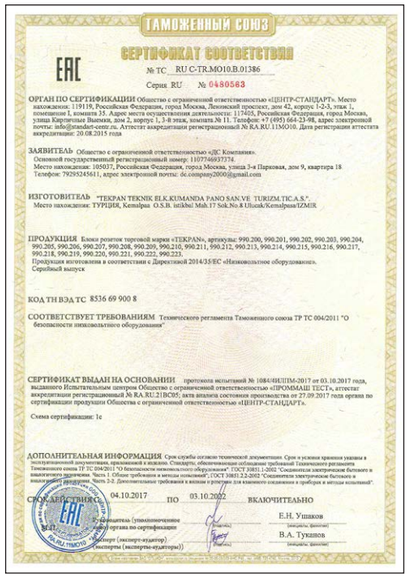
Look for the UL Listing Mark on the product.

William R. Carney, Director, North American Certification Programs
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contactus

Page 1 of 1

EAC CERTIFICATE



ТАМОЖЕННЫЙ СОЮЗ

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ТС RU C-TR.МО10.В.01386

Серия RU № 0480583

ОРГАН ПО СЕРТИФИКАЦИИ Общество с ограниченной ответственностью «ЦЕНТР-СТАНДАРТ». Место нахождения: 119119, Российская Федерация, город Москва, Ленинский проспект, дом 42, корпус 1-2-3, этаж 1, помещение I, комната 35. Адрес места осуществления деятельности: 117405, Российская Федерация, город Москва, улица Кирпичные Выемки, дом 2, корпус 1, 3-й этаж, комната № 11. Телефон: +7 (495) 664-23-98, адрес электронной почты: info@standart-cert.ru. Аттестат аккредитации регистрационный № RA.RU.11МО10. Дата регистрации аттестата аккредитации: 20.08.2015 года

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «ДС Компания».
Основной государственный регистрационный номер: 1107746937374.
Место нахождения: 105037, Российская Федерация, город Москва, улица 3-я Парковая, дом 9, квартира 18
Телефон: 7925245611, адрес электронной почты: dc.company2000@gmail.com

ИЗГОТОВИТЕЛЬ "TEKPAN TEKNIK ELK.KUMANDA PANO SAN.VE TURIZM.TIC.A.S.".
Место нахождения: ТУРЦИЯ, Кемалпаша О.S.В. Istiklal Mah.17 Sok.No.8 Ulucak/KemalpaşaIZMIR

ПРОДУКЦИЯ Блоки розеток торговой марки «ТЕКРАН», артикулы: 990.200, 990.201, 990.202, 990.203, 990.204, 990.205, 990.206, 990.207, 990.208, 990.209, 990.210, 990.211, 990.212, 990.213, 990.214, 990.215, 990.216, 990.217, 990.218, 990.219, 990.220, 990.221, 990.222, 990.223.
Продукция изготовлена в соответствии с Директивой 2014/35/ЕС «Низковольтное оборудование».
Серийный выпуск

КОД ТН ВЭД ТС 8536 69 900 8

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ Технического регламента Таможенного союза ТР ТС 004/2011 "О безопасности низковольтного оборудования"

СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ протоколов испытаний № 1084/ИЦПМ-2017 от 03.10.2017 года, выданного Испытательным центром Общества с ограниченной ответственностью «ПРОМАШ ТЕСТ», аттестат аккредитации регистрационный № RA.RU.21ВС05; акта анализа состояния производства от 27.09.2017 года органа по сертификации продукции Общества с ограниченной ответственностью «ЦЕНТР-СТАНДАРТ».

Схема сертификации: 1с

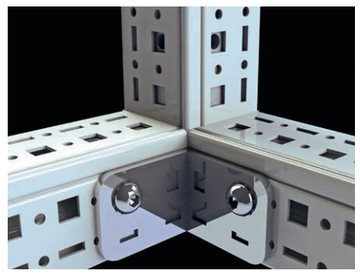
ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Срок службы согласно технической документации. Срок и условия хранения указаны в эксплуатационной документации, прилагаемой к изделию. Стандарты, обеспечивающие соблюдение требований Таможенного регламента Таможенного союза ТР ТС 004/2011 "О безопасности низковольтного оборудования": ГОСТ 30851.1-2002 "Совместимость электрическая бытового и аналогичного назначения. Часть 1. Общие требования и методы испытаний", ГОСТ 30851.22-2002 "Совместимость электрическая бытовых и аналогичных приборов. Часть 2-2. Дополнительные требования к изделиям и розеткам для взаимного соединения и приборов и методы испытаний".

СРОК ДЕЙСТВИЯ С 04.10.2017 ПО 03.10.2022 ВКЛЮЧИТЕЛЬНО

Е.Н. Ушаков (инициалы, фамилия)
В.А. Тукалов (инициалы, фамилия)

- You can view the complete report on our websites

TEOS POWERED FRAME STRUCTURE



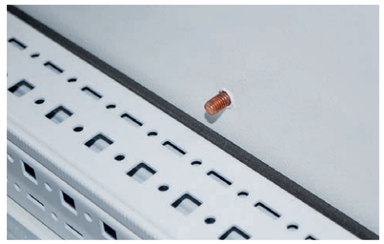
Turkish Patent No: TR 201009615Y

Produced with a closed rail structure, Teos enclosure rails are clamped with a special non-welded clamping system. Their resistance to both vertical and horizontal pressures is extremely high compared to open rail structures. This force enables full resistance for the movement of the installed equipments and resistance in overcurrents.

TEOS EARTING CONTINUTIY

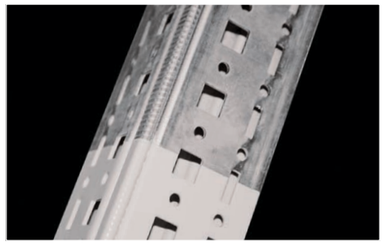
Placed on the aliminium corner combination, the earthing hooks are tightly mounted on the uncoated inner surface of the rails by means of eroding. Thereby, the earthing continuity is ensured for all rails and their parts

Placed on the bottom-top inner parts of the front door, the earthing screw increases conductive surface. Thereby, the front door is more efficiently grounded as the most important part to be grounded.

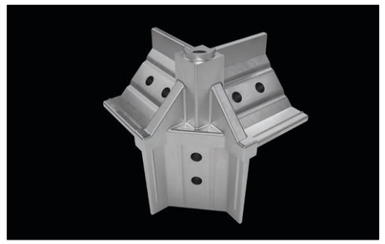


Applied to all other cover plates, the earthing screws allow for the complete earthing of all enclosure cover plates. Furtermore, TEOS allows for earting all parts by use of special grounding washers.

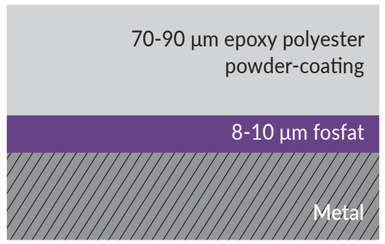
TEOS CORROSION PROTECTION



Teos closed frame made by galvanized steel (DIN EN 10142_00 DX51 D+Z) and coated Nano-plating and powder coated from outside of the surface. Non-powder coated inside surface can not corrade because of the galvanized material style.

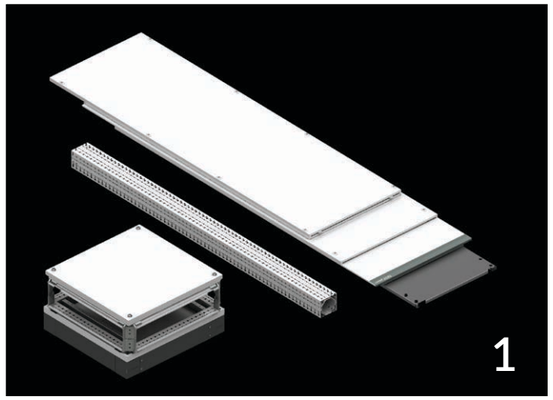


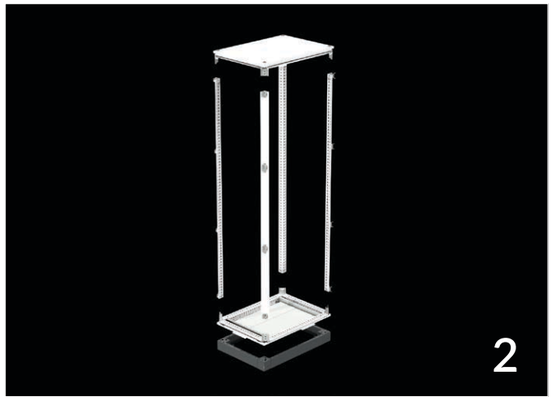
Manufactured from aliminum-cast (E-160) material, the rail connection corners do not corrode thanks to their aliminium structure.



All coated parts respectively undergo the automatic processes of washing, Nano-plating, deionized passivation- drying- coating- firing and are treated with active coating. 500 hour salt test resistance is acquired according to the test results of this process

TEOS EASY ASSEMBLING AND LOGISTICAL ADVANTAGES



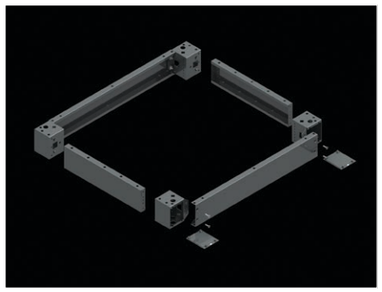


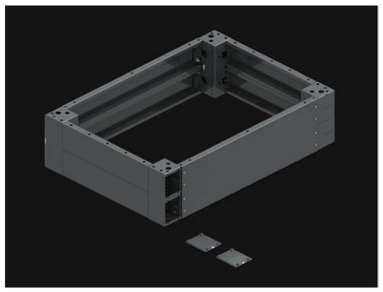
Offered as flat package, the TEOS series is designed for an easy mounting in a minimal amount of time. It does not require angulation for the body and can be mounted between 15-20 minutes by two people.

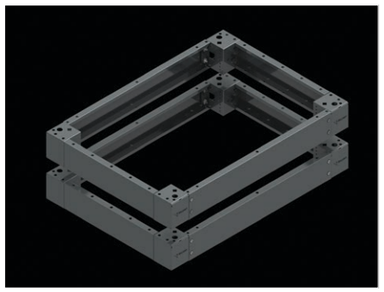
Offered as flat package, TEOS series save space during transportation and storage. However, since packages can be replaced with each other, they provide more solutions with less inventory.

You can access the Teos assembly video by scanning the QR code.

TEOS PLINTH SYSTEM







Front surfaces of the corner parts are open in the plinth system which is designed with a height of 100 mm and 200 mm. This enables not only an easy mounting on the enclosure but also an easy ground fixing. Upon the completion of this process, the plastic panel closes without use of screws.

Plinth front panels are mounted with screws while the side panels are screwed from the inside.

A separate corner can be used for plinth applications with a height of 200 mm as well as plinths with a height of 100 mm can be superimposed to reach the 200 mm height.

TEOS FRONT DOOR

Lock and hinge placed in four points

Wheel Application

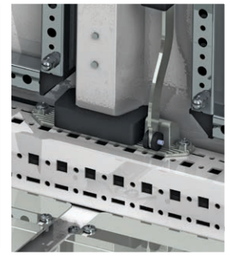
The standard wheel application that comes with TEOS+ products prevents the door from sagging, balances the weight of the door, and prevents harsh closing due to wind or other factors, thus protecting panels and accents against any mechanical impact.

Wide Space and Strong Door Rail

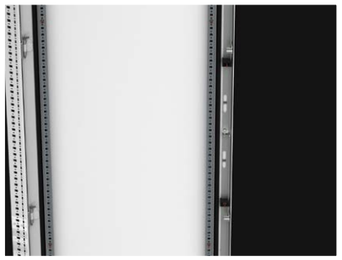
Since locking is performed on the rails, inner space of the cover plates allows for a maximum efficiency.

As the closed support rails are manufactured as a completely closed box, they are more resistant to bending. This ensures a stronger cover plate

Comfort Handle Lock with Insert Protection

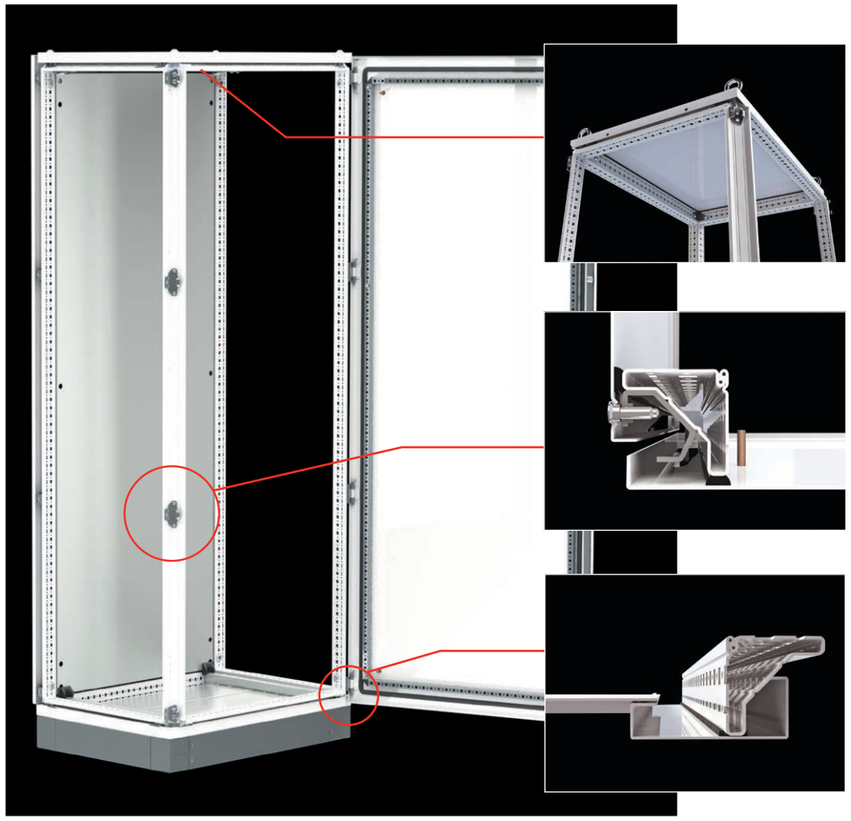


Rigid and Durable Lock Structure



Lock failures experienced in most enclosures are prevented in TEOS. Thanks to their corrugated and long-lasting structure, the locking plates do not bend and corrode.

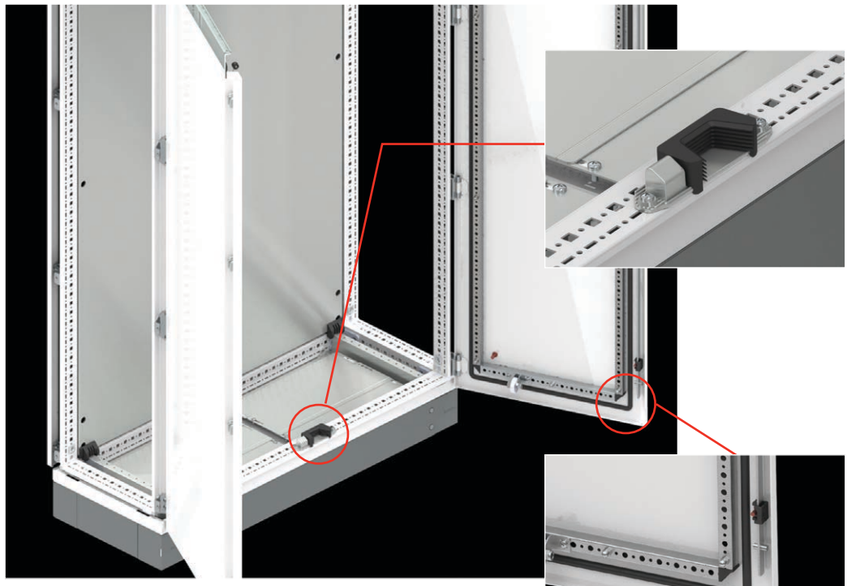
IP 54 - IP 65 PROTECTION CATEGORY



Sealing foam gaskets are used on the body door, back door, side panels and top panels of the enclosure. This gasket enables complete isolation between -40 and +100 C

All gaskets apply pressure on the convex frame curves. Dust and water particles are left in the space between the convex curves, and thus pressure on the gasket is prevented.

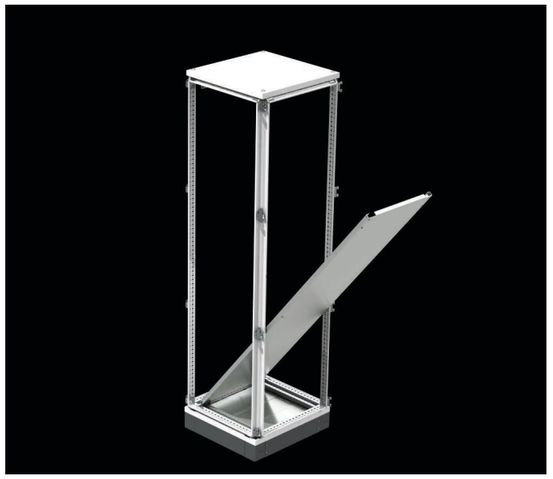
All seal applications on the covers press on the convex curves in the carcasses Dust and water droplets are left in the area between these convex curves and the pressure on the seal is prevented.



Applied to double-door enclosures, the insulating gasket assumes a full protective role between two panels and the frame when both doors close over the gasket.

Applied to all front doors and panels, the liquid seal is used in all double-door enclosures and acts as an insulator between two doors. Locking system of both doors work separately and this enables a full gasket pressing

MOUNTING PLATE SYSTEM



Manufactured from a 3,00 mm galvanized steel, TEOS mounting plates are railed and easily mounted. With its thick steel sheet structure, the mounting plate can carry heavy equipment with its rigid structure and does not need additional side support parts. In this way, bayed enclosure space is increased in combined enclosures.

Connected to the mounting plates, the intermediate mounting plate increases space and can move back and front together with the mounting plates.