

더빌더스 산업용 엔클로저 기술자료
산업용, 프레임·전용접 외함
Industrial Framed & Welded Enclosure

국제인증 외함 - 공종별 설계, 생산, 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - 공종별 설계, 생산, 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - 공종별 설계, 생산, 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - 공종별 설계, 생산, 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - "프레임 외함" 설계, 생산, 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - "프레임 외함" 설계, 생산, 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - "프레임 외함" 설계, 생산, 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - “프레임 외함” 공조파트 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - “프레임 외함” 악세사리 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



LEDAK light



A3 drawing frame



896-A3 Flat Lock



896-A2 Flat Lock



MS891-A1



Stainless Steel Button Lock



LED control lights



XL927 Little Sparrow



MS891-A3



Two-way plane lock

국제인증 외함 - “프레임 외함” 악세사리 공급

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



Streamlined Push Button Lock



T24 Deluxe Streamlined Push ...



Outdoor big lock 2



Outdoor big lock 1



Network back door lock



Stainless steel handle lock



867 button lock



AK928 Woodpecker Lock



A lot of outdoor locks



A4 drawing frame

더빌더스 산업용 엔클로저 기술자료
프레임 외함 국제인증서 패키지
3rd part Approval Certifications

국제인증 외함 - 인증서 패키지

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



국제인증 외함 - 인증서 패키지

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



Certificate

No. ICR Polska/a1-118/2018



Name and address of certificate owner:	WON HOUNG TECH 61, Cheongwonsandan 4-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea
Name and address of manufacturer:	WON HOUNG TECH 61, Cheongwonsandan 4-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea
Product name:	Industrial Control Panel System
Product type:	WH-ICP-# Series, WH-ICOP-# Series, WH-IDCP-# Series # can be H or K (# means Locking type) H: Handle type, K: Key type

This certificate confirms that the product meet the requirements of the following standards and within limits of its standards give presumption of conformity with essential requirements of Directive: LVD 2014/35/EU

EN 60529:1991+A2:2013 IP55

The certification process has been carried out in accordance with the program PC-P-07-07.
Evaluation has been carried out in accordance with test report made by CTK Co., Ltd. laboratory

No. of test report:	CTK-2018-01999; CTK-2018-02000; CTK-2018-02001
Issue date:	25.07.2018
Expiration date:	indefinitely

The mutual obligations and rights of the certification are regulated by the contract no.:
ICR Polska / 112 / 2018 of 09.04.2018

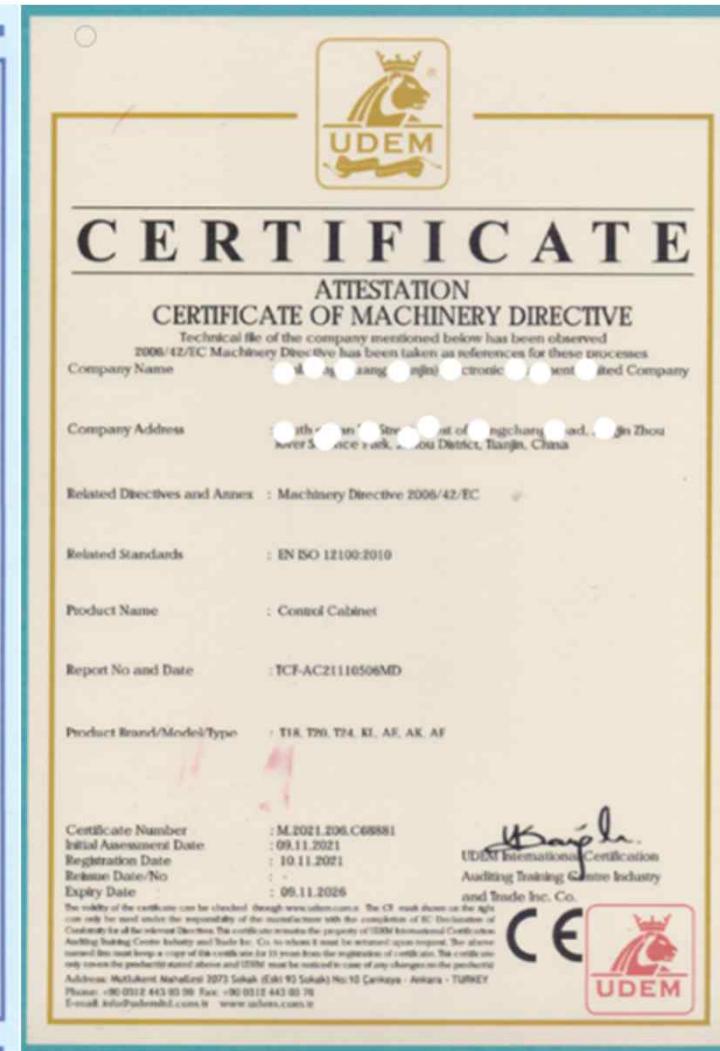
This certificate applies to products having the same attributes (parameters), intended use, that have been evaluated and meet the requirements of the aforementioned standards.



Director: Rafal Kalinowski
Warsaw, 25. 07. 2018



ICR Polska Sp. z o.o.
ul. Plac Przymierza 6, 03-944 Warszawa
www.icrpolska.com, e-mail: icrpolska@icrqm.com



국제인증 외함 - 인증서 패키지

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED

CERTIFICATE OF COMPLIANCE

Certificate Number: UL-CA-2210836-0
Report Reference: E526146-20220315
Date: 17-Mar-2022

Issued to: Industrial Electronics
No. 1ainanzhou
Caochi District, Nanhai District, Foshan, China
Date: 24/03/2022

This is to certify that representative samples of NITW7 - Industrial Control Panels Certified for Canada. See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: CSA C22.2 NO. 14-18, 13th Ed., Issue Date: 2018-03-01

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Barry Weller
Bruce Weller, Director North American Certification Program

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



CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

CERTIFICATE NO.: 2019010301241142

NAME AND ADDRESS OF THE APPLICANT

Shenzhen Xiangxtronics Electronic Technology Co., Ltd.
East side of Junxiandu and south of Lanhe Street, Jingzhou River Science Park, Jizhou District, Tianjin, China

NAME AND ADDRESS OF THE MANUFACTURER

Xinti Tongchuang (Tianjin) Electronic Equipment Limited Company
South of Lanhe Street, West of Dongchang Road, Jingzhou River Science Park, Jizhou District, Tianjin, China

NAME AND ADDRESS OF THE FACTORY

Xinti Tongchuang (Tianjin) Electronic Equipment Limited Company
South of Lanhe Street, West of Dongchang Road, Jingzhou River Science Park, Jizhou District, Tianjin, China

PRODUCT NAME, MODEL AND SPECIFICATION

Distribution Boards
JXF InA=250A~10A,Icw=4kA,Ue=380V, 220V,Ui=400V,50Hz;IP30-操作面 IP20C;户内型

THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS
GB/T7251.3-2017

This is to certify that the above mentioned product(s) complies with the requirements of implementation rules for compulsory certification(REFNO.CNCA-C03-2014).

Valid from: Oct.24,2019 Valid until: Oct.24,2024

The validity of the certificate is subject to positive result of the regular follow up inspection by issuing certification body until the expiry date.

The certificate information is available through CNCA's website: www.cnca.gov.cn



President:



CHINA QUALITY CERTIFICATION CENTRE

<http://www.cqc.com.cn>

Section 9, No. 188, Nanhuai Xlu, Beijing 100070 P. R. China

Tel: +86 10 83886666

Q 2439106



국제인증 외함 - 인증서 패키지

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED



TEST REPORT

No. : N19040 MF
Date : Apr 29, 2019
Page: 3 of 6

1. Test Item: IP6X

Sample Description: Metal box

Test Method: IEC 60529:2013 COR 2:2015

Test Condition:

Test Dust: Talcum powder

Dust Concentration: 2 kg/m³ chamber volume and be kept in suspension during the test

Test Duration: 8 hours

Lab Environment Condition: 15°C~35°C, 25%RH~75%RH

Test Result:

Sample No.	Test result
1	After test no dust ingress sample

Test Photo:



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed on the reverse side of this document. The Company reserves the right to withdraw or amend any part of this document at any time without notice. Any person who receives this document is bound to keep it confidential. Any disclosure of the contents of this document to third parties without the prior written consent of the Company is prohibited. The Company's sole responsibility is to its Client and this document does not constitute a warranty or guarantee of the quality of the equipment tested. The Client shall be responsible for any damage or loss resulting from the use of the equipment tested in his premises. In any event, the Company's liability under this document is limited to the cost of the equipment tested and such liability is excluded for 30 days after the date of issue of this document. Any claim for damages arising from the results shown in this test report refer only to the samples(s) tested and such samples(s) are retained for 30 days only.

SGS Testing Services Ltd., Shanghai Representative Office, Room 1103, Building 1119, No. 99, Xuhui District, Shanghai, China, 200031 Tel: +86-21-61690300 Fax: +86-21-61691900 E-mail: www.sgsgroup.com.cn

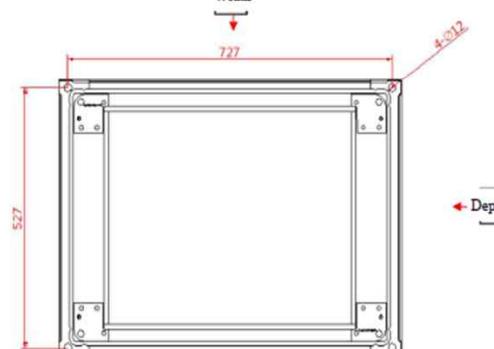
Member of the SGS Group (SGS 8A)

China Telecommunication Technology Labs.

Report No.: K17X87967



Page 4 of 12



Picture 2-2

China Telecommunication Technology Labs.

Report No.: K17X87967

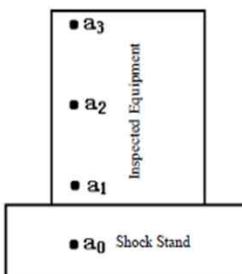


Page 5 of 12

III. Structural Property Test

1 Schematic Drawing for the Layout of Acceleration Sensor

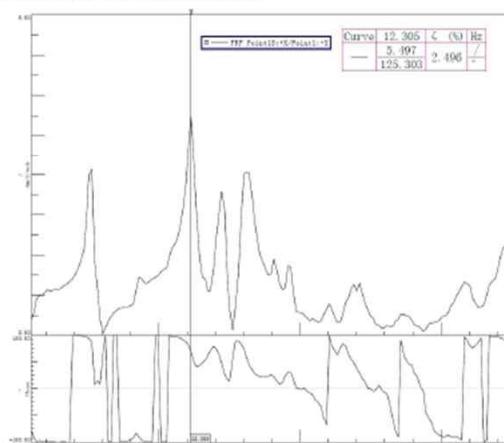
The acceleration sensors are respectively arranged on the shock stand and the main frame of the equipment, and the monitoring point arrangement is shown in Picture 3.



Picture 3

2 Dynamic Characteristic Curve of the Inspected Equipment

2.1 Dynamic Characteristic Diagram of the Inspected Equipment before the Intensity-8 Horizontal X-Direction Shock (refer to the following picture)



Picture 4

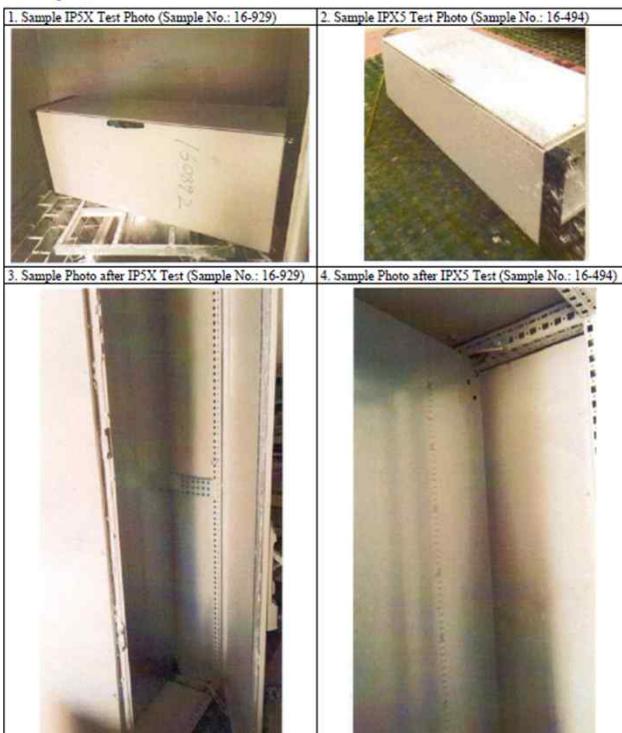
국제인증 외함 - 인증서 패키지

IP55~66, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE TESTED

Report No.: MCDL-2016-313-F

Page 3 of 4

II. Sample Pictures



III. List of Test Instruments and Equipment

Serial No.	Name	Type	Equipment No.	Expiry Date of Calibration	Current Use (X)
1	Sand and Dust Test Chamber	SC-020	MCDL-04-30-A	Sep. 1 st , 2017	X
2	Spray Preventer	DMS-E03B	MCDL-04-36-A	Oct. 31 st , 2016	X

ST1-STCB-M-052-2017

Beat Wave Test Report of Sever Cabinet

Attachment 1: Testing photos

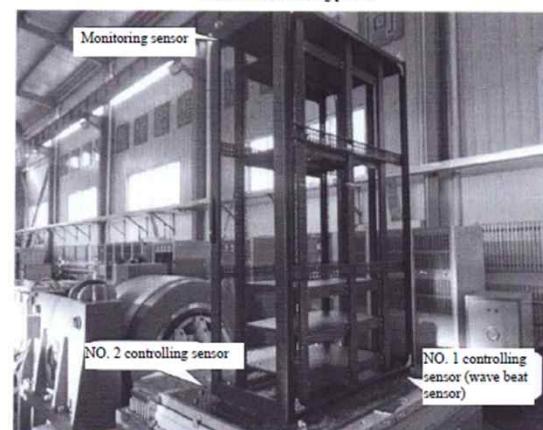


Photo 1: Testing photos of Axis X direction

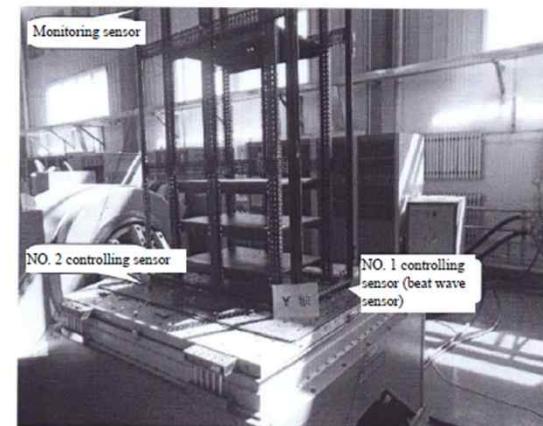


Photo 2: Testing photo of Axis Y direction

ST1-STCB-M-052-2017

Beat Wave Test Report of Sever Cabinet

Monitoring sensor

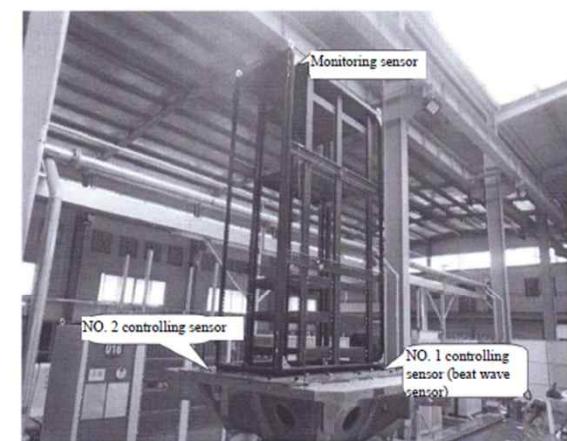


Photo 3: Testing photo of Axis Z direction

더빌더스 산업용 엔클로저 기술자료
프레임외함 국산화 생산공장(한국)
Global Smart Factory System

산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing



A better manufacturer, Made in Korea

Wide range of Enclosure system for various industries.

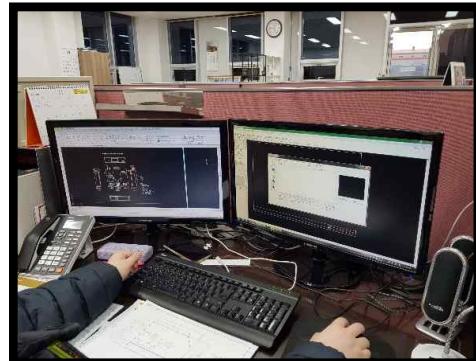
1. 국산화 주문형 프레임 외함 (엔클로저) 생산
2. 레이저 판금 국산 생산 – Laser sheeting & Manufacturing
3. 철의장 주문 국산 생산 - Taylor-made Steel Manufacturing
4. 가스켓 포밍 국산 생산 – Gasket Foaming & Manufacturing
5. 프레임 외함 국산 생산 – Framed Enclosure Manufacturing
6. 전용접 외함 국산 생산 – Welded Enclosure Manufacturing
7. 주문형 외함 국산생산 – Taylor-made Enclosure Manufacturing
8. EPC, project enclosure 외함 – 설계, 제작 (규격품 & 비규격품) – “System Enclosure”
9. IP55~66등급, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE 인증 판넬 공급

Framed & welded enclosures engineered to provide superior steel performance with parts.

- High performance steel fabrication with integrated solution.
- Customer service.
- Wide range of cables with accessories.
- Worldwide logistics.
- Advanced supply chain solutions.
- Consultancy, engineering projects.

산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing



ORE, 고객 오더접수 및 설계



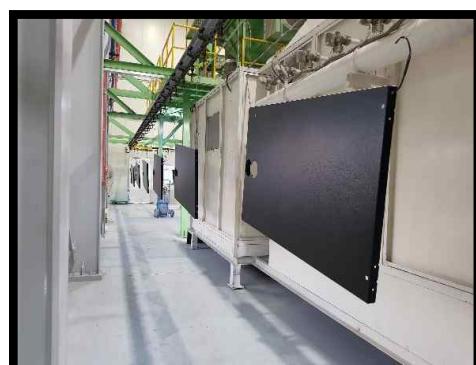
NCT PUNCHING, 편침



BENDING, 절곡



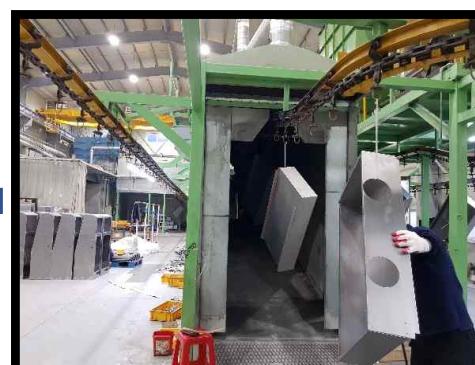
WELDING, 용접



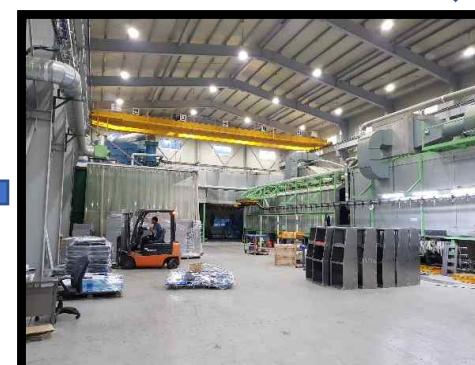
PAINTING, 도장



POWDER COATING, 분체 분사



PRETREATMENT, 도장 전처리



STANDBY PAINTING, 도장대기



GASKETING 우레탄가스켓 포밍(선택)



QC & ASSEMBLY, 검사 및 조립



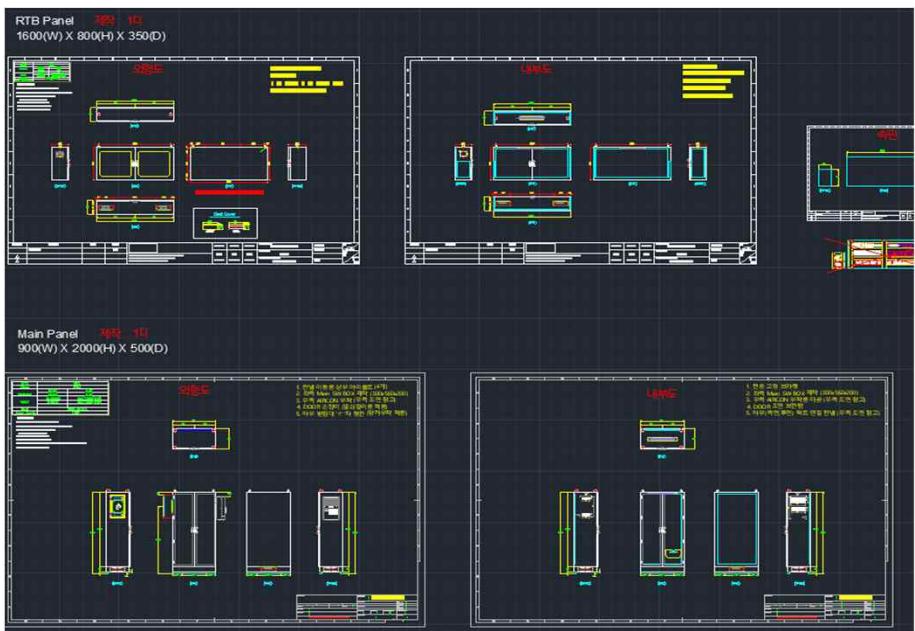
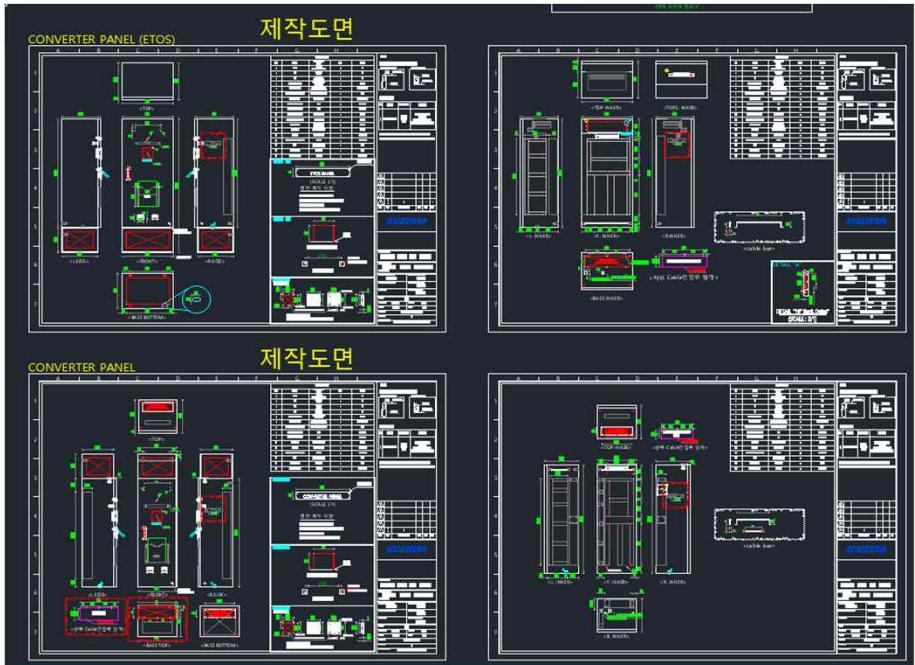
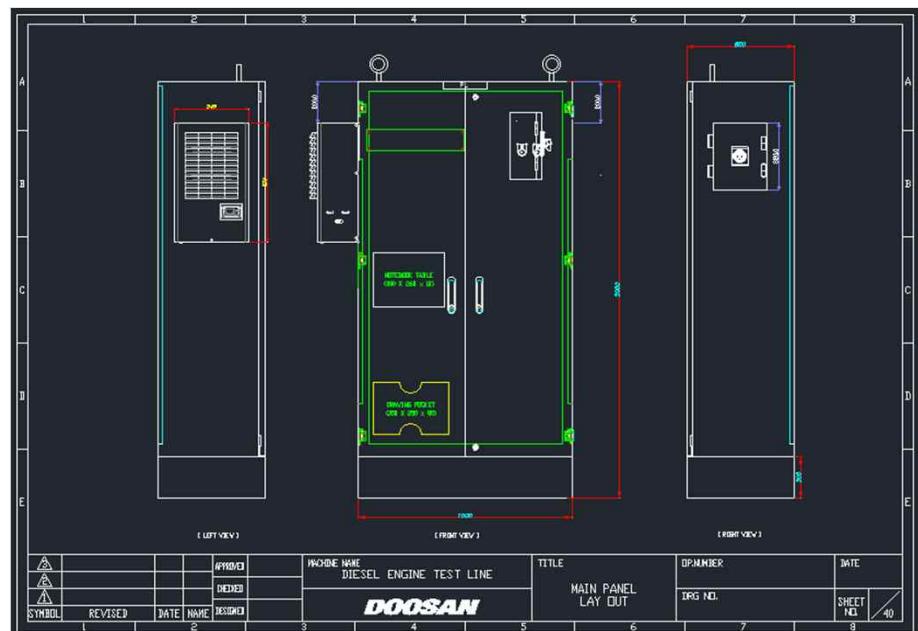
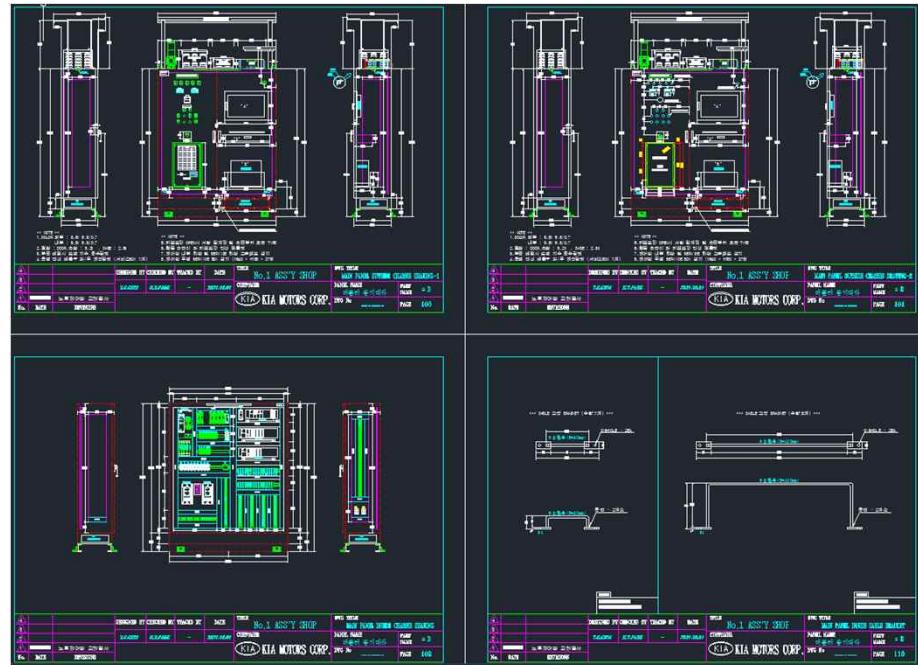
PACKING, 포장



LOAD OUT, 출하

산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing



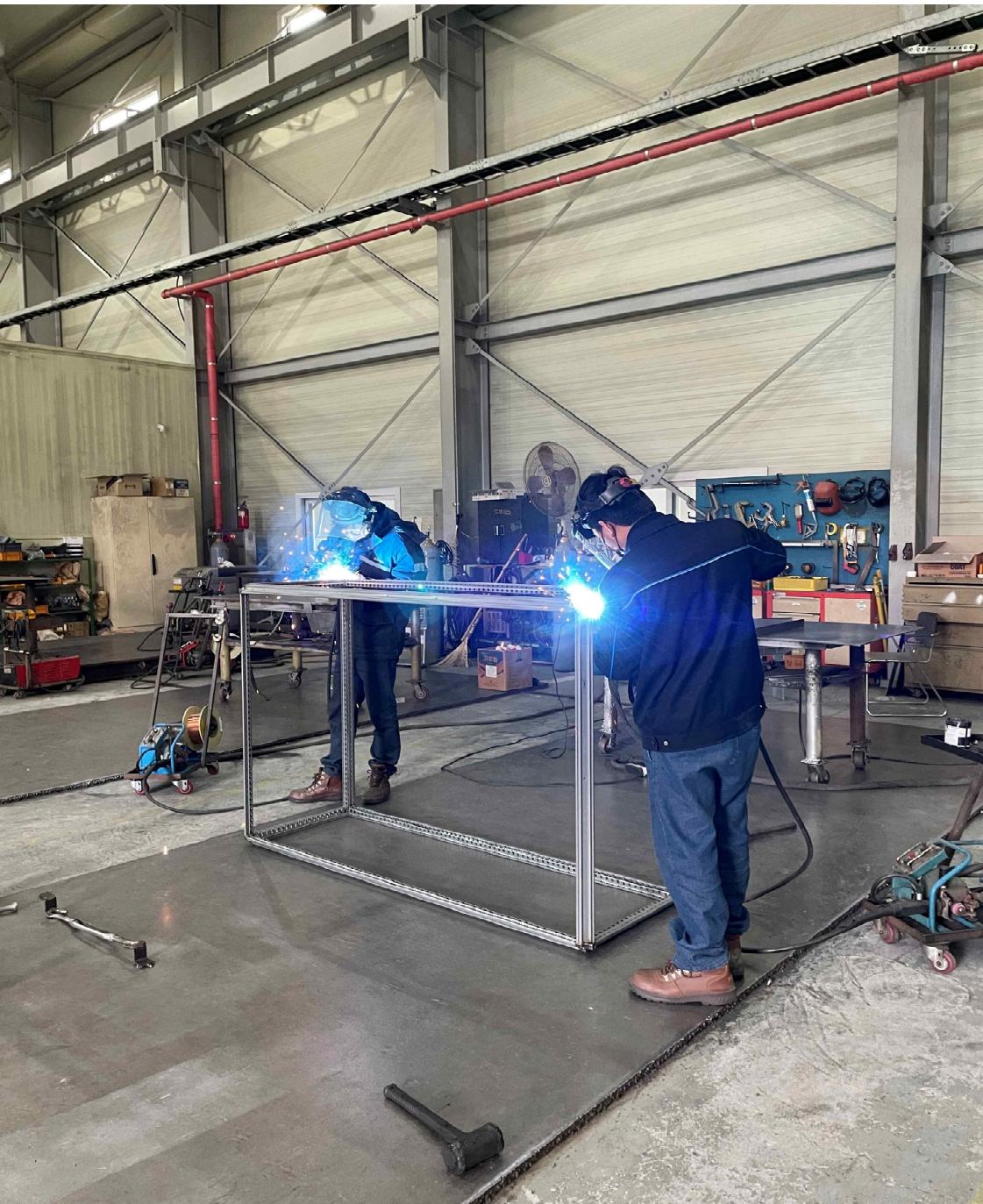
산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산 Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : W6400 H2200 D800 P300

개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : **W6400 H2200 D800 P300**

개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산 Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : W6400 H2200 D800 P300

개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산 Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : W6400 H2200 D800 P300

개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산 Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : W6400 H2200 D800 P300

개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산 Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : **W6400 H2200 D800 P300**

개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산 Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : W6400 H2200 D800 P300

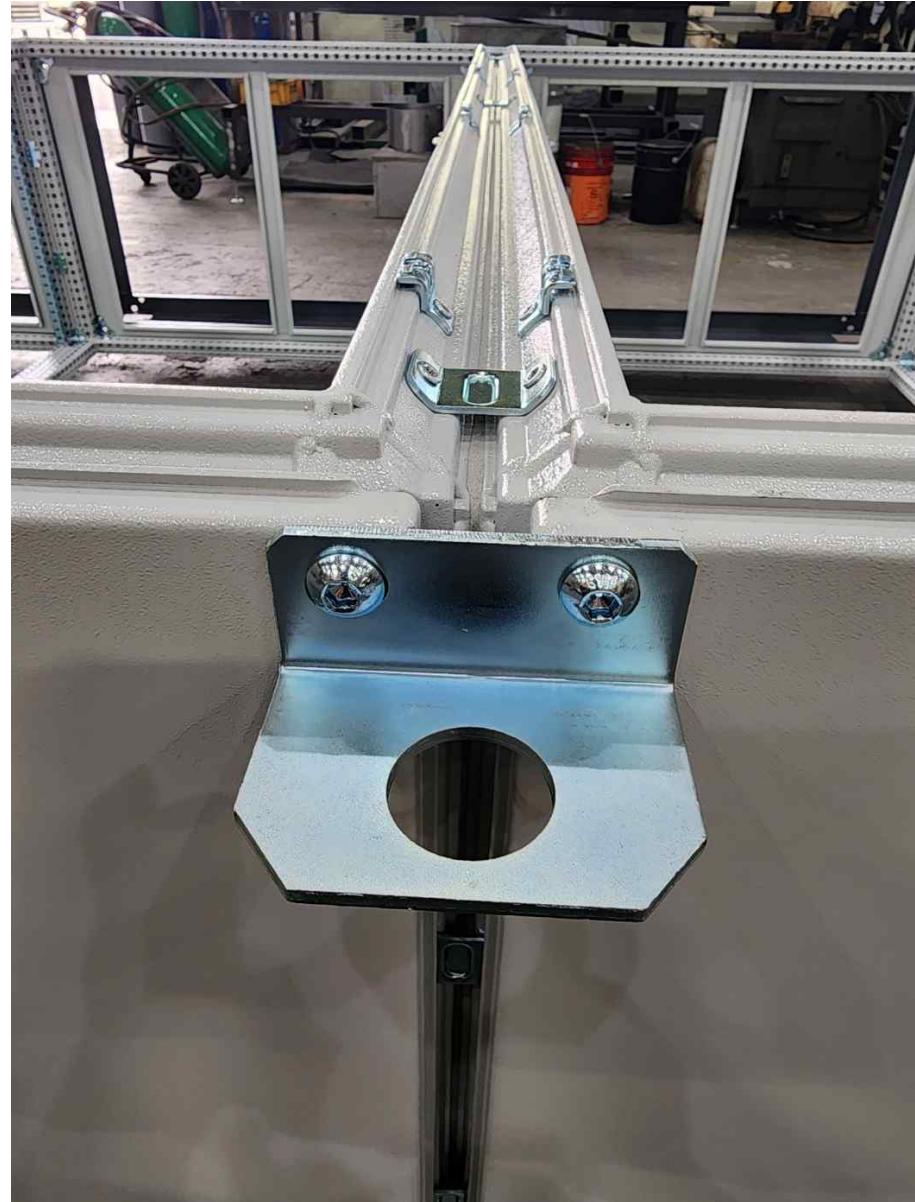
개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산 Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩-심원테크USA - 열반형 프레임 외함 : W6400 H2200 D800 P300

개별 외함 두께: T2.3mm / 개별 도어 두께: T2.3mm / 일체형 베이스 두께 : T4.0mm / 도장: RAL7035 / 실링: UL인증 우레탄 포밍 (UL 인증서 포함)



산업용 외함 (시스템 케비닛), 규격품+비규격품 케비닛 국산생산

Industrial Enclosure (Profiled Frame)& Baying Panel Local Manufacturing

프로젝트명: 심팩 - 무빙-제어반 (MOVING-ARM-ENCLOSURE)



더빌더스 산업용 엔클로저 기술자료
프레임 외함 해외 OEM 생산공장
Global OEM, ODM Factories

스마트 팩토리 – 프레임외함 생산공장 (본사, 중국) 개요

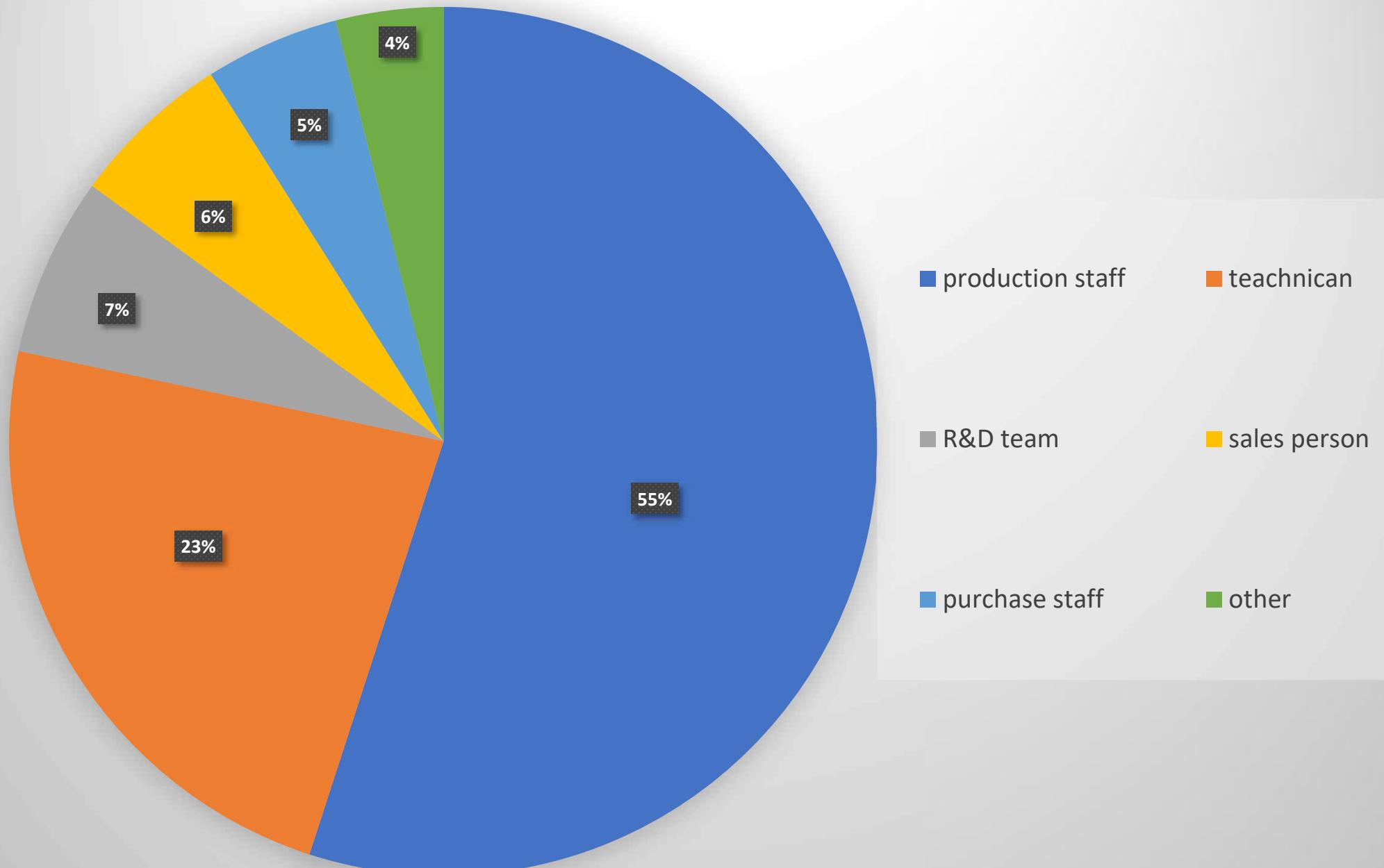
Gist of Smart Factory for Enclosure & Baying Panel System

“평균 생산량: 50,000 대 이상”

- ◆ 개별공장 면적: 42,000m² 이상 (12,700평↑)
- ◆ 개별작업장 면적: 30,000m² 이상 (9,000평↑)
- ◆ 특허, 지적재산권을 보유한 자동화 생산라인
- ◆ 고속기계화 생산 및 스마트 팩토리 시스템
- ◆ 100% 전자동 로봇 용접
- ◆ 100% 전자동 로봇 도장
- ◆ 100% 자체 도장공장 보유
- ◆ 프레임 외함 조립용 특수 지그 보유
- ◆ 외함 주요 사용국가 (고정거래처- 국가별):
중국, 한국, 일본, 베트남, 인도, 인도네시아,
말레이시아, 이란, 파키스탄, UAE, 벨로루시,
유럽



스마트 팩토리 – 프레임외함 생산공장(본사, 중국) 전문 인원, 숙련공 구성비 Man-Power RATIOS



스마트 팩토리 – 프레임외함 생산공장(북경, 천진) Gist of Smart Factory for Enclosure & Baying Panel System



* 중국 북경 공장 - BEIJING FACTORY S.S



* 중국 천진 공장 - TIANJIN FACTORY C.S

스마트 팩토리 – 프레임외함 생산공장(와령)

Gist of Smart Factory for Enclosure & Baying Panel System



* 중국 와령 1공장 - WARING FACTORY-1



* 중국 와령 2공장 - WARING FACTORY-2

스마트 팩토리 – 에어컨, 판금 생산공장(북경, 천진) Gist of Smart Factory for Enclosure & Baying Panel System



* 중국 산업용 에어컨 공장 – COOLING CONTROL FACTORY



* 중국 판금 제작 공장 - SHEET METAL FACTORY

고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

자동화 공정 - Auto Decoiling Line



고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

자동화공정 – PROFILING (18-BENDING LINE)



고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

자동화공정 - AMADA CNC punching & CNC Laser Jet Machine



고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

자동화공정 - AMADA CNC punching & CNC Laser Jet Machine



고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

자동화공정 - ZINC-Plate Facility



고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

자동화공정 - Auto Painting line



고강도, 경량, CS 열반 외함(자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

Factory's Laboratory



고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

설비 목록 1/3 – Facility's List & log

<u>Description</u>	<u>Type</u>	<u>Qty</u>	<u>Specification</u>
Lathe		1	Max rpm: 360mm
Lathe	CD6140A	1	Working length: 1500mm
Lathe		1	Max. cutting dia.: 400mm
Cutting Saw	SHARK	1	Max. cutting width: 280mm
CNC Milling Machine	XK8140	1	X: 800mm Y: 400mm
Milling Machine	X8130	1	X: 750mm Y: 300mm
Fiber Drawing Machine	SG1300-DSIB	1	Max working width: 1300mm
Fiber Drawing Machine	SG1300	1	
Welding Robot	Arc Mate 100ib	1	
TIG Machine	TIG200S	3	Max. welding THK: 0.5-3mm
TIG Machine	TIG250D/TIG40	2	

고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

설비 목록 2/3 – Facility's List & log

<u>Description</u>	<u>Type</u>	<u>Qty</u>	<u>Specification</u>
CNC Laser Cut	1530	1	X: 3000mm Y: 1500mm; Max. cutting THK: CRS 0.5~1.8mm; SS 0.5~8mm; AL 0.5~5mm
CNC Punch Machine	2510C	1	X: 50 inch; Y: 100 inch
CNC Punch Machine	255NT	2	X: 50 inch; Y: 100 inch
CNC Punch Machine	31228C	1	X: 1200mm; Y: 2800mm
CNC Punch Machine	3058	1	X: 2500mm; Y: 1500mm
CNC Shearing Machine	QC12Y-6X3200	1	Width: 3200mm; THK: 6mm
Shearing Machine	QC12Y-6X2500	1	Width: 2500mm; THK: 6mm
Sheet Flattening Machine	W43-3X1250	1	Width: 1250mm; THK: 0.8-3mm
Punch Press	J21S-80	1	Max. Pressure: 80tons; Max. cutting THK: 9mm
Punch Press	J21S-40	1	Max. Pressure: 40tons
Punch Press	J21S-25	1	Max. Pressure: 25tons
Punch Press	J21S-25	1	Max. Pressure: 25tons

고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

설비 목록 3/3 – Facility's List & log

<u>Description</u>	<u>Type</u>	<u>Qty</u>	<u>Specification</u>
CNC Bending Machine	RG100X3200	3	Max. pressure: 100 tons, Max. working width: 3200mm
CNC Bending Machine	RG35X1200	1	Max. pressure: 35 tons, Max. working width: 1200mm
Bending Machine	RG160X3200	1	Max. pressure: 160 tons, Max. working width: 3200mm
Bending Machine	RG63X2500	1	Max. pressure: 63 tons, Max. working width: 2500mm
Bending Machine	RG250X2500	1	Max. pressure: 250 tons, Max. working width: 3200mm
Spot Welding Machine	YR-350B2HGE	1	Max. THK: 1.0-3.0mm
Spot Welding Machine	DNB-63B	1	X: 1500mm Y: 600mm, Max. THK: 1.0~3.0mm
Stud Welding Machine	LZH-2602	1	Max. stud: M8X260mm ; Min. stud: M3×4mm
Stud Welding Machine	PRESSOTECHM K	1	Max. pressure: 40MPa
Drilling Machine	ZN 3732X8	1	Max. dilling dia.:32mm; Max. working space: 800mm
CNC Milling-drilling Machine	ZJK7532-A-4	1	X: 540mm Y:350mm Z: 450mm
Lathe	CA6136	1	Working length: 650mm

고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

Production pictures of FRA (Frame Work Agreement) Customer



고강도, 경량, CS 열반 외함 (자동화생산) – TC9000

IP55-66 고강도 방진, 방오, 부식방지 캐비닛 – High Strength, Anti-Corrosion

CRM (주요고객) – Frame Work Agreement Customer List

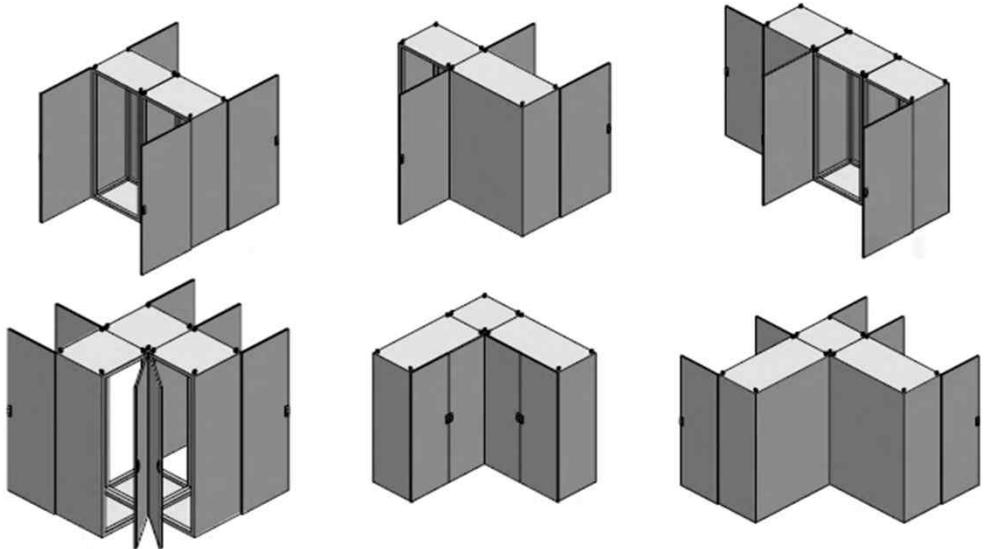


MINGYANG ELECTRIC
明阳电气

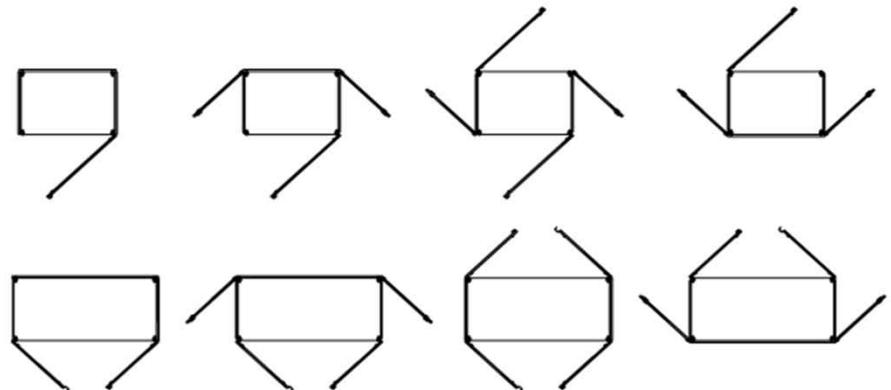
더빌더스 산업용 엔클로저 기술자료
프레임 외함 제품 (Catalog Data)
Product Line-up information

고강도, 경량, CS 열반용 프레임 외함 (특허제품)

Profiled Frame Enclosure - Catalog Data



DOORS AND SIDE PANELS ARE OPTIONAL FOR ALL DIRECTIONS COMPATIBLE WITH
THE ABOVE BAYING SOLUTIONS



Whether around corners, forwards, backwards, to the left or right or even upwards if required, the baying possibilities are unlimited. Doors can be opened clock-wise or counter-clock-wise as request.



발주처 지정 Vendor(폐사)제품 사용, 설치 & 운용사진

고강도, 경량, CS 열반용 프레임 외함 (특허제품) – TC9000

Profiled Frame Enclosure - Catalog Data



TC9000
TC-9000 SERIES PROFILE
T20 Control cabinets

Material:
-T20 Enclosure frame:Zinc-plated 2.0mm
Roof,side panel,rear panel,bottom panel:sheet steel 1.5mm
-Door:Sheet steel 2.0mm
-Mounting plate:Zinc-plated 2.5mm

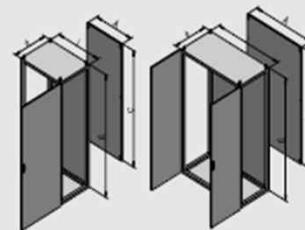
Surface finish:
-T20 Enclosure frame:Dipcoat-primed,powder-coated on the outside,flat
-Door,roof,side panel,rear panel:Dipcoat-primed,powder-coated on the outside,textured paint
-Mounting plate and bottom plates:Zinc-plated

Colour:
-RAL 7035

Protection category:
-IP55 to IEC 60529,complies with NEMA 12.

Supply includes:
-T20 Enclosure frame with door(s),3mm double-bit lock insert
-Mounting plate
-Bottom plate
-Rear plate
-Roof,4 eye-bolts

Approvals:
-CE
-RoHS
-IP protection
-Bearing
-Salt spray
-High and low temperature
-Glow-wire
-Anti-seismic 8 grade



Height:2000mm,depth:600mm-800mm

Standard

Width(B1)mm	600	800	800	1000	1200	page
Height(H1)mm	2000	2000	2000	2000	2000	
Depth (T1) mm	600	600	800	600	800	
Mounting plate width(F1)mm	499	699	699	899	1099	
Mounting plate height(G1)mm	1896	1896	1896	1896	1896	
Model TC	T20-2066	T20-2086	T20-2088	T20-20106	T20-20128	
Door(s)	1	1	1	2	2	
Weight(kg)	144	150	158	198	214	

Available on request

Side panel	T900300019	T900300019	T900300025	T900300019	T900300025	49
Plinth(Height 100mm)	T900700002	T900700005	T900700006	T900700008	T900700012	45
Plinth(Height 200mm)	T900700026	T900700029	T900700030	T900700032	T900700036	45

Lock System

Standard supply is MS896,MS867 is available on request
Note:Color:Textured RAL7035.RAL7032 is available on request.Lead time is available on request



TC9000
TC-9000 SERIES PROFILE
T24 Control cabinets

Material:
-T24 Enclosure frame:Zinc-plated 2.5mm
Roof,side panel,rear panel,bottom panel:sheet steel 2.0mm
-Door:Sheet steel 2.5mm
-Mounting plate:Zinc-plated 3.0mm

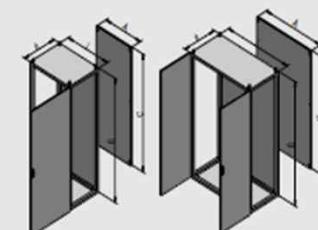
Surface finish:
-T24 Enclosure frame:Dipcoat-primed,powder-coated on the outside,flat
-Door,roof,side panel,rear panel:Dipcoat-primed,powder-coated on the outside,textured paint
-Mounting plate and bottom plates:Zinc-plated

Colour:
-RAL 7035

Protection category:
-IP55 to IEC 60529,complies with NEMA 12.

Supply includes:
-T24 Enclosure frame with door(s),3mm double-bit lock insert
-Mounting plate
-Bottom plate
-Rear plate
-Roof,4 eye-bolts

Approvals:
-CE
-RoHS
-IP protection
-Bearing
-Salt spray
-High and low temperature
-Glow-wire
-Anti-seismic 8 grade



Height:2000mm,depth:600mm-800mm

Standard

Width(B1)mm	800	1000	1000	1200	1200	页码
Height(H1)mm	2000	2000	2000	2000	2000	
Depth (T1) mm	800	600	800	600	800	
Mounting plate width(F1)mm	699	899	899	1099	1099	
Mounting plate height(G1)mm	1896	1896	1896	1896	1896	
Model TC	T24-2088	T24-20106	T24-20108	T24-20126	T24-20128	
Door(s)	1	2	2	2	2	
Weight(kg)	180	200	205	240	270	

Available on request

Side panel	T900300049	T900300043	T900300049	T900300043	T900300049	49
Plinth(Height 100mm)	T900700094	T900700097	T900700098	T900700101	T900700102	45
Plinth(Height 200mm)	T900700123	T900700128	T900700131	T900700130	T900700131	45

Lock System

Standard supply is MS896,MS867 is available on request
Note:Color:Textured RAL7035.RAL7032 is available on request.Lead time is available on request

고강도, 경량, CS 열반용 프레임 외함 (특허제품) – TC9000

Profiled Frame Enclosure - Catalog Data



TC9000

TC-9000 SERIES PROFILE

AE Control box

Material:
 -Box:Sheet steel 1.5mm
 -Front door:Sheet steel 1.5mm,all-round foamed in PU seal
 -Mounting plate:Zinc-plated 2.5mm

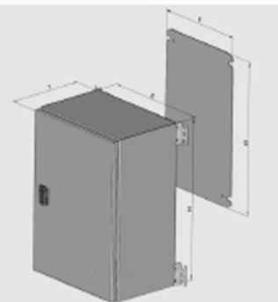
Colour:
 -RAL 7035

Protection category:
 -IP55 to IEC 60529,complies with NEMA 12

Approvals:
 -CE
 -RoHS
 -IP protection
 -High and low temperature
 -Glow-wire

Surface finish:
 -Box and front door:Powder-coated on the outside, textured paint
 -Mounting plate:Zinc-plated

Supply Includes:
 -Box
 -Front door
 -Mounting plate
 -Wall mounting brackets



TC9000

TC-9000 SERIES PROFILE

KL Control box

Material:
 -Box:Sheet steel 1.2mm
 -Box cover:Sheet steel 1.2mm,all-round foamed in PU seal
 -Mounting plate:Zinc-plated 2.5mm

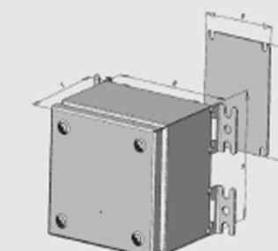
Colour:
 -RAL 7035

Protection category:
 -IP55 to IEC 60529,complies with NEMA 12

Approvals:
 -CE
 -RoHS
 -IP protection
 -High and low temperature
 -Glow-wire

Surface finish:
 -Box and box cover:Powder-coated on the outside, textured paint
 -Mounting plate:Zinc-plated

Supply Includes:
 -Box
 -Box cover
 -Mounting plate
 -Wall mounting brackets



Width(B)mm	200	200	300	400	380	600	600	400	600
Height(H)mm	300	300	380	400	500	600	760	800	800
Depth(T)mm	120	155	210	210	210	210	210	250	300
Box Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Door Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Mounting plate width(F)mm	150	150	550	250	350	330	550	550	350
Mounting plate height(G)mm	280	280	380	380	480	580	740	780	780
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Model AE	AE-3020120	AE-3020155	AE-3860210	AE-4030210	AE-5040210	AE-6038210	AE-7660210	AE-8060250	AE-8040300
Weight(kg)	3.5	4.5	20	17	15	21	35	38	22

Width(B)mm	150	200	200	300	300	150	200	200	300	300	300
Height(H)mm	150	150	200	150	200	150	150	200	150	200	300
Depth(T)mm	80	80	80	80	80	120	120	120	120	120	120
Box Material thickness (mm)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Door Material thickness (mm)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Mounting plate width(F)mm	150	200	200	300	300	150	200	200	300	300	300
Mounting plate height(G)mm	150	150	200	150	200	150	150	200	150	200	300
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Model KL	KL-151580	KL-152080	KL-202080	KL-153080	KL-203080	KL-1515120	KL-1520120	KL-2020120	KL-1530120	KL-2030120	KL-3030120
Weight(kg)	1	1	1.5	1.5	2	1.5	1.5	2	2	2.5	3

고강도, 경량, CS 열반용 프레임 외함 (특허제품) – TC9000

Profiled Frame Enclosure - Catalog Data



TC9000
TC-9000 SERIES PROFILE
AF Control box

Material:
-Box:Sheet steel 2.0mm
-Front door:Sheet steel 1.2mm,all-round foamed in PU seal
-Mounting plate:Zinc-plated 2.5mm

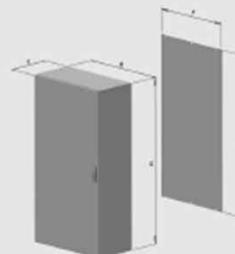
Colour:
-RAL 7035

Approvals:
-CE
-RoHS
-IP protection
-High and low temperature
-Glow-wire

Protection category:
-IP56 to IEC 60529,complies with NEMA 12

Surface finish:
-Box and front door:Powder-coated on the outside, textured paint
-Mounting plate:Zinc-plated

Supply Includes:
-Box
-Front door
-Mounting plate



TC9000
TC-9000 SERIES PROFILE
Glazed door enclosure

Material:
-T20 Enclosure frame:Zinc-plated 2.0mm
-Side panel:Sheet steel 1.5mm
-Front door:Aluminum profile steel glass
-Panel:1.5mm

Colour:
-RAL 7035, RAL 7032

Approvals:
-CE
-RoHS
-IP protection
-Bearing
-Salt spray
-High and low temperature
-Glow-wire
-Anti-seismic 8 grade

Protection category:
-IP55 to IEC 60529, complies with NEMA 12.
Anti-corrosion grade:C2(C3/C4)

Surface finish:
-Pre-treatment process of polymer nano ceramic+powder-coated

Application Industry:
Widely used in power transmission and distribution, wind power industry, automobile manufacturing, machine tool equipment, metallurgical manufacturing, and analytical instruments.



Width(B)mm	600	1000	1200	600	1200	600	1000	1200	600	1200
Height(H)mm	1200	1200	1200	1400	1800	1200	1200	1200	1400	1600
Depth(T)mm	300	300	300	300	300	400	400	400	400	400
Box Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Door Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Mounting plate width(F)mm	540	940	1140	540	1140	540	960	1140	540	1140
Mounting plate height(G)mm	1155	1155	1155	1355	1555	1155	1155	1155	1355	1555
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Model AF	AF-1280300	AF-1210300	AF-1212300	AF-1480300	AF-1612300	AF-1280400	AF-1210400	AF-1212400	AF-1480400	AF-1612400
Weight(kg)	44	67	79	50	102	48	73	85	55	109

Width(B)mm	800	800	800	800	800
Height(H)mm	1800	2000	2100	2000	2100
Depth(T)mm	600	600	600	800	800
Model TCP	TCP-1886	TCP-2086	TCP-2186	TCP-2088	TCP-2188
Weight(kg)	125	140	147.5	148	155.9

고강도, 경량, CS 열반용 프레임 외함 (특허제품) – TC9000

Profiled Frame Enclosure - Catalog Data



TC9000
TC-9000 SERIES PROFILE
AF Control box

Material:
-Box:Sheet steel 2.0mm
-Front door:Sheet steel 1.2mm,all-round foamed in PU seal
-Mounting plate:Zinc-plated 2.5mm

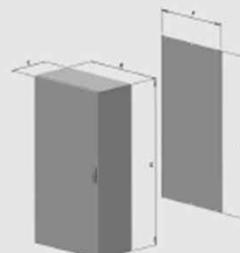
Colour:
-RAL 7035

Approvals:
-CE
-RoHS
-IP protection
-High and low temperature
-Glow-wire

Protection category:
-IP56 to IEC 60529,complies with NEMA 12

Surface finish:
-Box and front door:Powder-coated on the outside, textured paint
-Mounting plate:Zinc-plated

Supply Includes:
-Box
-Front door
-Mounting plate



TC9000
TC-9000 SERIES PROFILE
Glazed door enclosure

Material:
-T20 Enclosure frame:Zinc-plated 2.0mm
-Side panel:Sheet steel 1.5mm
-Front door:Aluminum profile steel glass
-Panel:1.5mm

Colour:
-RAL 7035, RAL 7032

Approvals:
-CE
-RoHS
-IP protection
-Bearing
-Salt spray
-High and low temperature
-Glow-wire
-Anti-seismic 8 grade

Protection category:
-IP55 to IEC 60529, complies with NEMA 12.
Anti-corrosion grade:C2(C3/C4)

Surface finish:
-Pre-treatment process of polymer nano ceramic+powder-coated

Application Industry:
Widely used in power transmission and distribution, wind power industry, automobile manufacturing, machine tool equipment, metallurgical manufacturing, and analytical instruments.



Width(B)mm	600	1000	1200	600	1200	600	1000	1200	600	1200
Height(H)mm	1200	1200	1200	1400	1800	1200	1200	1200	1400	1600
Depth(T)mm	300	300	300	300	300	400	400	400	400	400
Box Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Door Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Mounting plate width(F)mm	540	940	1140	540	1140	540	960	1140	540	1140
Mounting plate height(G)mm	1155	1155	1155	1355	1555	1155	1155	1155	1355	1555
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Model AF	AF-1280300	AF-1210300	AF-1212300	AF-1480300	AF-1612300	AF-1280400	AF-1210400	AF-1212400	AF-1480400	AF-1612400
Weight(kg)	44	67	79	50	102	48	73	85	55	109

Width(B)mm	800	800	800	800	800
Height(H)mm	1800	2000	2100	2000	2100
Depth(T)mm	600	600	600	800	800
Model TCP	TCP-1886	TCP-2086	TCP-2186	TCP-2088	TCP-2188
Weight(kg)	125	140	147.5	148	155.9

고강도, 경량, CS 열반용 프레임 외함 (특허제품) – TC9000

Profiled Frame Enclosure - Catalog Data



TC9000
TC-9000 SERIES PROFILE
AF Control box

Material:
-Box:Sheet steel 2.0mm
-Front door:Sheet steel 1.2mm,all-round foamed in PU seal
-Mounting plate:Zinc-plated 2.5mm

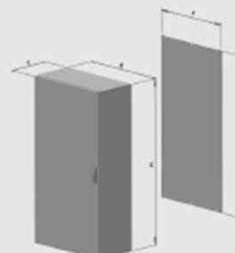
Colour:
-RAL 7035

Approvals:
-CE
-RoHS
-IP protection
-High and low temperature
-Glow-wire

Protection category:
-IP56 to IEC 60529,complies with NEMA 12

Surface finish:
-Box and front door:Powder-coated on the outside, textured paint
-Mounting plate:Zinc-plated

Supply Includes:
-Box
-Front door
-Mounting plate



TC9000
TC-9000 SERIES PROFILE
Glazed door enclosure

Material:
-T20 Enclosure frame:Zinc-plated 2.0mm
-Side panel:Sheet steel 1.5mm
-Front door:Aluminum profile steel glass
-Panel:1.5mm

Colour:
-RAL 7035, RAL 7032

Approvals:
-CE
-RoHS
-IP protection
-Bearing
-Salt spray
-High and low temperature
-Glow-wire
-Anti-seismic 8 grade

Protection category:
-IP55 to IEC 60529, complies with NEMA 12.
Anti-corrosion grade:C2(C3/C4)

Surface finish:
-Pre-treatment process of polymer nano ceramic+powder-coated

Application Industry:
Widely used in power transmission and distribution, wind power industry, automobile manufacturing, machine tool equipment, metallurgical manufacturing, and analytical instruments.



Width(B)mm	600	1000	1200	600	1200	600	1000	1200	600	1200
Height(H)mm	1200	1200	1200	1400	1800	1200	1200	1200	1400	1600
Depth(T)mm	300	300	300	300	300	400	400	400	400	400
Box Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Door Material thickness (mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Mounting plate width(F)mm	540	940	1140	540	1140	540	960	1140	540	1140
Mounting plate height(G)mm	1155	1155	1155	1355	1555	1155	1155	1155	1355	1555
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Model AF	AF-1280300	AF-1210300	AF-1212300	AF-1480300	AF-1612300	AF-1280400	AF-1210400	AF-1212400	AF-1480400	AF-1612400
Weight(kg)	44	67	79	50	102	48	73	85	55	109

Width(B)mm	800	800	800	800	800
Height(H)mm	1800	2000	2100	2000	2100
Depth(T)mm	600	600	600	800	800
Model TCP	TCP-1886	TCP-2086	TCP-2186	TCP-2088	TCP-2188
Weight(kg)	125	140	147.5	148	155.9

고강도, 경량, CS 열반용 프레임 외함 (특허제품) – TC9000

Profiled Frame Enclosure - Catalog Data



TC9000
TC-9000 SERIES PROFILE
Single AP console

Material:
-Enclosure:Sheet steel 1.5mm
-Door:Sheet steel 2.0mm,all-round polyurethane foam seal strips
-Console cover:Sheet steel 2.0mm,all-round polyurethane foam seal strips
-Mounting plate:Zinc-plated 2.5mm

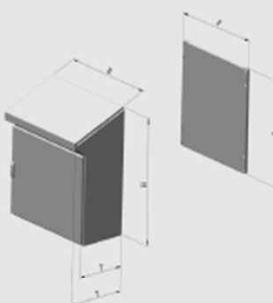
Surface finish:
-Enclosure cover and door:Powder-coated,textured paint
-Mounting plate:Zinc-plated

Colour:
-RAL 7035

Protection category:
-IP55 to IEC 60529,complies with NEMA 12

Supply includes:
-Enclosure
-Front door
-Mounting plate
-Console cover

Approvals:
-CE
-RoHS
-IP protection
-High and low temperature
-Glow-wire



TC9000
TC-9000 SERIES PROFILE
Double AP console

Material:
-Enclosure:Sheet steel 1.5mm
-Door:Sheet steel 2.0mm,all-round polyurethane foam seal strips
-Console cover:Sheet steel 2.0mm,all-round polyurethane foam seal strips
-Mounting plate:Zinc-plated 2.5mm

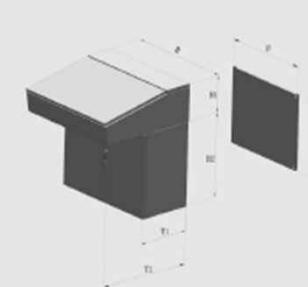
Surface finish:
-Enclosure,cover and door:Powder-coated,textured paint
-Mounting plate:Zinc-plated

Colour:
-RAL 7035

Protection category:
-IP55 to IEC 60529,complies with NEMA 12

Supply includes:
-Enclosure
-Front door
-Mounting plate
-Console cover

Approvals:
-CE
-RoHS
-IP protection
-High and low temperature
-Glow-wire



Width(B)mm	600	800	1000	1200
Height(H)mm	960	960	960	960
Depth(T)mm	400/480	400/480	400/480	400/480
Console material thickness (mm)	1.5	1.5	1.5	1.5
Door material thickness (mm)	2.0	2.0	2.0	2.0
Mounting plate width(F)mm	532	732	932	1132
Mounting plate height(G)mm	780	780	780	780
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5
Model AP	AP-9680400	AP-9680400	AP-9610400	AP-9612400
Weight(kg)	68	75	80	95

Width(B)mm	600	800	1000	1200
Upper box height(H1)mm	260	260	260	260
Bottom box height(H2)mm	580	580	580	580
Upper box depth(T2)mm	400	400	400	400
Bottom box depth(T1)mm	750	750	750	750
Console material thickness (mm)	1.5	1.5	1.5	1.5
Door material thickness (mm)	2.0	2.0	2.0	2.0
Mounting plate width(F)mm	451	651	851	1051
Mounting plate height(G)mm	516	516	516	516
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5
Model AP2	AP2-9680400	AP2-9680400	AP2-9610400	AP2-9612400
Weight(kg)	85	95	110	120

고강도, 경량, CS 열반용 프레임 외함 (특허제품) – TC9000

Profiled Frame Enclosure - Catalog Data



TC9000

TC-9000 SERIES PROFILE

Three AP console

Material:

- Enclosure:Sheet steel 1.5mm
- Door:Sheet steel 2.0mm;all-round polyurethane foam seal strips
- Console cover:Sheet steel 2.0mm;all-round polyurethane foam seal strips
- Mounting plate:Zinc-plated 2.5mm

Colour:

- RAL 7035

Protection category:

- IP55 to IEC 60529,complies with NEMA 12

Surface finish:

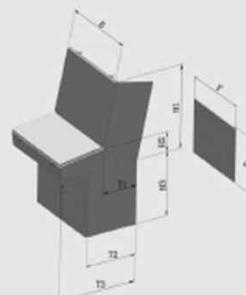
- Enclosure cover and door: Powder-coated, textured paint
- Mounting plate: Zinc-plated

Supply includes:

- Enclosure
- Front door
- Mounting plate
- Console cover

Approvals:

- CE
- RoHS
- IP protection
- High and low temperature
- Glow-wire



Width(B)mm	600	800	1000	1200
Upper box height(H1)mm	870	870	870	870
Middle box height(H2)mm	210	210	210	210
Bottom box height(H3)mm	680	680	680	680
Upper box depth(T1)mm	386	386	386	386
Middle box depth(T3)mm	889	889	889	889
Bottom box depth(T2)mm	600	600	600	600
Console material thickness (mm)	1.5	1.5	1.5	1.5
Door material thickness (mm)	2.0	2.0	2.0	2.0
Mounting plate width(F)mm	445	645	845	1045
Mounting plate height(G)mm	560	560	560	560
Mounting plate thickness (mm)	2.5	2.5	2.5	2.5
Model AP3	AP3-15560600	AP3-15580600	AP3-15510600	AP3-15512600
Weight(kg)	115	130	140	152



TC9000

TC-9000 SERIES PROFILE

Mounting plate



No.	Name	Specification	Qty.
1	Mounting plate fixing kit-up A		1
2	Mounting plate fixing kit-up B		1
3	Cage nut	M8	2
4	Duck nut	M8	2
5	Raised head screw	M5*16	2
6	Mounting plate screw		2
7	Flat washer	M8	2
8	Spring washer	M8	2

No.	Name	Specification	Qty.
1	Mounting plate fixing kit-middle A		1
2	Mounting plate fixing kit-middle B		1
3	Cage nut	M8	2
4	Duck nut	M8	2
5	Mounting plate screw		2
6	Raised head screw	M5*16	2

No.	Name	Specification	Qty.
1	Mounting plate fixing kit-bottom A		2
2	Mounting plate fixing kit-bottom B		2
3	Self-tapping screw	MS*10	2
4	Bottom slide beam		2

Mounting plate was fixed in the frame with mounting plate fixing kits. The position is adjustable.

Material:High quality cold rolled hot-dip galvanized sheet, 3.0mm

Note: Install a completely electronic mounting plate needs all the above accessories, such as the quantities showed in sheets. Contact us if questionable.

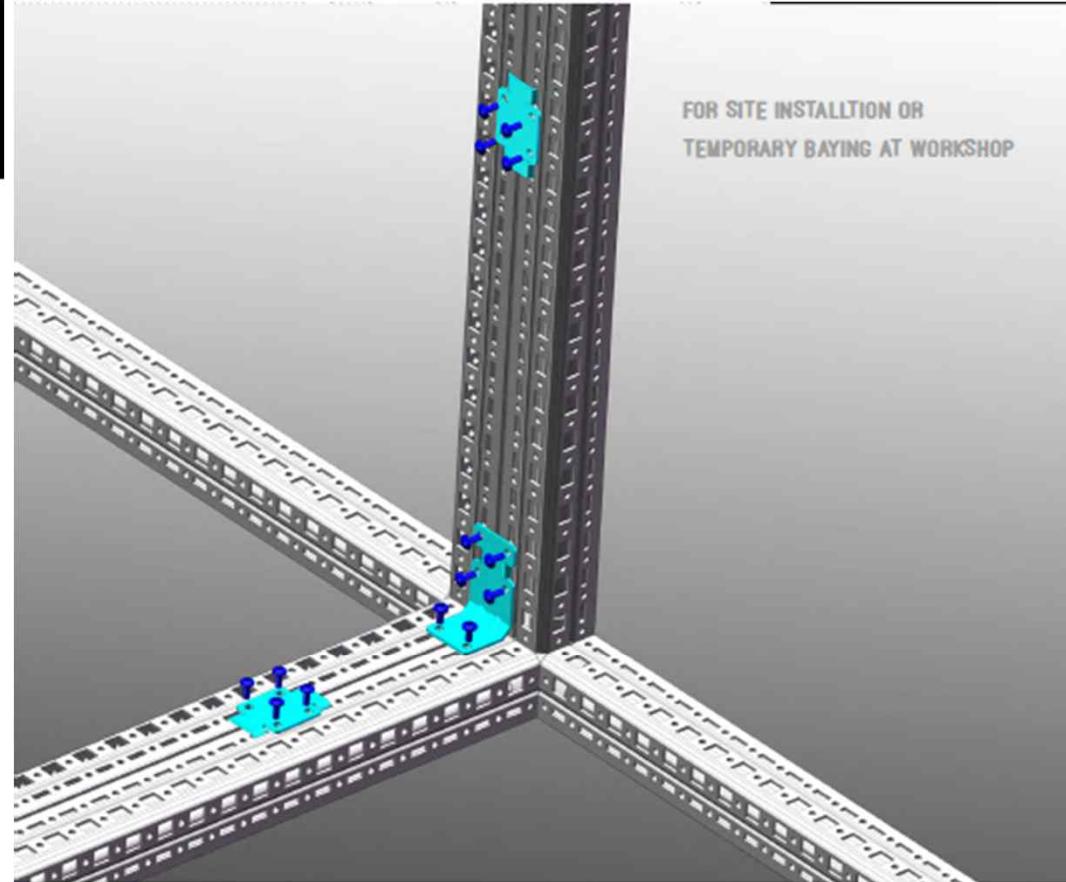
고강도, 경량, CS 열반용 프레임 외함 (특허제품)

Profiled Frame Enclosure - Catalog Data



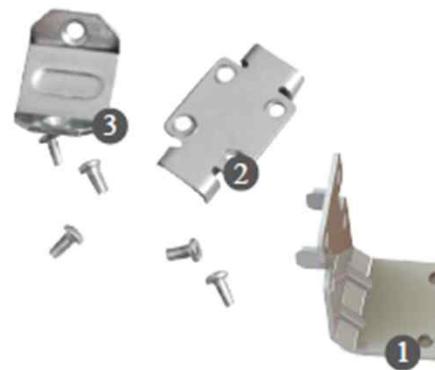
TC9000

TC9000

TC-9000 SERIES PROFILE
Large swing frame

Door stay of swing frame

Keep the swing frame open and installed on the
bottom of swing frame



1 internal baying clamp-1

2 internal baying clamp-2

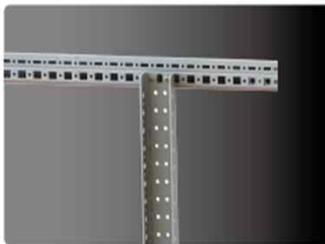
3 external baying clamp

고강도, 경량, CS 열반용 프레임 외함 (특허제품)

Profiled Frame Enclosure - Catalog Data

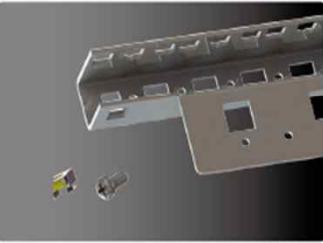
U-shaped column

With standard 25mm module for installation electric beam. Horizontally installed on the frame and can be adjustable. Material: 2.0mm sheet steel Finish: painted



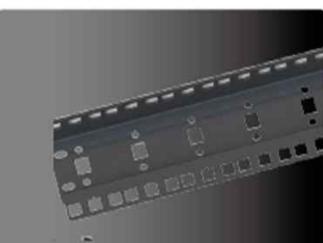
19" angle rail

With standard U module for installation 19" electronic facility. Horizontally installed on the frame and can be adjustable. Material: 2.0mm sheet steel Finish: painted



19" column

With standard module for installation 19" electronic facility. Horizontally installed on the frame and can be adjustable. Material: 2.0mm sheet steel Finish: painted



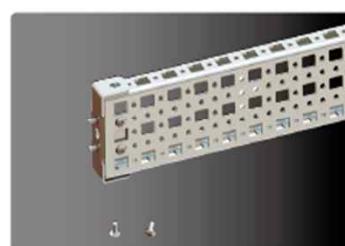
Chassis with single module line:

Chassis with 25 mm pitch pattern:
Used for binding wire. Height adjustable.
Material: 1.5mm sheet steel
Finish: Zinc-plated



Slicing chassis with triple module line:

Chassis with 25 mm pitch pattern. without mounting flange for mounting heavy-duty equipment. Height adjustable.
Material: 1.5mm sheet steel
Finish: Zinc-plated



Chassis with triple module line:

Chassis with 25mm pitch pattern with mounting flange for mounting heavy-duty equipment. Height adjustable.
Material: 1.5mm sheet steel
Finish: Zinc-plated



고강도, 경량, CS 열반용 프레임 외함 (특허제품)

Profiled Frame Enclosure - Catalog Data

Hanging pieces:

Optimizing assembly process.
Efficient during mount and dismount.



Utility lectern:

For programming units etc.
Prepared for mounting on the
tubular door frame of TC Load
capacity: max. 30 kg.
Material: Sheet steel



Door stay:

To secure the door in the open
position.



Wiring plan pockets of sheet steel:

Holds wiring plans
Material: Sheet steel
Model: A3 and A4



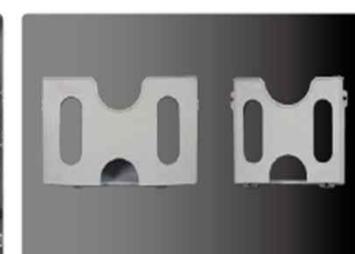
Door protector:

Prevent the deformation during
transportation and utilization.



Plastic wiring plan pockets:

Holds wiring plans
Material: Plastic
Model: A3 and A4



고강도, 경량, CS 열반용 프레임 외함 (특허제품)

Profiled Frame Enclosure - Catalog Data

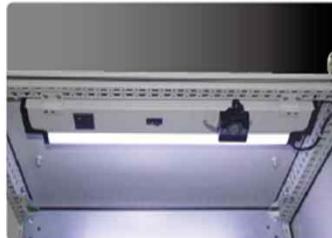
Luxury button lock/Luxury lock:

Luxury button lock: the handle adopts the pull-push method, no need for turn to open, efficient space utilization; push button control; flexible and convenient
Luxury lock: with handle, top-grade appearance, easy to switch, strong and perfect sealing



Emergency LED light:

Technical specifications	Socket	Width	Approvals
"9W 220V 50/60Hz"	Yes	400mm	3C
"15W 220V 50/60Hz"	Yes	600mm	3C
"18W 220V 50/60Hz"	Yes	700mm	7C



Standard lock/big key:

Standard lock: flat structure, turn to open, three point locking system, strong, perfect sealing
Big key: with luxury handle; humane and top-grade



LED light:

Technical specifications	Socket	Width	Approvals
"6W 220V 50/60Hz"	No	200	3C
"9W 220V 50/60Hz"	No	300	3C
"12W 220V 50/60Hz"	No	400	3C



Luxury outdoor lock:

Two dimensions of structure with humane handle; convenient and can be hanged with locks to improve safety.



Filter with fan:

For ventilation and heat dissipation. Installation position and quantities as you required



Steel Fabrication & Framed + Welded Enclosures for
IP55~66, ISO9001, CE, UL, EN, KR, ROHS, NEMA, CCC, SEISMIC, BEAT-WAVE

더빌더스

THE BUILDERS

E. thebuilders@thebuilders.kr

M. +82 (0)10-8969-3369

W. www.thebuilders.kr

