

Dedication Trustworthy

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Conscientious Innoyation

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**CNC MACHINE TOOLS ACCESSORIES CATALOG**

2024 Edition



Intelligent Switchboard



Safety Door Switch



Cable Set



High pressure TSC system



Broken Tool Detector



System OEM Machine Operation Panel



Warning light



Manual Pulse Generator



Oil Mist Collector



Oil skimmer

**Shandong SHANSEN CNC Technology Co., Ltd.**  
**Rizhao SHANSEN Machine Tool Sales Co., Ltd.**

Http: //www.ssk.com.cn



**Founded in 2001** Shandong SHANSEN CNC Technology Co., Ltd. is the vice chairman of China CNC System Association, the chairman of Tengzhou City Machinery Industry Association, the specialized, high-end and innovation-driven little giant, the national high-tech enterprise, the double soft enterprise, with a strong R&D team, complete technical equipment and technology means. We have been operating according to ISO9001 quality management system and strictly implementing 6S site management. Up to now, we have 100,000 square meters of factory buildings, with an area of 180mu.

The company's main products include: CNC system, human-machine interface, intelligent Switch-board, oil mist collector, safety door switch, relay module, cable separator module, hand-held pulse generator, cable harness, warning lights, LED work lights, electronic lathe and so on, counting up to more than 20 kinds of products.

## GROUP SUBSIDIARIES

- Shandong SHANSEN CNC Technology Co., Ltd.
- Rizhao SHANSEN Machine Tool Sales Co., Ltd.
- Shandong ZAOKE Intelligent Equipment Research Institute Co., Ltd.
- YIMU Technology Co., Ltd.
- Shandong SHANSEN Robot Co., Ltd.
- Shandong Rizhao SHANSEN CNC Equipment Co., Ltd.

## ENTERPRISE SPIRIT

DEDICATION TRUSTWORTHY  
CONSCIENTIOUS INNOVATION

## ENTERPRISE PURPOSE

Use our hard work and wisdom to Liberate people from tedious labor with our hard work & wisdom and conserve resources to the largest extent for the benefit of future generations!

## BUSINESS PHILOSOPHY

Build first-class technical teams, develop first-class processes and create first-class technology products to give back to the community and strengthen our China!

- July 1, 2001** Tengzhou SHANSEN CNC Equipment Factory was established.
- March, 2002** Shenyang No.1 Machine Tool Factory used our machine Operation Panel in batch.
- April 28, 2003** Tengzhou SHANSEN Chuangfa CNC Equipment Co., Ltd. was established.
- 2004** Mass production of cable separator modules, relay modules, and RS-type communication ports.
- July 2006** Shandong Rizhao SHANSEN CNC Equipment Co., Ltd.
- November 2007** Mass production of E-type communication ports and safety door switches.
- August 2008** SS-08T/M CNC system was successfully developed.
- July 2009** SS-09T and SS-09S CNC systems were successfully developed.
- March 16, 2010** Construction of SHANSEN CNC's new plant in Tengzhou was started.
- March 2011** Tengzhou factory moved to a new place in this year and set up a provincial-level technology center, winning the national high-tech enterprise title.
- January 6, 2012** Rizhao SHANSEN Machine Tool Sales Co., Ltd. was established, and in the same year, machining workshop, printing workshop and showroom were built successively. Semi CNC lathe and lathe controller won the national invention patent.
- 2013** The mold workshop was completed and the CNC laboratory took shape.
- 2014** Shenyang i5 system OEM was put into mass production.
- 2015** Fully-automatic SMT production line was completed.
- 2016** It was elected as the chairman of Tengzhou Machinery Industry Association.
- 2017** The Gema Switzerland spraying line was introduced, a sheet metal spraying workshop was constructed, and IPO listing guidance was initiated.
- 2018** ZAOKE Intelligent Equipment Research Institute Co. Ltd. and YIMU Technology Co. Ltd. were established.
- 2019** It was elected as the vice chairman of China CNC System Association.
- 2020** 65mu land were acquired and the construction of CNC system and the CNC machine tool magazine project were invested.
- 2021** It was awarded the specialized, high-end and innovation-driven "Small Giant" enterprise; Shandong SHANSEN Robot Co., Ltd. was founded; the broken tool detector products were put into mass production.
- 2022** It was awarded the honorary titles of Shandong Province Mountain Goat Enterprise, Shandong Province Quality Benchmark, Shandong Famous Brand, etc.; Fanuc and Mitsubishi Bus Panels, SS/E-01B Safety Door Switches and other products were put into mass production.
- 2023** Intelligent Switchboards were awarded the first set of products and the first version of software at the provincial level; Little Giant operation box and photoelectric wave switches started trial production.

The splendid continues at SHANSEN .....

**Thankful to have you on the road of growth!**



## 200+ CERTIFIED PATENTS



## Process Demonstration

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## Product Introduction

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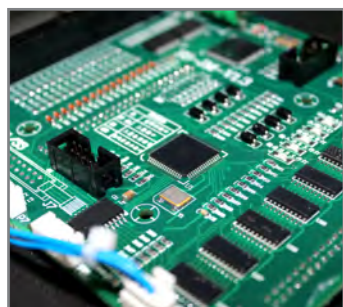
## PRODUCTION LINE INTRODUCTION

SMT line has automatic visual printing machine, multifunctional chip mounter, lead-free hot air reflow soldering machine, automatic AOI optical detector, automatic electronic assembling machine, conformal coating automatic spraying machine and other production equipment, they can complete the automatic printing, assembling, reflow soldering, testing, mounting, spraying and other full set of processes. The company introduced SMT production line in 2015, trained a number of first-class grass-roots staff and lean, efficient management team; through the modernization of the production management system, it has adhered to the road of scientific management and production standardization, has adopted "zero defects" as the production policy, and has been committed to creating first-class enterprises of SMT and wave soldering processing.

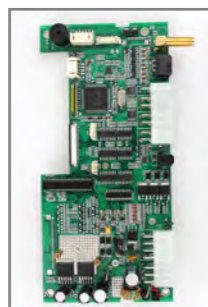
## SMT PROCESSING EQUIPMENT



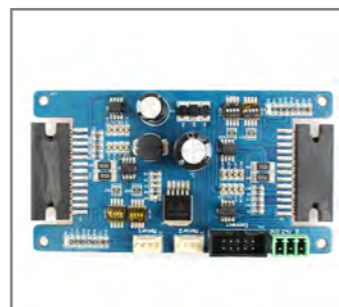
## EXTERNAL PROCESSING



CONTROL MOTHERBOARD



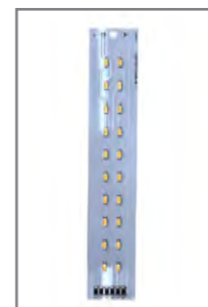
GPS PRODUCT



DIGITAL PRODUCT



NETWORK PRODUCT



LED LAMP PANEL

## PRINTING WORKSHOP INTRODUCTION

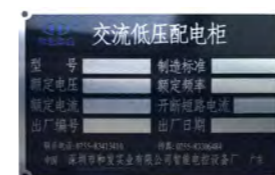
The printing workshop has 27 sets of production equipment, such as laser cutting machine, automatic printing machine, automatic box making machine, automatic punching machine, laser marking machine, etc. It can complete the whole set of process of plate making, printing, baking, cutting, embossing, laminating, etc., with high product quality and short production cycle.

The workshop can undertake external printing business.

## PRINTING EQUIPMENT



## EXTERNAL PROCESSING BUSINESS



NAMEPLATE & LABEL PRINTING PRODUCTS



FILM PRINTING PRODUCTS



EMBOSSED FILM PRODUCTS



ACRYLIC PRINTED PRODUCTS



## WORKSHOP FEATURES

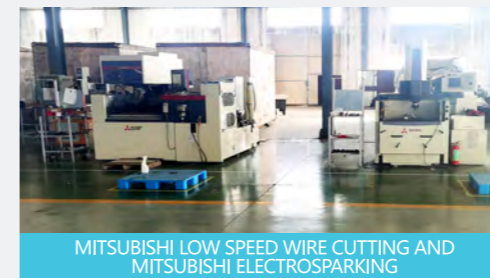
- ◆ Experienced sheet metal design engineer;
- ◆ Skilled operators;
- ◆ The introduction of advanced Gema Switzerland automatic electrostatic spraying production line;
- ◆ Italian energy-saving natural gas combustion system;
- ◆ Components drying and plastic powder curing system for pre-treatment automatic spraying production line, which was designed and manufactured by Tianjin No. 7 Institute of CSIC;
- ◆ American reverse osmosis pure water purification system;
- ◆ CNC fiber laser cutting machine and CNC bending machine of Casting and Forging Institute;
- ◆ Yaskawa welding robot from Japan.

## PROCESSING EQUIPMENT



## WORKSHOP FEATURES

The mold production line has the support of a technical team with 20 years of experience, the technical team are from large senior enterprises, with mature design and machining software. The machining equipment is robust, with a total of 30 injection molding machines from 100T to 1600T. There are 8 sets of two-color machines from 160T to 850T, 16 sets of machining centers, 10 sets of EDM machines, 10 sets of wire-cutting machines, 13 sets of CNC lathes, 3 sets of laser welders, 6 sets of CNC grinders, and 3 sets of two-color machines. The quality and the delivery time are guaranteed.



MITSUBISHI LOW SPEED WIRE CUTTING AND MITSUBISHI ELECTROSPARKING



PRECISION GRINDING MACHINE



MACHINING CENTER AND PRECISION ENGRAVING MACHINE



MOLD LASER WELDING MACHINE

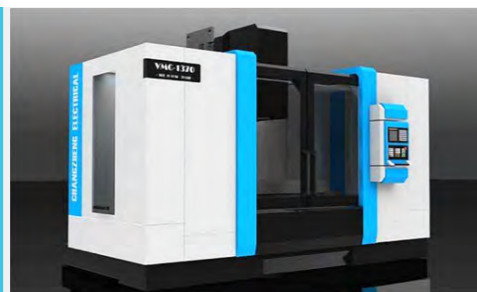
## PROCESSING SITE



STANDARD MOLD BASE

HIGH PRECISION

## EXTERNAL PROCESSING BUSINESS

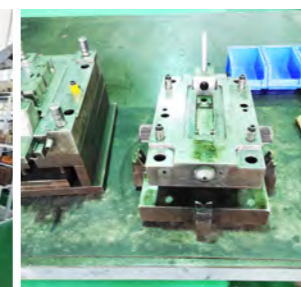


DESIGNING, MANUFACTURING AND PAINTING OF EQUIPMENT PROTECTION DESIGNING



MANUFACTURING AND PAINTING OF ELECTRICAL CABINETS

## FINISHED PRODUCTS SHOW



PROFESSIONAL PROTOTYPING

BATCH PROCESSING

## PRODUCTION EQUIPMENT

Injection molding production line has 6 professional injection molding craftsmen, robust machine equipment, we can produce plastic shells from small to large sizes.

We have a total of 30 injection molding machines from 100T to 1600T, a total of 8 double injection machines from 160T to 850T. Injection molding process is advanced and scientific, with automatic loading and unloading robots, ultrasonic dewatering automatic line, and other equipment. The quality and the delivery time are guaranteed.



## PRODUCTION EQUIPMENT

Machining workshop has experienced operators and technical workers, workshop has over a hundred processing equipment, such as processing centers, CNC turret punches, CNC grinding machines, CNC lathes, CNC bending machines, sanding machines, chamfering machines and other equipment. Plus, there are 3 automated production lines, capable of undertaking the processing of product base metal framework, enclosure and other products. The workshop can not only complete the company's product production, but also can be external to undertake the processing business.



## FINISHED PRODUCTS SHOW



## FINISHED PRODUCTS SHOW



## LABORATORY IMPLEMENTATION STANDARDS

- GB/T18209.1-2010 Electrical Safety of Machinery – Indication, Marking and Actuation;
- JB-T8832-2001 General Requirements for Numerical Control Systems of Machine Tools;
- GB 5226.1-2012 Electrical Safety of Machinery – Electrical Equipment of Machines - Part 1: General Requirements
- GB 4208-2008 Enclosure protection class (IP code).

## EXPERIMENTAL EQUIPMENT

The SHANSEN laboratory is equipped with electronic aging chamber, high and low temperature test chamber, AOI appearance testing equipment, GOI appearance testing equipment, electronic interference detector, vibration test bench, LCR automatic measuring instrument and other experimental equipment.

### Climate environment testing equipment

Climate environment testing equipment can test the product's ability of adapting to high and low temperatures, waterproofing and dustproofing, and resistance to air pressure.



DUSTPROOF LEVEL TEST CHAMBER



HIGH-LOW TEMPERATURE TEST CHAMBER



RAIN TEST CHAMBER

### Laboratory

Electromagnetic compatibility testing equipment



SURGE IMMUNITY TESTER



PULSE GROUP IMMUNITY TESTER



STATIC INTERFERENCE TESTER

### Mechanical environmental equipment

It can test the pressure resistance, vibration resistance and drop resistance of products.



SHAKER



DROP TEST BENCH



WIRE BENDING TESTER

### Appearance Testing Equipment

It can inspect the correctness of the logo, characters and pictures in the product appearance, and inspect the placement and welding of the components.



AOI APPEARANCE TESTING EQUIPMENT



CCD INSPECTION EQUIPMENT



GOI APPEARANCE TESTING EQUIPMENT

## PRODUCT OVERVIEW

Human-machine interface products are widely used in CNC machine tools, woodworking machinery, injection molding machinery, robots, textile machinery, engineering machinery, medical equipment and other industries, we can provide customers with CNC system appearance design, product OEM, machine Operation Panel support and other services. They are adapted to the market mainstream of the domestic and foreign high and middle-end CNC systems, such as Fanuc, Mitsubishi, Siemens, Huazhong CNC, GSK, KND, Syntec, Lynuc and so on. According to customer demand, we can provide a variety of communication connection methods, appearance processing technology, customized design of key material style.

## CUSTOMIZED SERVICE PROJECTS

### 01 Appearance Processing Technology

We offer a wide range of appearance processing options in terms of material, process color, engineering standards, usage, and family element serialization.



SHEET METAL LAMINATION



METAL PAINT



STAINLESS STEEL WIRE DRAWING



ALUMINUM AND MAGNESIUM ALLOY  
OXIDATION SANDBLASTING



3D RESIN DECORATION

## 02 Communication Connection Methods

Various communication protocols and media and a wide range of CNC/PLC bus communication technologies are available according to customer requirements.

### CNC/PLC bus communication technologies

- FANUC IO-Link
- MITSUBISHI CC-Link
- BECKHOFF EtherCAT
- SIEMENS Profinet

### Various communication protocols and media

- WIFI2.4G/5G
- Bluetooth5.1
- RS\_232/RS\_485

## 03 Key and Printing Style

According to customer requirements, we can provide a variety of key material styles and a variety of keypad printing styles.

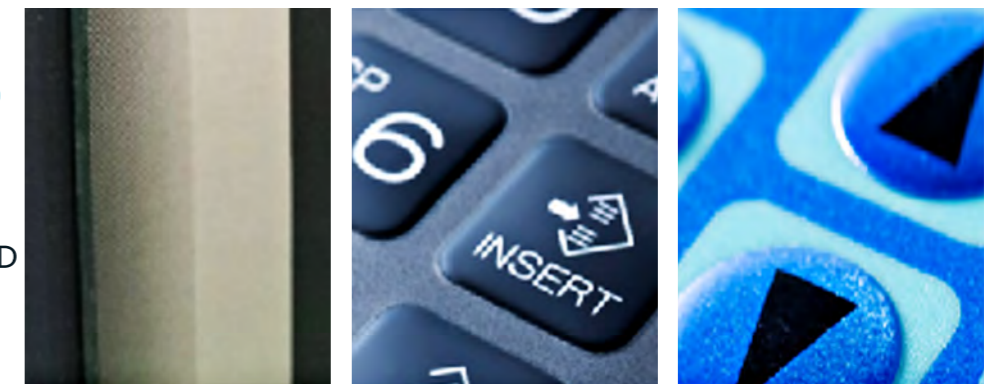
### Key Material

- Membrane
- Crystal
- Laser Engraving
- Labelled

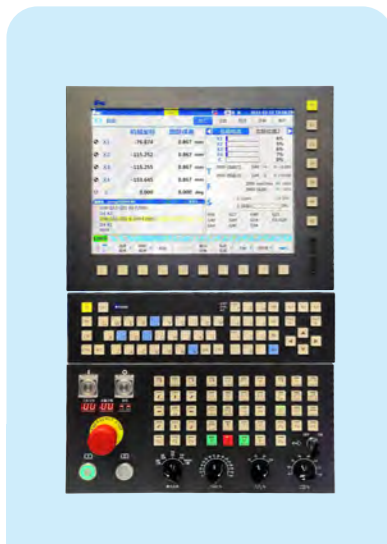


### Printing Style

- Dot-matrix 3D
- Oil-resistant 3D
- Touch 3D







**Huazhong System**

**Product Information**

Product Process	Aluminum and magnesium alloy oxidation sandblasting
Key Process	Laser
Screen Size	12 inch



**Lynuc System**

**Product Information**

Product Process	Aluminum and magnesium alloy oxidation sandblasting
Key Process	Laser
Screen Size	12 inch



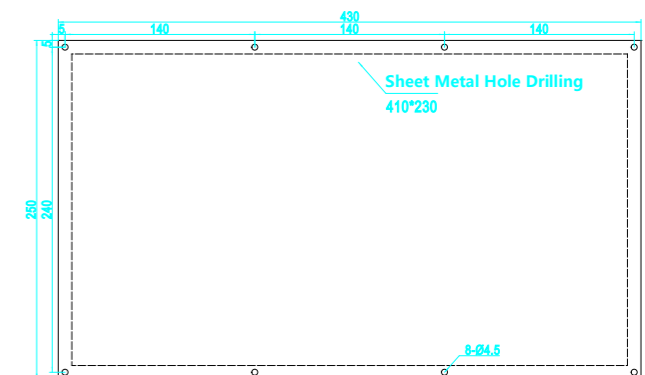
**KND System**

**Product Information**

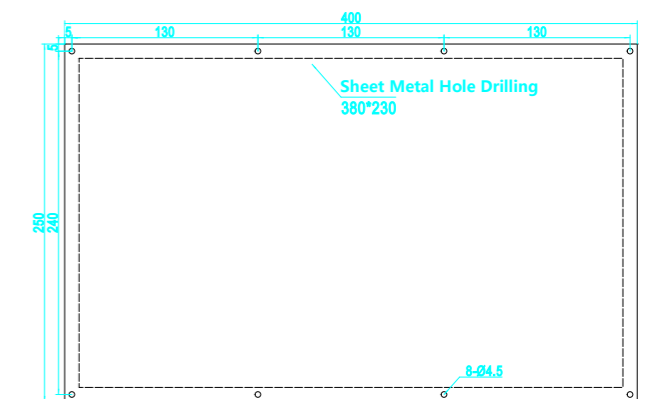
Product Process	Sheet metal lamination
Key Process	Membrane
Screen Size	10.4 inch



**SS-TY-M80-N**



**SS-4025M**



**GSK System**

**Product Information**

Product Process	Aluminum and magnesium alloy oxidation sandblasting
Key Process	Laser
Screen Size	15 inch



**i5 Intelligent Machine Tool-Operating Module System**

**Product Information**

Product Process	Aluminum and magnesium alloy oxidation sandblasting
Key Process	Laser
Screen Size	12 inch



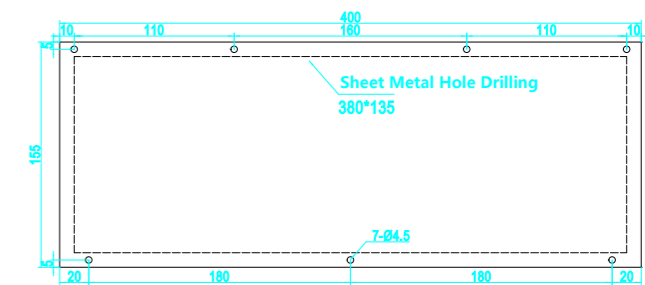
**Syntec System**

**Product Information**

Product Process	Sheet metal lamination
Key Process	Laser
Screen Size	8 inch



**SS-FZD-B-2**



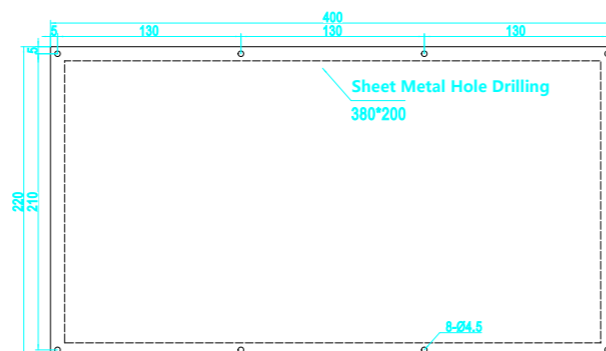
Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-TY-M80-N
Dimension Appearance	430*250
Applicable System	Mitsubishi M80
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type (bus type optionale)
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-4025M
Dimension Appearance	400*250
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type (bus type optionale)
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

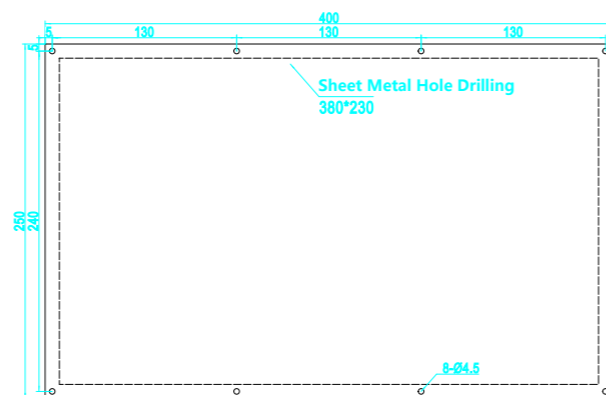
Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-FZD-B-2
Dimension Appearance	400*155
Applicable System	Fanuc
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Bus type
System I/O Occupancy	
Encryption Method	Software encryption, and remote-control support



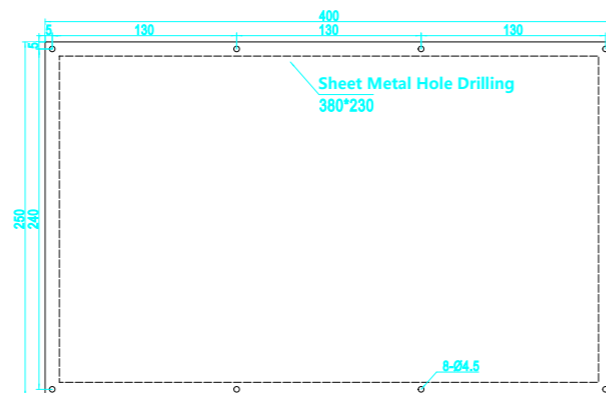
SS-BZ-MC



SS-4025MF-HD



SS-4025MF-JZ-BJ



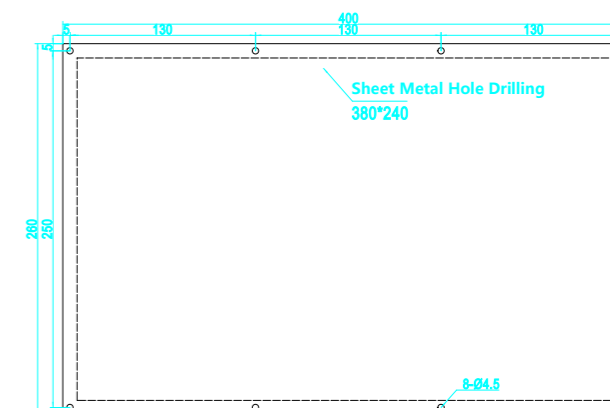
Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-BZ-MC
Dimension Appearance	400*220
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-4025MF-HD
Dimension Appearance	400*250
Applicable System	Fanuc/Mitsubishi/Customized
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

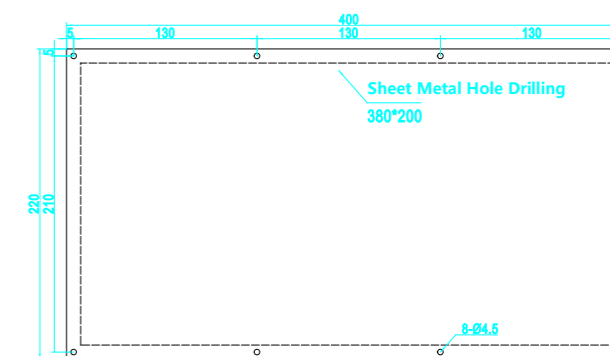
Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-4025MF-JZ-BJ
Dimension Appearance	400*250
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support



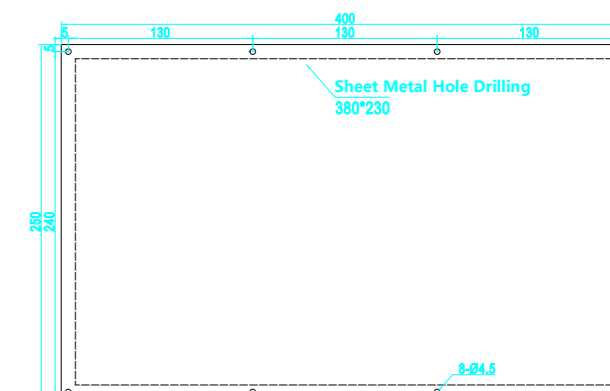
KDVM-01HE-JM



DMTG-VMC108-S



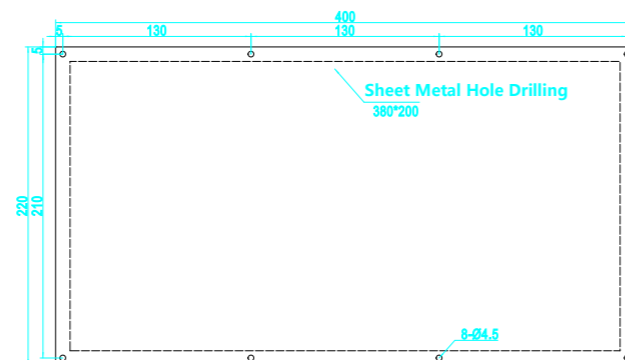
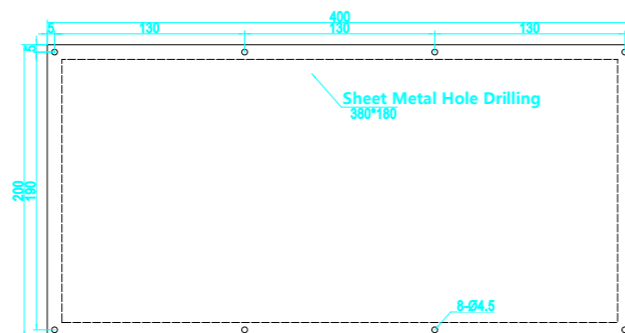
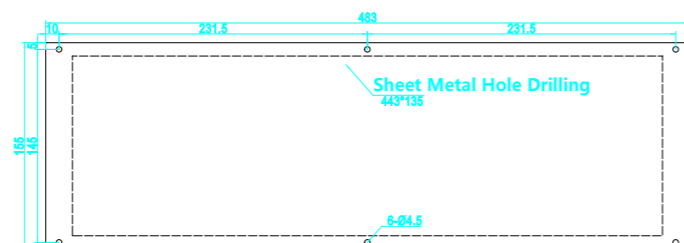
XDKB01-V3



Product Information	
Product Name	Standard Machining Center Panel
Product Model	KDVM-01HE-JM
Dimension Appearance	400*260
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard Machining Center Panel
Product Model	DMTG-VMC108-S
Dimension Appearance	400*220
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

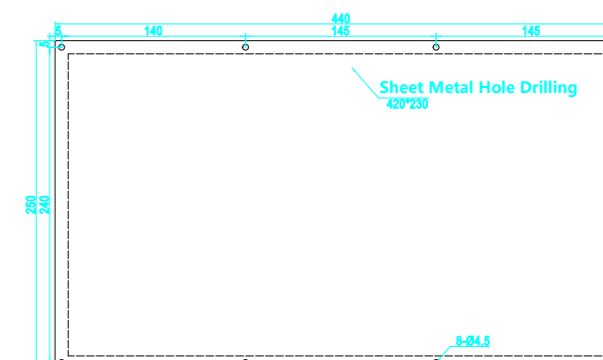
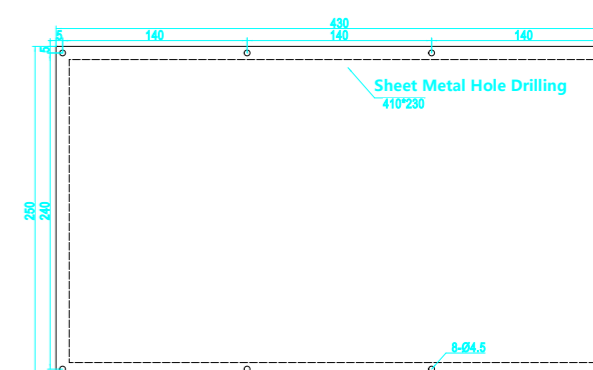
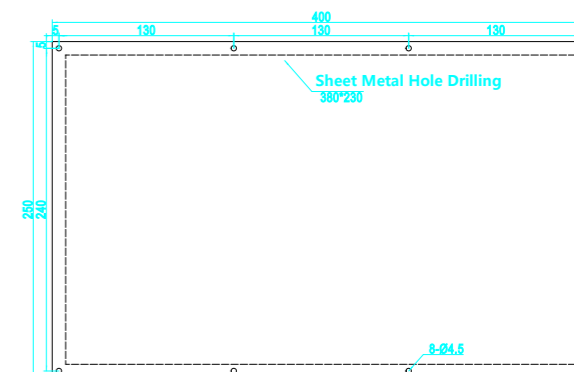
Product Information	
Product Name	Standard Machining Center Panel
Product Model	XDKB01-V3
Dimension Appearance	400*250
Applicable System	Syntec
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix/ Syntec protocol
System I/O Occupancy	
Encryption Method	Not supported for the panel



Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-SM-B
Dimension Appearance	483*155
Applicable System	Siemens
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix, bus type optional
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Not supported for the panel

Product Information	
Product Name	Custom machining center panel
Product Model	SS-4020AL-HS
Dimension Appearance	400*200
Applicable System	Fanuc/Mitsubishi/Customized
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard Machining Center Panel
Product Model	NCBK-3MCH-N
Dimension Appearance	400*250
Applicable System	Mitsubishi E70/E80/M80
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Point to Point
System I/O Occupancy	48 inputs/32 outputs
Encryption Method	Not supported for the panel



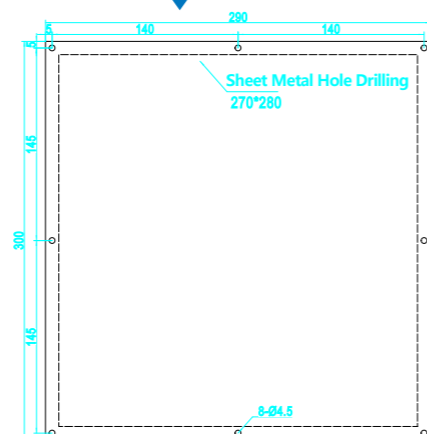
Product Information	
Product Name	Custom machining center panel
Product Model	KNM-Cc4025M5.4S
Dimension Appearance	400*250
Applicable System	KND
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	RS485 communication
System I/O Occupancy	
Encryption Method	None

Product Information	
Product Name	Custom machining center panel
Product Model	KND-Cc4325M5.2S
Dimension Appearance	430*250
Applicable System	KND
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	RS485 communication
System I/O Occupancy	
Encryption Method	None

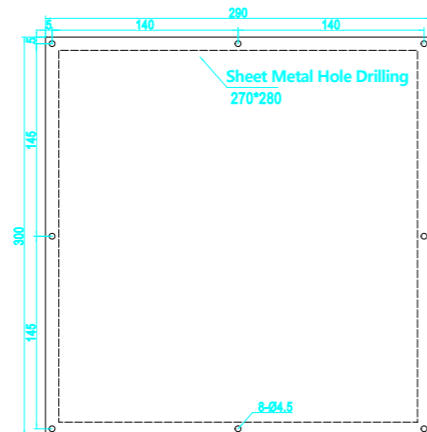
Product Information	
Product Name	Custom machining center panel
Product Model	KND-Cc4425M5.6
Dimension Appearance	440*250
Applicable System	KND
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	RS485 communication
System I/O Occupancy	
Encryption Method	None



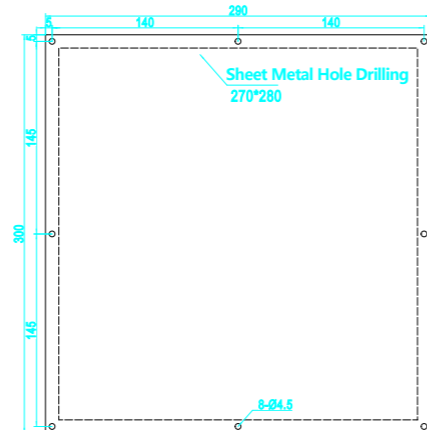
PRSKB03H2



SS-2930FM-JZ-BJ



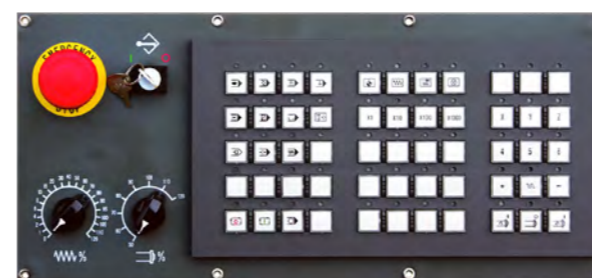
SS-BZ-MC-V



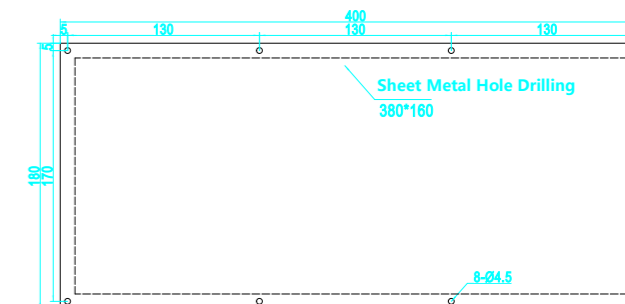
Product Information	
Product Name	Standard Machining Center Panel
Product Model	PRSKB03H2
Dimension Appearance	290*300
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V±5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-2930FM-JZ-BJ
Dimension Appearance	290*300
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V±5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

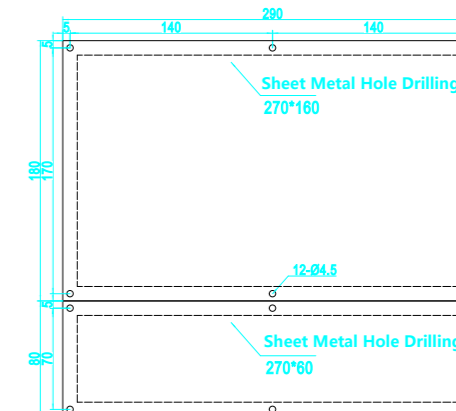
Product Information	
Product Name	Standard Machining Center Panel
Product Model	SS-BZ-MC-V
Dimension Appearance	290*300
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V±5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support



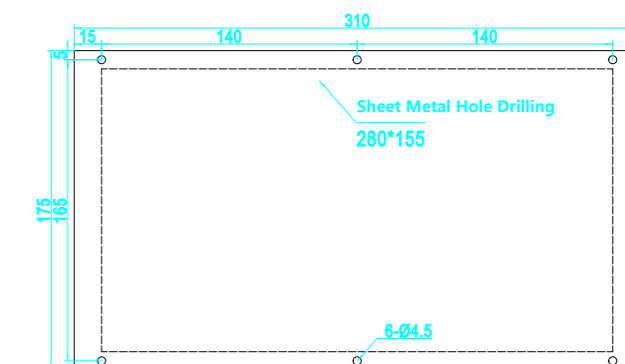
SS-FM-B-2



SS-FM-B+SS-FM-B-8



SS-828D



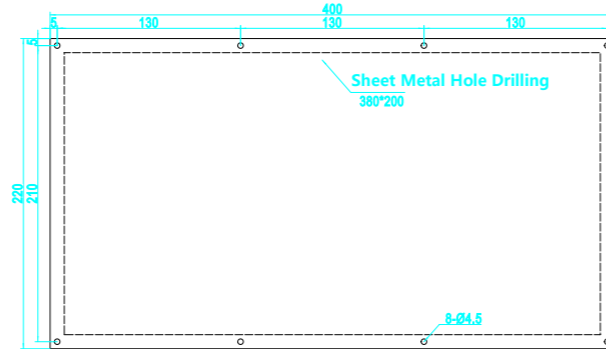
Product Information	
Product Name	Standard panel
Product Model	SS-FM-B-2
Dimension Appearance	400*180
Applicable System	Fanuc
Working Voltage	DC24V±5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Not supported for the panel

Product Information	
Product Name	Standard panel
Product Model	SS-FM-B+SS-FM-B-8
Dimension Appearance	290*180+290*80
Applicable System	Fanuc
Working Voltage	DC24V±5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Not supported for the panel

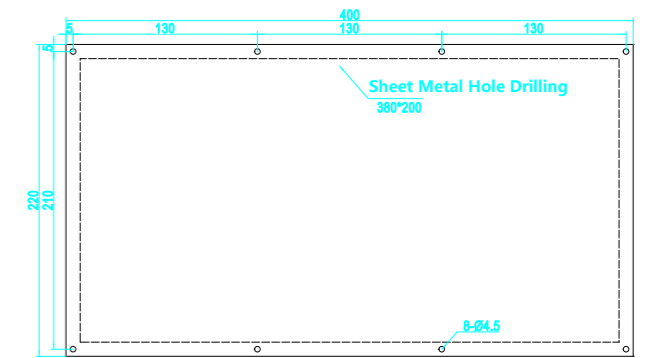
Product Information	
Product Name	Standard panel
Product Model	SS-828D
Dimension Appearance	310*175
Applicable System	Siemens
Working Voltage	DC24V±5%
Protection Class	IP54
Communication Method	Matrix, bus type optional
System I/O Occupancy	16 inputs/16 outputs
Encryption Method	Not supported for the panel



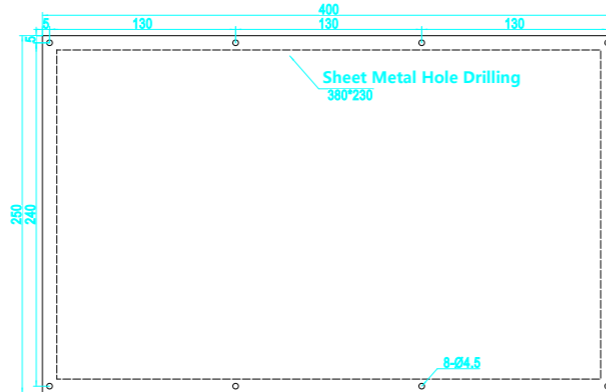
SS-BZ-TC



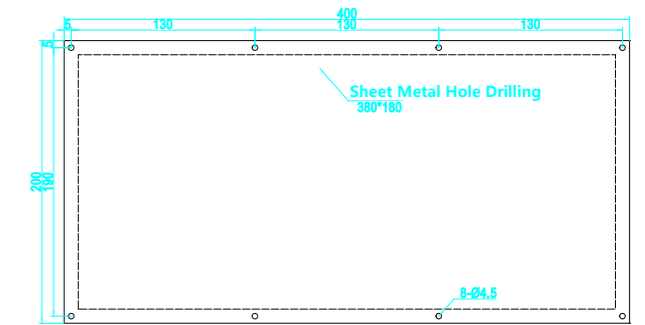
SS-BZ-TC-V1



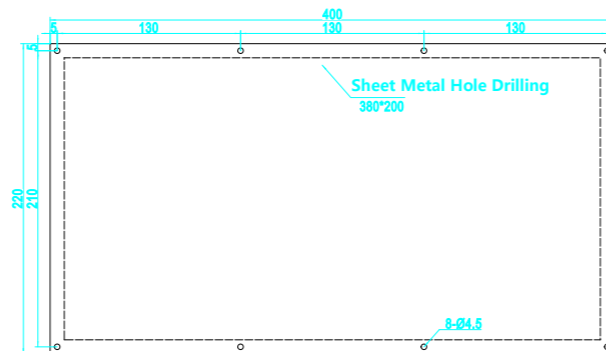
SS-BZ-4025T



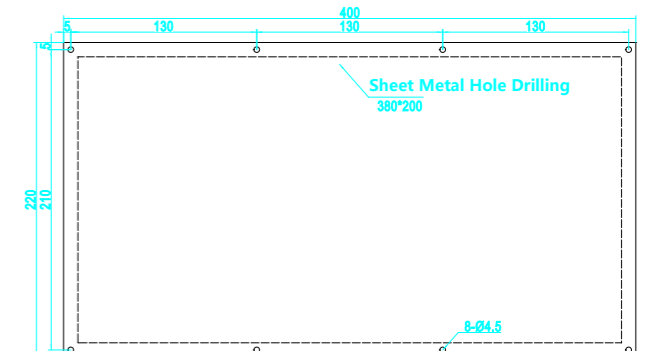
CNC-01MAH



SS-4022T-KDS



FCT-400H-FM



Product Information	
Product Name	Standard lathe panel
Product Model	SS-BZ-TC
Dimension Appearance	400*220
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP65
Communication Method	Matrix system
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard lathe panel
Product Model	SS-BZ-4025T
Dimension Appearance	400*250
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix system
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard lathe panel
Product Model	SS-4022T-KDS
Dimension Appearance	400*220
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix system
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

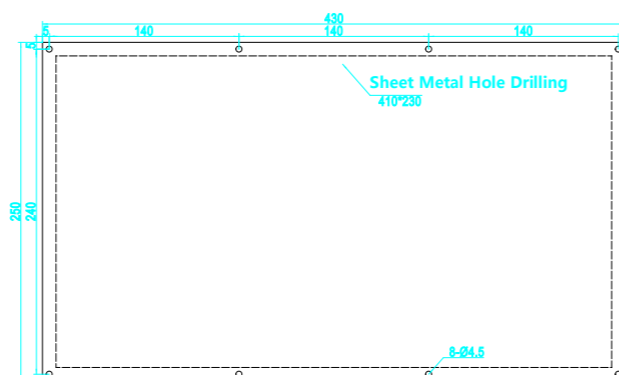
Product Information	
Product Name	Standard lathe panel
Product Model	SS-BZ-TC-V1
Dimension Appearance	400*220
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix system
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard lathe panel
Product Model	CNC-01MAH
Dimension Appearance	400*200
Applicable System	Fanuc
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Point to Point
System I/O Occupancy	48 inputs/32 outputs
Encryption Method	Not supported for the panel

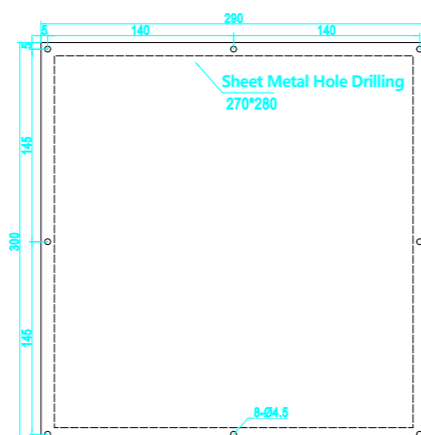
Product Information	
Product Name	Standard lathe panel
Product Model	FCT-400H-FM
Dimension Appearance	400*220
Applicable System	Fanuc/Mitsubishi M80
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Point to Point
System I/O Occupancy	48 inputs/32 outputs
Encryption Method	Not supported for the panel



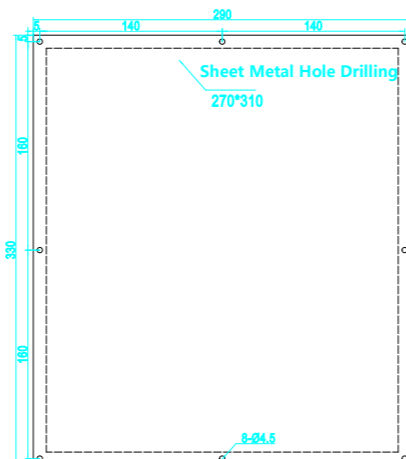
SS-4325M-H



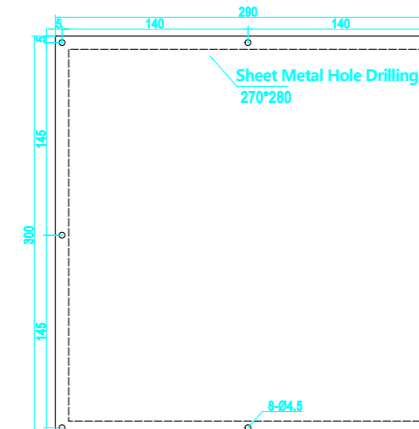
SS-BZ-4025VT



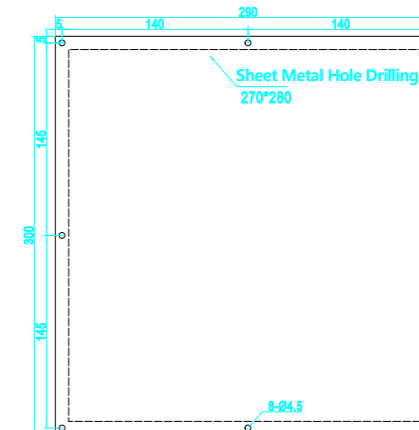
MK-F2933-8DA01



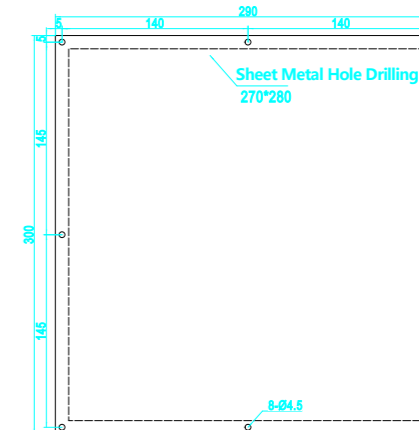
KB08V1N-S



SK-F0VE1



SS-2930VT



Product Information	
Product Name	Standard lathe panel
Product Model	SS-4325M-H
Dimension Appearance	430*250
Applicable System	Mitsubishi M80
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Point to Point
System I/O Occupancy	48 inputs/32 outputs
Encryption Method	Not supported for the panel

Product Information	
Product Name	Standard lathe panel
Product Model	SS-BZ-4025VT
Dimension Appearance	290*300
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard lathe panel
Product Model	MK-F2933-8DA01
Dimension Appearance	290*330
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Bus type
System I/O Occupancy	
Encryption Method	Software encryption, and remote-control support

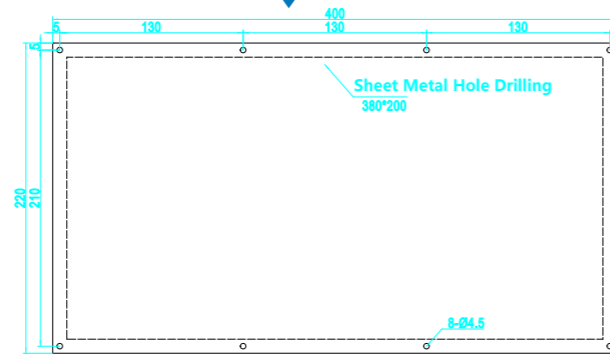
Product Information	
Product Name	Standard lathe panel
Product Model	KB08V1N-S
Dimension Appearance	290*300
Applicable System	Fanuc
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Point to Point
System I/O Occupancy	48 inputs/32 outputs
Encryption Method	Not supported for the panel

Product Information	
Product Name	Standard lathe panel
Product Model	SK-F0VE1
Dimension Appearance	290*300
Applicable System	Fanuc
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Point to Point
System I/O Occupancy	48 inputs/32 outputs
Encryption Method	Not supported for the panel

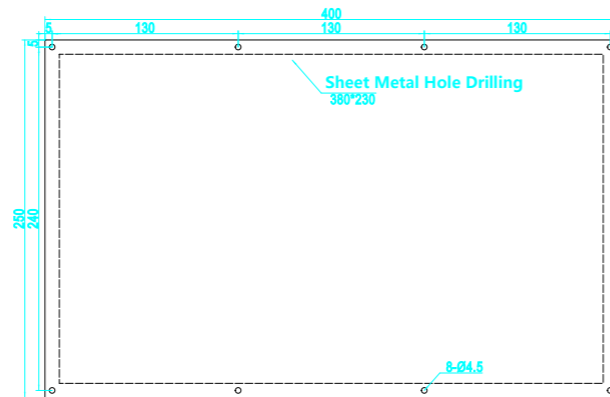
Product Information	
Product Name	Standard lathe panel
Product Model	SS-2930VT
Dimension Appearance	290*300
Applicable System	Fanuc
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Point to Point
System I/O Occupancy	48 inputs/32 outputs
Encryption Method	Not supported for the panel



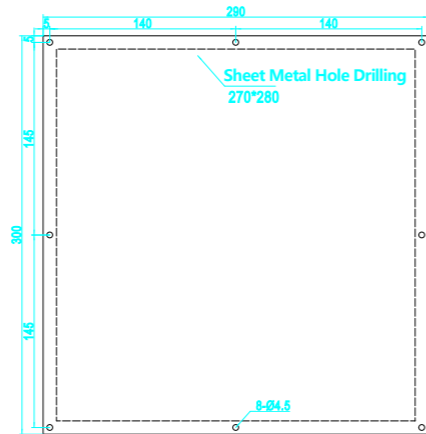
ST4022T



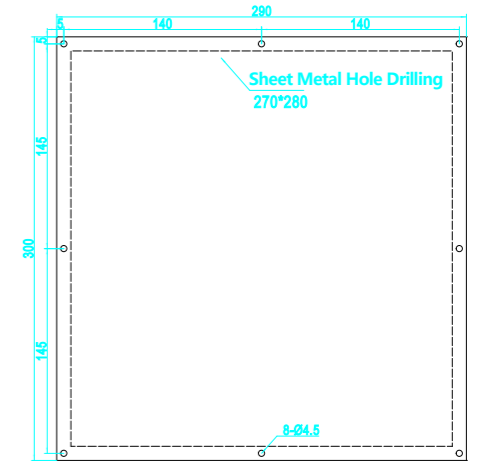
HNC-808DiT-10N



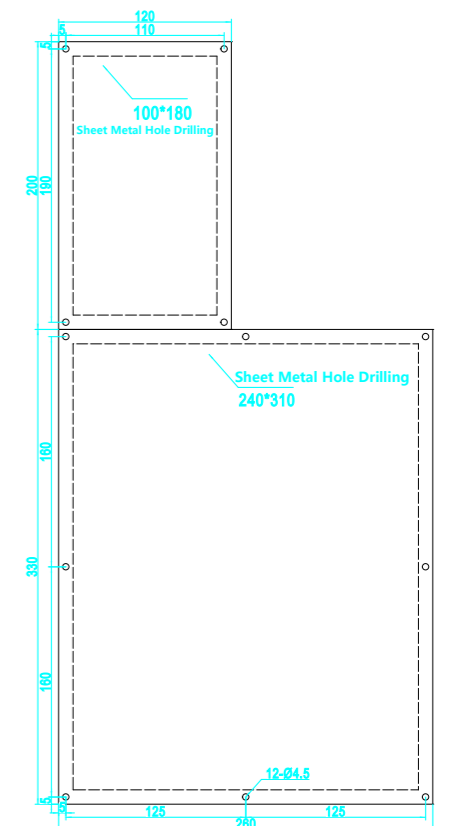
HNC-808DiT-10L



SS-2930-ZG



SS-2633-ZG-B-TY



Product Information	
Product Name	Standard lathe panel
Product Model	ST4022T
Dimension Appearance	400*220
Applicable System	Syntec
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix/ Syntec Protocol
System I/O Occupancy	
Encryption Method	Not supported for the panel

Product Information	
Product Name	Standard lathe panel
Product Model	HNC-808DiT-10N
Dimension Appearance	400*250
Applicable System	Fanuc/Mitsubishi/Customized
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

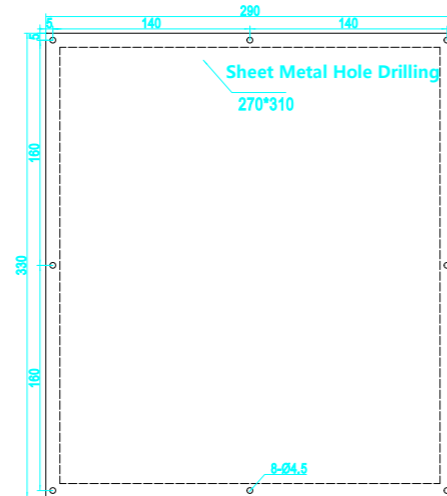
Product Information	
Product Name	Standard lathe panel
Product Model	HNC-808DiT-10L
Dimension Appearance	290*300
Applicable System	Fanuc/Mitsubishi/Customized
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix Type
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

Product Information	
Product Name	Standard Drilling and Tapping Machine Panel
Product Model	SS-2930-ZG
Dimension Appearance	290*300
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix (bus type optional)
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

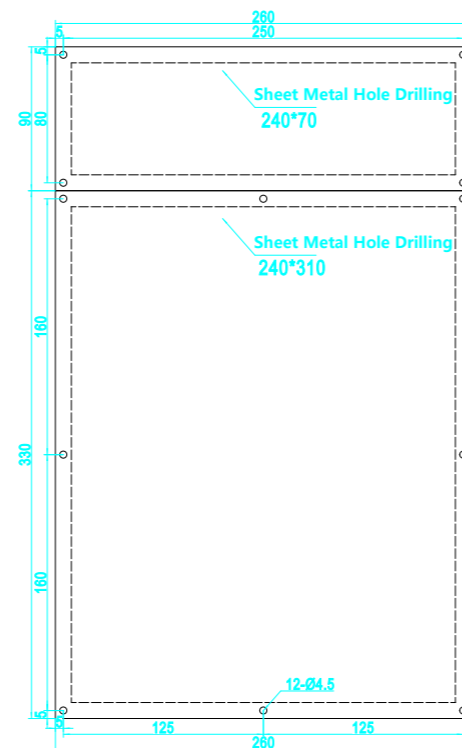
Product Information	
Product Name	Standard Drilling and Tapping Machine Panel
Product Model	SS-2633-ZG-B-TY
Dimension Appearance	260*330+120*200
Applicable System	Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix (bus type optional)
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support



SS-2933-ZG-B



TD500A-JZ



Product Information	
Product Name	Standard Drilling and Tapping Machine Panel
Product Model	SS-2933-ZG-B
Dimension Appearance	290*330
Applicable System	Fanuc/Mitsubishi
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix (bus type optional)
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

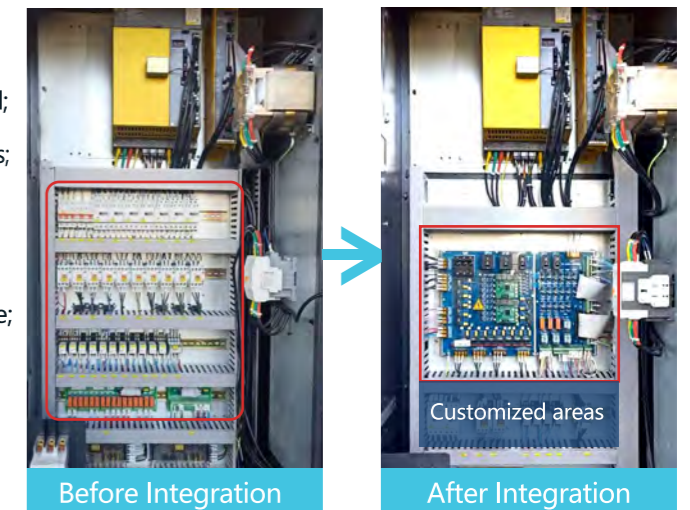
Product Information	
Product Name	Standard Drilling and Tapping Machine Panel
Product Model	TD500A-JZ
Dimension Appearance	260*330+260*90
Applicable System	Fanuc
Working Voltage	DC24V ± 5%
Protection Class	IP54
Communication Method	Matrix (bus type optional)
System I/O Occupancy	13 inputs/16 outputs
Encryption Method	Software encryption, and remote-control support

## PRODUCT OVERVIEW

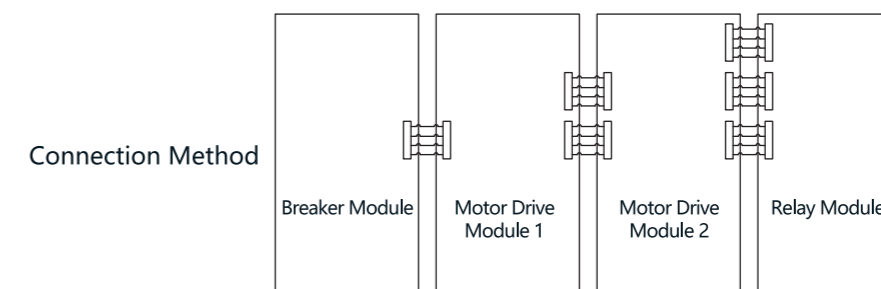
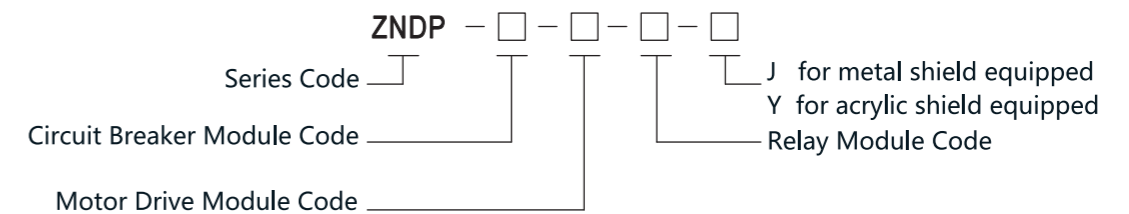
Intelligent Switchboard is developed on the basis of the traditional Switchboard, which can replace some common components controlling the three-phase asynchronous motor in the original panel, including the circuit breaker, AC contactor, thermal protection relay, arc extinguisher with impedance and capacitor, relay module and others; it features simple wiring, strong anti-interference ability, small size, easy to install, cost savings, low failure rate, versatility, high reliability, high coefficient of safety and other advantages.

## FEATURES IN BRIEF

- 1.Highly integrated, modularity in design, with high reliability;
- 2.Protection function for motor phase failure, short circuit, overload;
- 3.Circuit breakers with oil damping replace metal bellows circuit breakers;
- 4.Wide adjustable range of overload current;
- 5.Fast response time for short-circuit protection;
- 6.Control signals of high and low levels are commonly applicable;
- 7.Diversified selection of motor drive modules;
- 8.Modules can be replaced, maintenance is simple and fast.

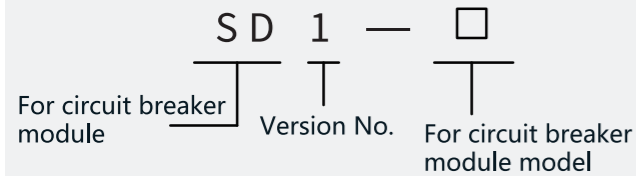


## MODEL DESCRIPTION



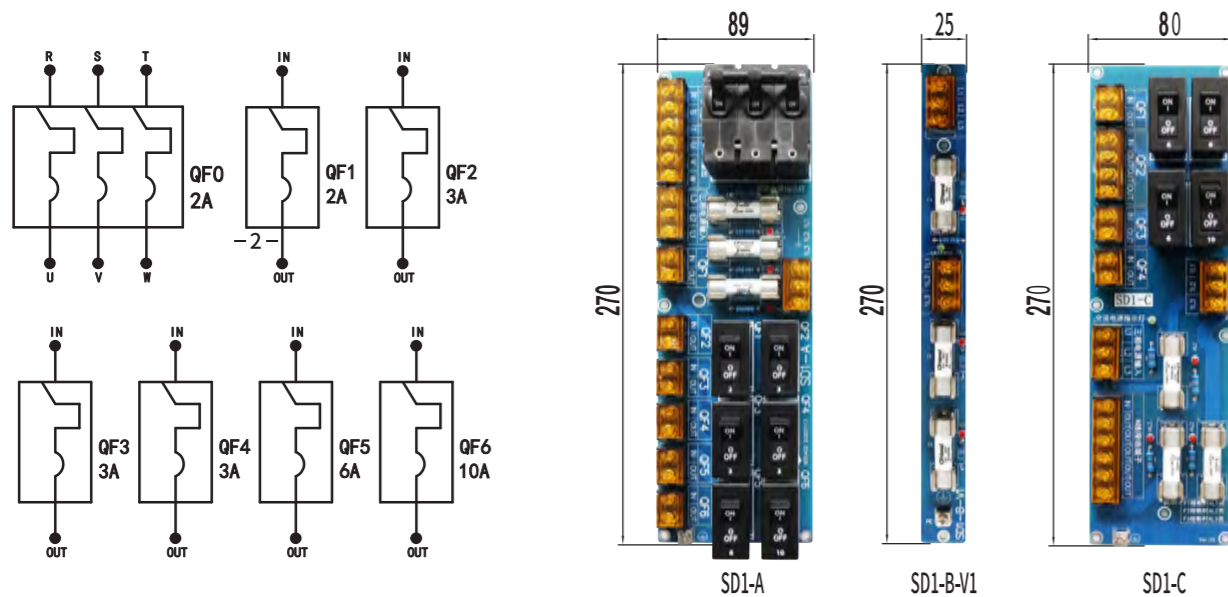


## CIRCUIT BREAKER MODULE DESCRIPTION



## MODULE TYPE

Code	1	2	3
Model	SD1-A	SD1-B-V1	SD1-C



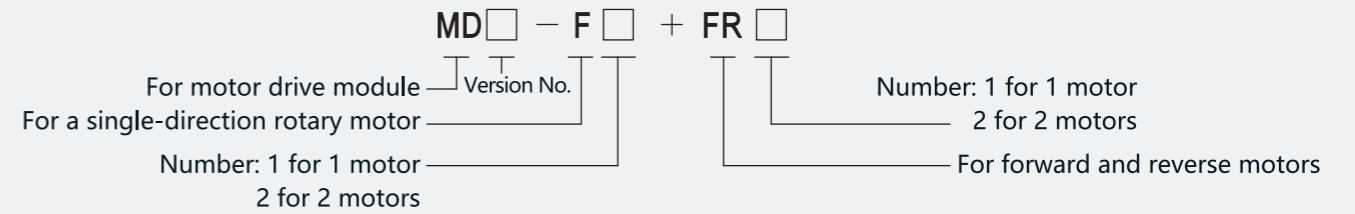
## INDICATOR LIGHT DESCRIPTION

Three-phase AC Indicator: The indicator lights up when there is power in the three-phase electric power. AL1, AL2, AL3: When the fuse is working normally, the three indicator lights do not light up, if a light is lit, it indicates that the indicator corresponding to the fuse is faulty, it is necessary to cut off the three-phase power supply, after ruling out the failure point and replacing the fuse, before powering up.

## PRECAUTIONS

- 1. It is prohibited that customers replace the fuse not provided by our company without permission to prevent the circuit board line from burning out;
- 2. When the fuse is fault, please solve the cause of the short circuit before replacing it;
- 3. Circuit breaker specifications can be replaced, please contact us if you need other specifications of circuit breakers;
- 4. The precision of circuit breakers with oil damping is higher than that of traditional circuit breakers. When choosing specifications, full consideration should be given to the starting current and other circumstances to prevent tripping when in use.

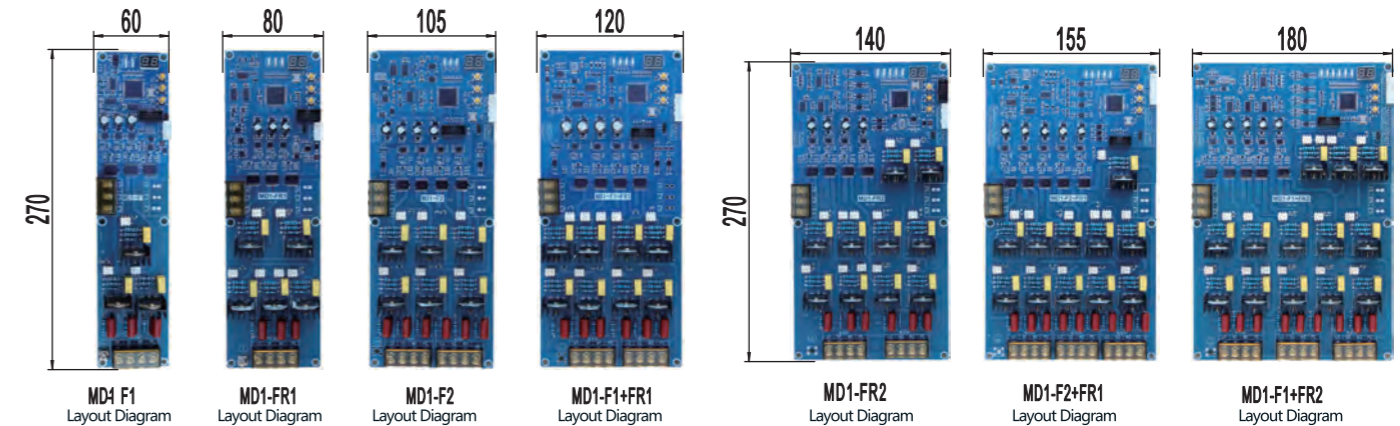
## MOTOR DRIVE MODULE DESCRIPTION



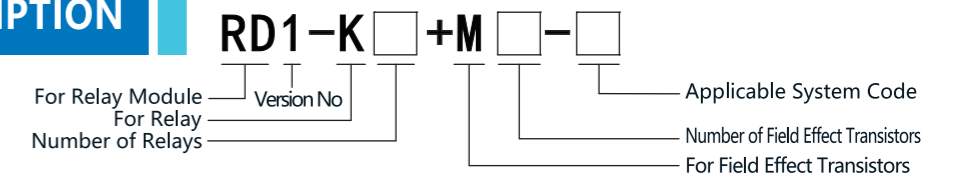
## MODULE TYPE

Code	A	B	C	D	E	F	G	S*
Model	MD□-F1	MD□-FR1	MD□-F2	MD□-F1+FR1	MD□-FR2	MD□-F2+FR1	MD□-F1+FR2	MD□-F4+FR2

If a motor drive module can not meet the requirements, the above modules can be used in combination, motor drive module Codes can be added for selection, such as A + F. S is a double-layer plate to reduce the mounting area and can drive 4 single-direction rotary motors and 2 forward and reverse motors.



## RELAY MODULE DESCRIPTION



Code	1	2	3	4
Model	RD1-K5+M8	RD1-K16+M15+BY2	RD1-K14-TY	RD1-K19
Remark	1 plug contains 24 inputs, 16 outputs. 1 on/off lower relay	2 plugs contain 48 inputs, 32 outputs. 1 on/off relay, 2 spare relays	2 plugs contain 48 inputs, 32 outputs. 1 on/off relay.	2 plugs contain 48 inputs, 32 outputs. 1 on/off relay.



RD1-K5+M8



RD1-K5+M8-XD



RD1-K14-M80



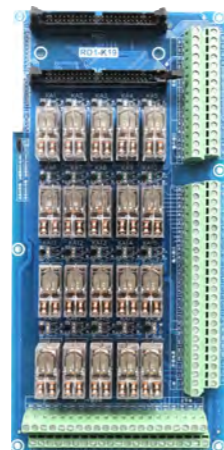
RD1-K14-TY



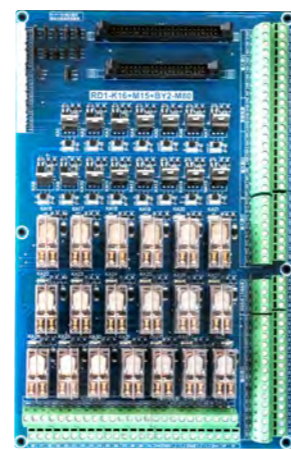
RD3-K3+M10



RD1-K16+M15+BY2



RD1-K19



RD1-K16+M15+BY2-M80

## PRECAUTIONS

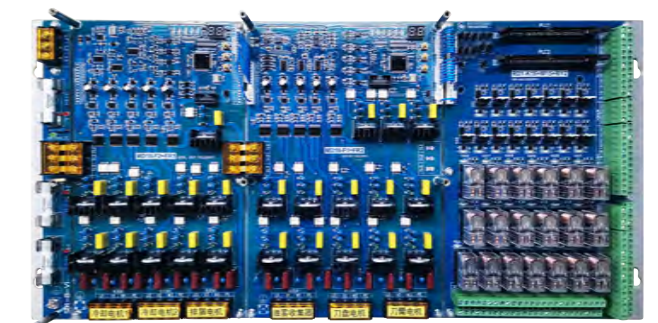
- ◆ 1. The effective value of the control signal of the relay module can be selected by using the mini jumper, when the output is effective at high level, the COM terminal and OV are shorted. When the output is effective at low level, COM terminal and 24V are shorted; and the corresponding mini jumper on the motor drive module should be set synchronously;
- ◆ 2. FET driver only outputs DC +24V, maximum current 2.3A, not for controlling AC loads or high voltage loads;
- ◆ 3. The start and overload signals of the three-phase asynchronous motor controlled by the smart panel will occupy the input and output points of the system.
- ◆ 4. The default IO plug of the relay module is 50-pole right-angle plug, if you need other forms of plugs, you can contact us to replace the relay module or increase the corresponding adapter module;
- ◆ 5. Circuit breaker module and relay module with special requirements can be customized design.

Due to the limited space, can not describe the specific use of each module in detail, for more detailed content, please contact us, our company will send specific instructions according to demand.

## MODELING EXAMPLES

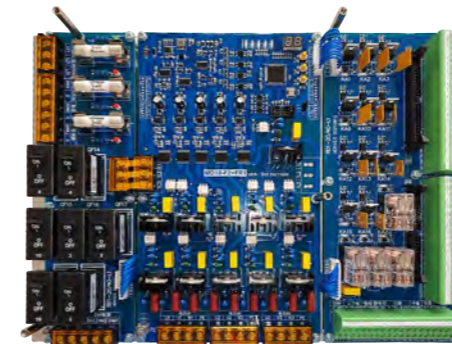


Model: ZNDP-1-G-3



Model: ZNDP-2-F+G-2

## CUSTOMIZED DESIGN EXAMPLES



Model: ZNDP-2040-L1  
System: Fanuc



Model: ZNDP-BY-V2  
System: Huazhong or KND



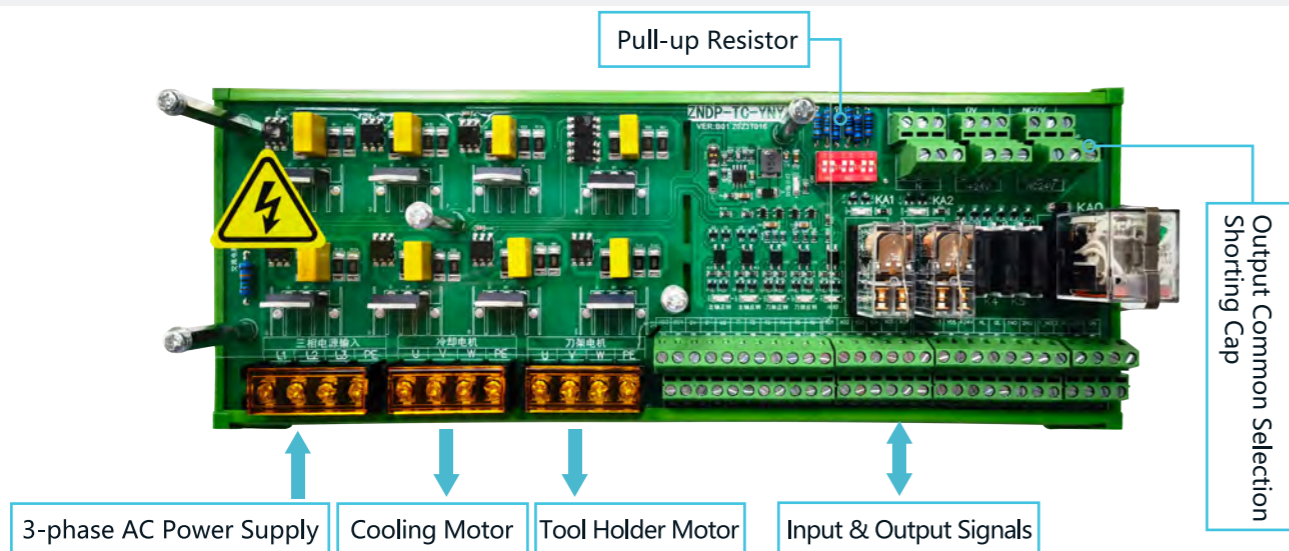
Model: ZNDP-XAJL-V2  
System: Fanuc or Syntec



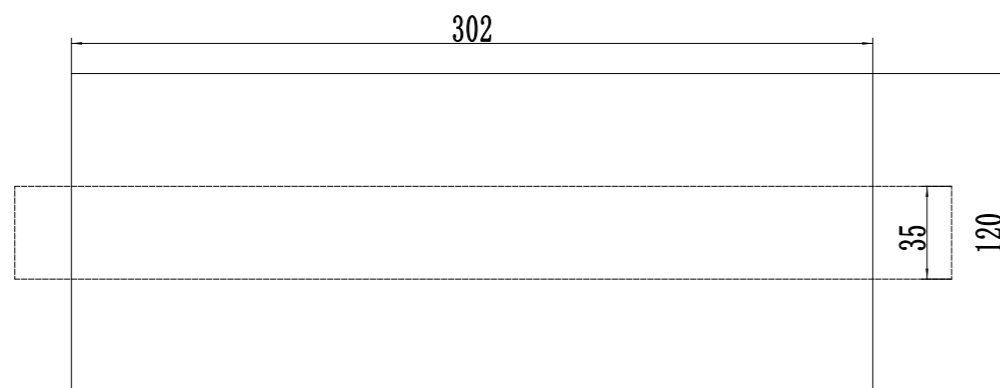
Model: ZNDP-MF85QSa  
System: Fanuc or Huazhong

## ECONOMIC ZNDP-TC-YNJ FEATURES IN BRIEF

- ◆ 1、Highly integrated and reliable;
- ◆ 2、Control signal high and low level common;



- Pull-up resistor description** The tool position signal is connected to a 2K 1/2W pull-up resistor inside the board, and the tool position signal is active low.
- Short Circuit Cap Description** When the short circuit cap is shorted to COM and 0V, the output signal +24V is valid. When the short circuit cap is shorted to COM and +24V, the output signal 0V is valid.
- Installation Dimensions Description** The mounting of the Switchboard is 35mm U-type snap rail with the size of 302\*120mm.



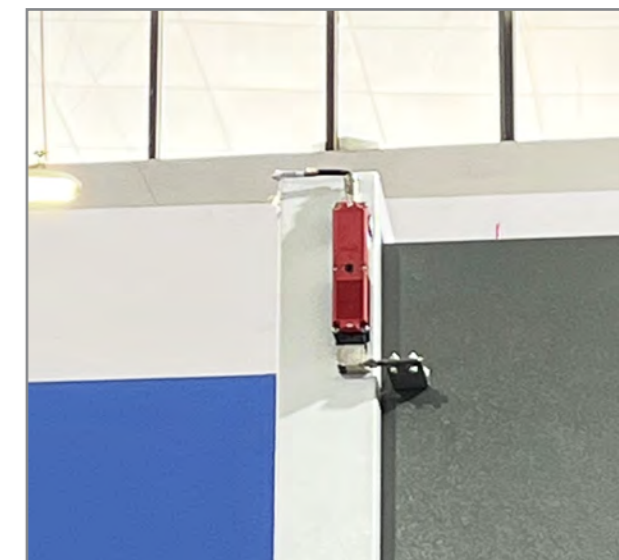
## PRODUCT OVERVIEW

Safety door switches are used to detect the opening and closing status of doors, and are used in equipment, assembly lines, and specific job A device that meets specific safety requirements for the premises and is a standard accessory in CNC machine tools.



## FEATURES IN BRIEF

- ◆ 1. Dual choice of metal head and plastic or metal housing to ensure overall strength and improve reliability
- ◆ 2. Cable outlet direction adjustable, metal head allows four directions of adjustment, providing five kinds of plug options
- ◆ 3. Provide manual unlocking and allow manual unlocking in case of emergencies
- ◆ 4. Quick and easy installation, high flexibility and compatibility
- ◆ 5. Hazards and risks to personnel can be reduced



## FEATURE DESCRIPTION

- ◆ Metal switch head for 4-way adjustment
- ◆ Five plug types optional
- ◆ With manual unlocking mechanism
- ◆ Outlet method in 3 directions optional

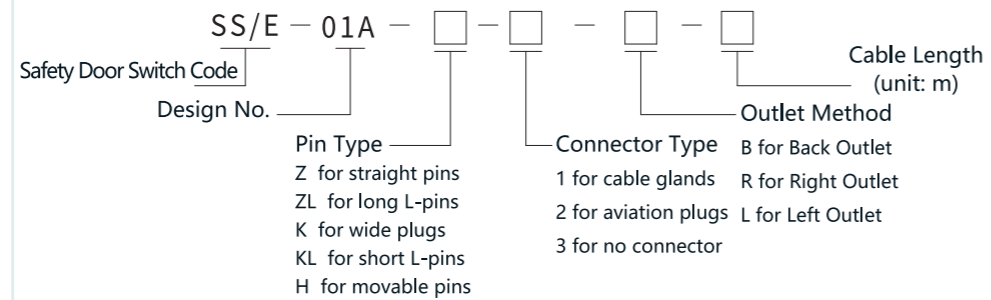


## LOCKING METHOD



Energized Unlocking

## MODEL DESCRIPTION



## DYNAMIC ACTION AND CIRCUIT DIAGRAM

	State 1	State 2	State 3	State 4	Manual unlock state
Action State	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment running</li> <li>• Coil power off</li> </ul>	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment stops</li> <li>• Coil power on</li> </ul>	<ul style="list-style-type: none"> <li>• Door Opened</li> <li>• Equipment stops</li> <li>• Coil power off after 2S delay</li> </ul>	<ul style="list-style-type: none"> <li>• Door Opened</li> <li>• Equipment stops</li> <li>• Coil power off</li> </ul>	<ul style="list-style-type: none"> <li>• Equipment stops</li> <li>• Coil power off</li> </ul>
Safety door status diagram					
Contact Status Diagram					

## CONTACT CAPACITY

Rated Voltage		30V	250V
Rated Current	AC		
	Resistive load(AC-12)	—	4A
	Inductive load(AC-15)	—	2A
DC	Resistive load(DC-12)	2A	0.8A
	Inductive loads(DC-13)	1A	0.4A

## SOLENOID COIL

Rated voltage	DC24V	+10%	-15%
Rated current	0.4A		
Insulation class	Level B		

## PERFORMANCE SPECIFICATIONS

Production standard	T/SDMTGM0007-2020
Operating environment	Better than pollution level 3
Ambient temperature	-5~40°C
Relative humidity	45~80%
Protection class	IP67 (without induction port)
Mechanical service life	Not less than 1 million times
Electrical service life	Not less than 100,000 cycles(AC-12 250V 4A)
	Not less than 1 million times(24V AC/DC 100mA)
Tensile strength	2000N

## PLUG

Coding	Z	ZL	K	KL	H
Name	Straight pin	Long L-pin	Wide Pin	Short L-pin	Movable pin
Sizes					
Contour					

## OUTLET CONNECTOR TYPE

Connector Type	Photo	Connector Type	Wiring Diagram
1. Cable waterproof connector		Internal Terminals	
2. Aviation plug			
3. No connector			

## FEATURE DESCRIPTION

- ◆ Metal switch head for 4-way adjustment
- ◆ Five plug types optional
- ◆ With manual unlocking mechanism
- ◆ Increase the number of contact groups to 4 groups
- ◆ Outlet method in 3 directions optional

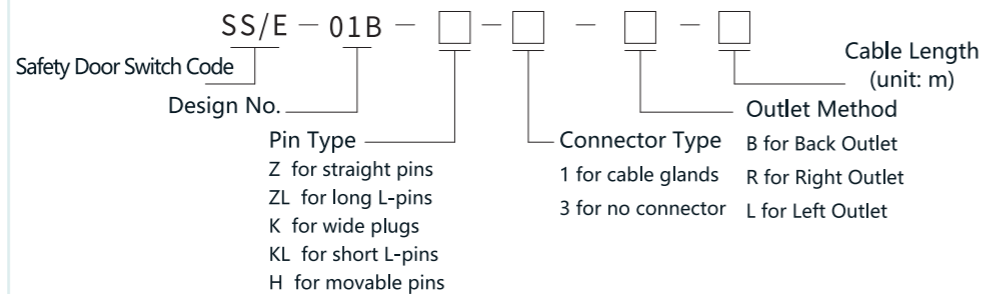


## LOCKING METHOD



Energized Unlocking

## MODEL DESCRIPTION



## DYNAMIC ACTION AND CIRCUIT DIAGRAM

	State 1	State 2	State 3	State 4	Manual unlock state
Action State	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment running</li> <li>• Coil power off</li> </ul>	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment can't start</li> <li>• Coil power on</li> </ul>	<ul style="list-style-type: none"> <li>• Door Opened</li> <li>• Equipment can't start</li> <li>• Coil power off after 2S delay</li> </ul>	<ul style="list-style-type: none"> <li>• Door Opened</li> <li>• Equipment can't start</li> <li>• Coil power off</li> </ul>	<ul style="list-style-type: none"> <li>• Equipment stops</li> <li>• Coil power off</li> </ul>
Safety door status diagram					
Wiring diagram					

## CONTACT CAPACITY

Rated Voltage	24V	230V	
Rated Current	Inductive load (AC-15)	4A	—
	Inductive loads (DC-13)	—	4A

## SOLENOID COIL

Rated voltage	DC24V	+10%	-15%
Rated current	0.31A		
Insulation class	Level B		

## PERFORMANCE SPECIFICATIONS

Production standard	T/SDMTGM0007-2020
Operating environment	Better than pollution level 3
Ambient temperature	-5~40°C
Relative humidity	45~80%
Protection class	IP67 (without induction port)
Mechanical service life	Not less than 1 million times
Electrical service life	Not less than 100,000 cycles(AC-12 250V 4A)
	Not less than 1 million times(24V AC/DC 100mA)
Tensile strength	2500N

## PLUG

Coding	Z	ZL	K	KL	H
Name	Straight pin	Long L-pin	Wide Pin	Short L-pin	Movable pin
Sizes					
Contour					

## OUTLET CONNECTOR TYPE

Connector Type	Photo	Connector Type	Wiring Diagram
		Internal Terminals	
1. Cable waterproof connector			
3. No connector			

## FEATURE DESCRIPTION

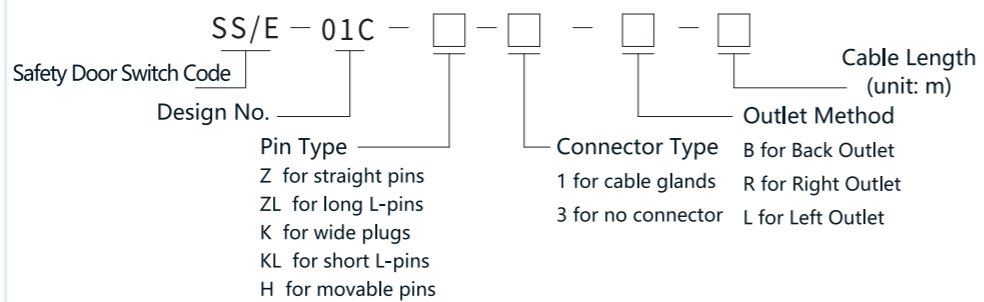
- ◆ Metal switch head for 4-way adjustment
- ◆ Five plug types optional
- ◆ With manual unlocking mechanism
- ◆ Increase the number of contact groups to 4 groups
- ◆ Outlet method in 3 directions optional



## LOCKING METHOD MODEL DESCRIPTION



Energized Locking



## DYNAMIC ACTION AND CIRCUIT DIAGRAM

Action State	State 1	State 2	State 3	Manual unlock state
	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment running</li> <li>• Coil power on</li> </ul>	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment can't start</li> <li>• Coil power off</li> </ul>	<ul style="list-style-type: none"> <li>• Door Opened</li> <li>• Equipment can't start</li> <li>• Coil power off</li> </ul>	
Safety door status diagram				
Wiring diagram				

## CONTACT CAPACITY

Rated Voltage	24V	230V	
Rated Current	Inductive load (AC-15)	4A	—
	Inductive loads (DC-13)	—	4A

## SOLENOID COIL

Rated voltage	DC24V	+10%	-15%
Rated current	0.31A		
Insulation class	Level B		

## PERFORMANCE SPECIFICATIONS

Production standard	T/SDMTGM0007-2020
Operating environment	Better than pollution level 3
Ambient temperature	-5~45°C
Relative humidity	45~80%
Protection class	IP67 (without induction port)
Mechanical service life	Not less than 1 million times
Electrical service life	Not less than 100,000 cycles(AC-12 250V 4A)
	Not less than 1 million times(24V AC/DC 100mA)
Tensile strength	2500N

## PLUG

Coding	Z	ZL	K	KL	H
Name	Straight pin	Long L-pin	Wide Pin	Short L-pin	Movable pin
Sizes					
Contour					

## OUTLET CONNECTOR TYPE

Connector Type	Photo	Connector Type	
		Internal Terminals	Wiring Diagram
1. Cable waterproof connector			
3. No connector			

## FEATURE DESCRIPTION

- ◆ Square shape structure
- ◆ Metal switch head for 4-way adjustment
- ◆ Spring force for unlocking by solenoid coil excitation
- ◆ Assisted unlocking mechanism as standard
- ◆ Independent circuits of indicator lights can respond to a variety of uses

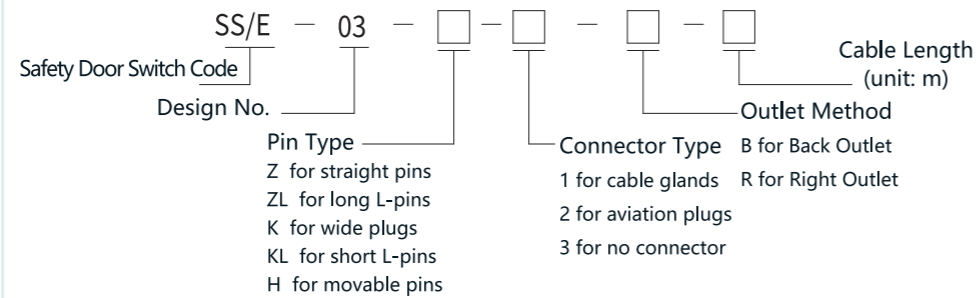


## LOCKING METHOD



Energized Unlocking

## MODEL DESCRIPTION



## DYNAMIC ACTION AND CIRCUIT DIAGRAM

Action State	State 1	State 2	State 3	State 4	Manual unlock state
	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment started</li> <li>• Coil power off</li> </ul>	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment can't start</li> <li>• Coil power on</li> </ul>	<ul style="list-style-type: none"> <li>• Door Opened</li> <li>• Equipment can't start</li> <li>• Coil power off after 2S delay</li> </ul>	<ul style="list-style-type: none"> <li>• Door Opened</li> <li>• Equipment can't start</li> <li>• Coil power off</li> </ul>	<ul style="list-style-type: none"> <li>• Equipment stops</li> <li>• Coil power off</li> </ul>
Safety door status diagram					
Wiring diagram					

## CONTACT CAPACITY

Rated Voltage		30V	250V	
Rated Current	AC	Resistive load(AC-12)	—	4A
		Inductive load(AC-15)	—	2A
DC		Resistive load(DC-12)	2A	0.8A
		Inductive loads(DC-13)	1A	0.4A

## SOLENOID COIL

Rated voltage	DC24V	+10%	-15%
Rated current	0.4A		
Insulation class	Level B		

## PERFORMANCE SPECIFICATIONS

Production standard	T/SDMTGM0007-2020
Operating environment	Better than pollution level 3
Ambient temperature	-5~40°C
Relative humidity	45~80%
Protection class	IP67 (without induction port)
Mechanical service life	Not less than 1 million times
Electrical service life	Not less than 100,000 cycles(AC-12 250V 4A)
	Not less than 1 million times(24V AC/DC 100mA)
Tensile strength	2700N

## PLUG

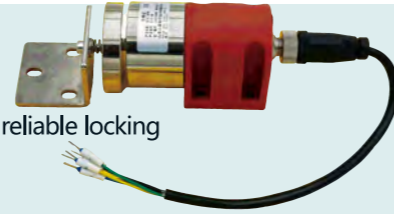
Coding	Z	ZL	K	KL	H
Name	Straight pin	Long L-pin	Wide Pin	Short L-pin	Movable pin
Sizes					
Contour					

## OUTLET CONNECTOR TYPE

Connector Type	Photo	Connector Type Internal Terminals	Wiring Diagram
1. Cable waterproof connector			
2. Aviation plug			
3. No connector			

## FEATURE DESCRIPTION

- ◆ Attractive force of suction cup electromagnet is used as locking force
- ◆ Detecting the opening and closing of Safety doors by switching signals
- ◆ The suction plate is equipped with a position compensation function to ensure reliable locking
- ◆ The base is available in plastic or metal
- ◆ Clamping force of 600N

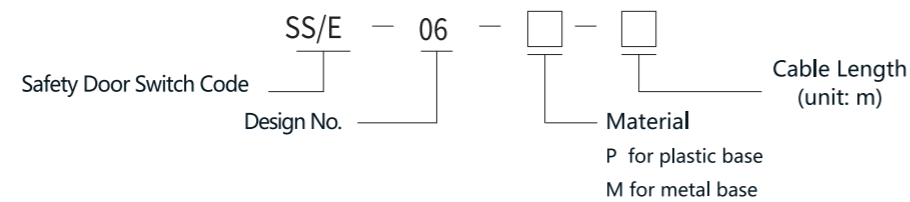


## LOCKING METHOD



**Power Failure Unlock:** When the safety door switch is de-energized, the safety door switch unlocks and the machine or Equipment stops running.

## MODEL DESCRIPTION



## CONTACT CAPACITY

Rated voltage	DC24V <sup>+10%</sup> / <sub>-15%</sub>
Rated current	2mA

## CONTACT CAPACITY

Production standard	T/SDMTGM0007-2020
Operating environment	Better than pollution level 3
Ambient temperature	-5~40°C
Relative humidity	45~80%
Protection class	IP50
Mechanical service life	Not less than 1 million times
Electrical service life	Not less than 100,000 cycles(AC-12 250V 4A) Not less than 1 million times(24V AC/DC 100mA)
Tensile strength	600N

## SOLENOID COIL

Rated voltage	DC24V <sup>+10%</sup> / <sub>-15%</sub>
Rated current	0.25A
Insulation class	Level B

## OUTLET CONNECTOR TYPE

Connector Type	Photo	Connector Type	Wiring form
1.Cable waterproof connector			<p>5 pole connector terminal number</p>

## FUNCTIONAL DESCRIPTION

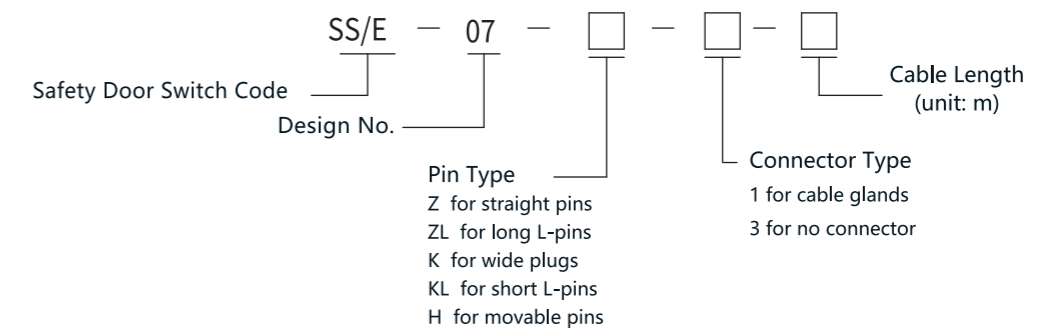
There is no locking function for the Safety door, and the contact switch signal is used to detect whether the Safety door is closed or not, to determine whether the equipment can be opened.



## CHARACTERISTICS

- ◆ Small body for narrow installation space.
- ◆ Metal switch head for 4-direction adjustment.
- ◆ Built-in 3 sets of contacts, can complete a variety of wiring methods.
- ◆ The standardized contacts ensure high reliability of contact.

## MODEL DESCRIPTION



## DYNAMIC ACTION AND CIRCUIT DIAGRAM

	State 1	State 2
Action State	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment running</li> </ul>	<ul style="list-style-type: none"> <li>• Door Closed</li> <li>• Equipment stops</li> </ul>
Safety door status diagram		
Wiring diagram		

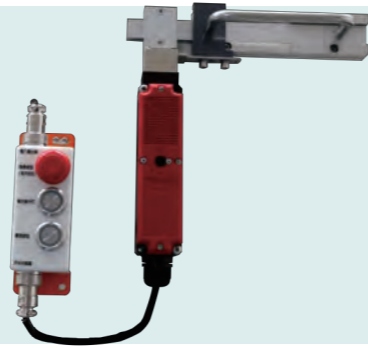
## 성능설명

Production standard	T/SDMTGM0007-2020
Operating environment	Better than pollution level 3
Ambient temperature	-5~40°C
Relative humidity	45~80%
Protection class	IP67 (without induction port)
Mechanical service life	Not less than 1 million times
Electrical service life	Not less than 100,000 cycles(AC-12 250V 4A) Not less than 1 million times(24V AC/DC 100mA)
Tensile strength	None



## FUNCTIONAL DESCRIPTION

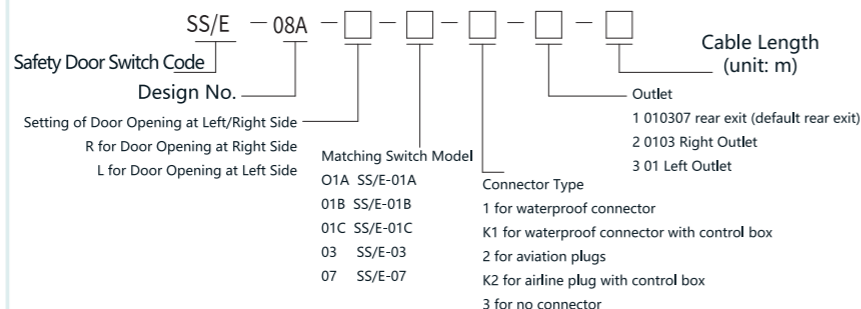
This safety door switch protects people and equipment. It can be used on its own (door lock function only) or in conjunction with a wide range of safety door switches, making it easy to realize the optimal solution for different scenarios. When the door opens, the mechanism and the safety door switch synchronize their movements to issue a stop command, reducing the risk factor. The risk factor determines the level of the safety control factor, and different matching safety door switches are selected according to the different levels.



## CHARACTERISTICS

- ◆ Aluminum alloy frame with high overall strength and reliability;
- ◆ The screw connection method is easy to assemble and is more lenient to the installation conditions;
- ◆ Outstanding color matching, highly recognizable in the installation environment;
- ◆ There are two directions of left and right opening, choose as needed;
- ◆ Matching control box independent control function module.

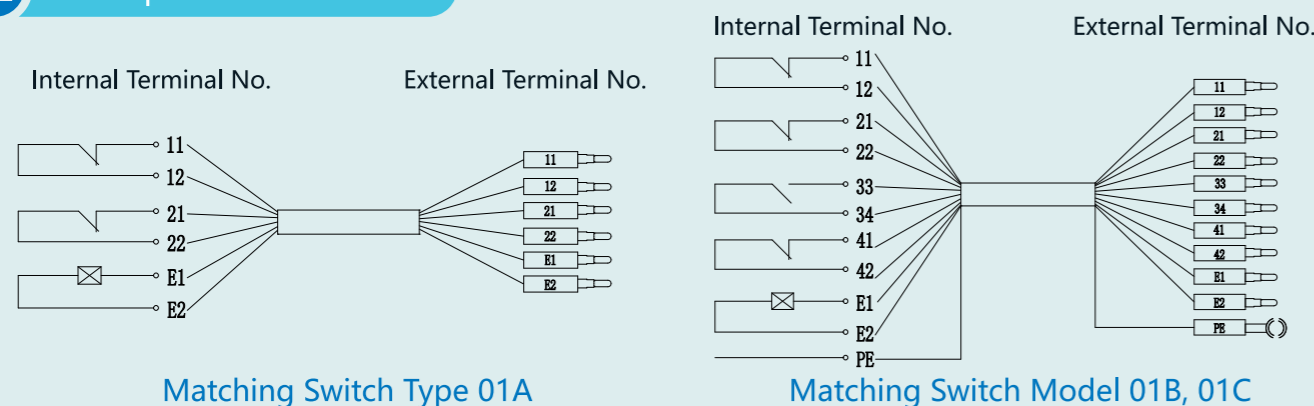
## MODEL DESCRIPTION



Note: The definition of left/right opening is only for SS/E-03, other matching safety door switch models can be used for left/right opening, and this definition cannot be selected when selecting the model.

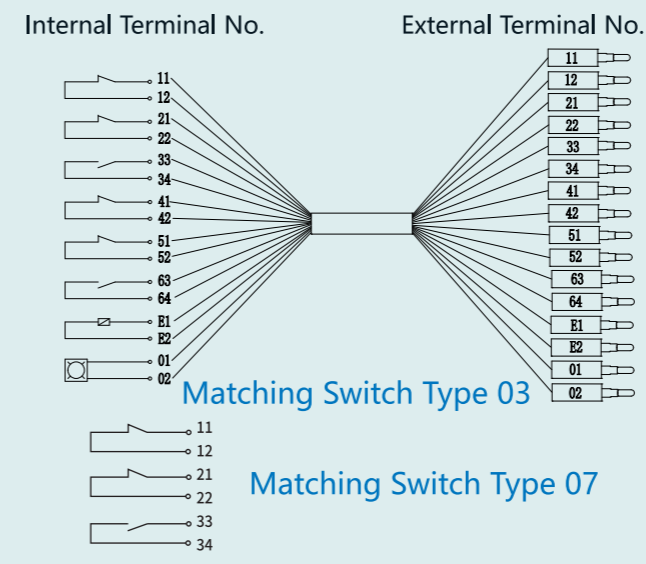
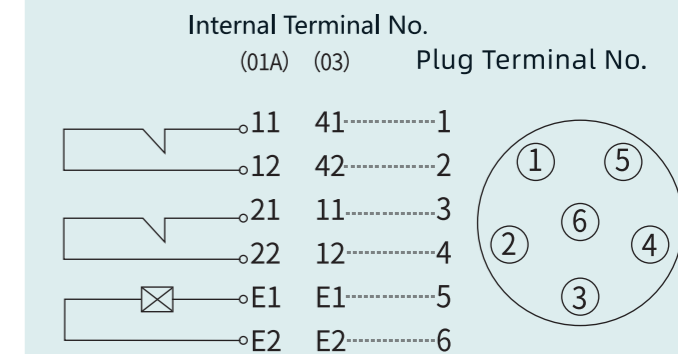
## OPTIONAL CONTROL BOX WIRING DIAGRAM

### 01 Waterproof Connector



### 02 Aviation Plug

Matching Switch Type 01A, 03



## CONTACT CAPACITY

Rated Voltage		30V	250V
Rated Current	AC	Resistive load(AC-12)	4A
		Inductive load(AC-15)	2A
	DC	Resistive load(DC-12)	0.8A
		Inductive loads(DC-13)	0.4A

## SOLENOID COIL

Rated voltage	DC24V <sup>+10%</sup> / <sub>-15%</sub>
Rated current	0.25A
Insulation class	Level B

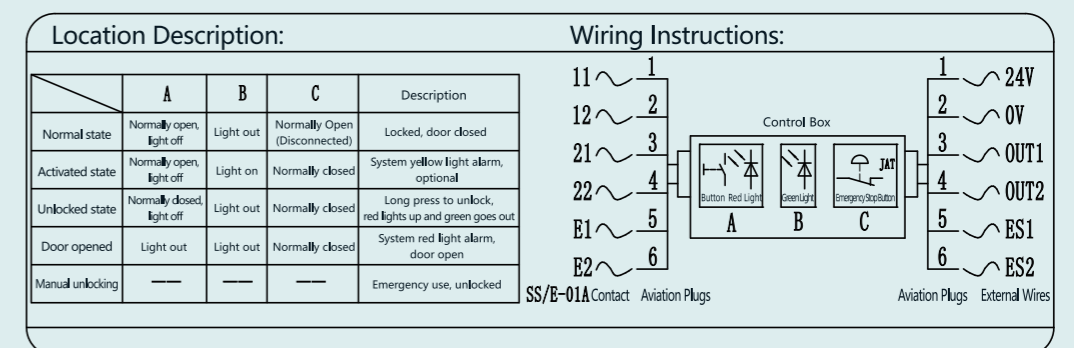
## PERFORMANCE SPECIFICATIONS

Production standard	Safety door switches*
Operating environment	Better than pollution level 3
Ambient temperature	-5~40°C
Relative humidity	45~80%
Protection class	IP67 (without induction port)
Mechanical service life	Not less than 1 million times
Electrical service life	Not less than 100,000 cycles(AC-12 250V 4A)
	Not less than 1 million times(24V AC/DC 100mA)
Tensile strength	SS/E-01A: 2000N SS/E-01B: 2500N SS/E-01C: 2500N SS/E-03: 2700N

Note: \* It indicates that the standard is a group standard, standard number: T/SDMTGM0007-2020.

## INDIVIDUAL CONTROL BOX DESCRIPTION

SS/E-01A  
Example  
Description



### PRODUCT OVERVIEW

Manual pulse generator (hereinafter referred to as MPG) for CNC machine tools in the origin setting, manual stepping fine-tuning, processing interruptions and insertion, etc., the product is divided into: SE, SM, SF four major series, can be widely used in CNC machine tools, printing machinery, automation systems and so on.

### FEATURES IN BRIEF

- ◆ Humanized design, more comfortable handfeeling and more beautiful appearance;
- ◆ High-performance core encoder, non-contact optical detecting structure, accuracy unchanged after millions of times of use;
- ◆ Built-in strong magnet, base type hanging box, more convenient and firm to place;
- ◆ High-quality standard spring cable, guaranteed 200,000 times stretching;
- ◆ Optional emergency stop, enable, add manual and quick buttons;
- ◆ Wireless portable MPG adopts 433M wireless transmission technology, encrypted transmission and anti-interference;
- ◆ Shielded design, anti-electromagnetic interference;
- ◆ Adopts anti-interference, wear-resistant, oil-resistant and drop-resistant design;
- ◆ Can be customized according to customers' requirements.



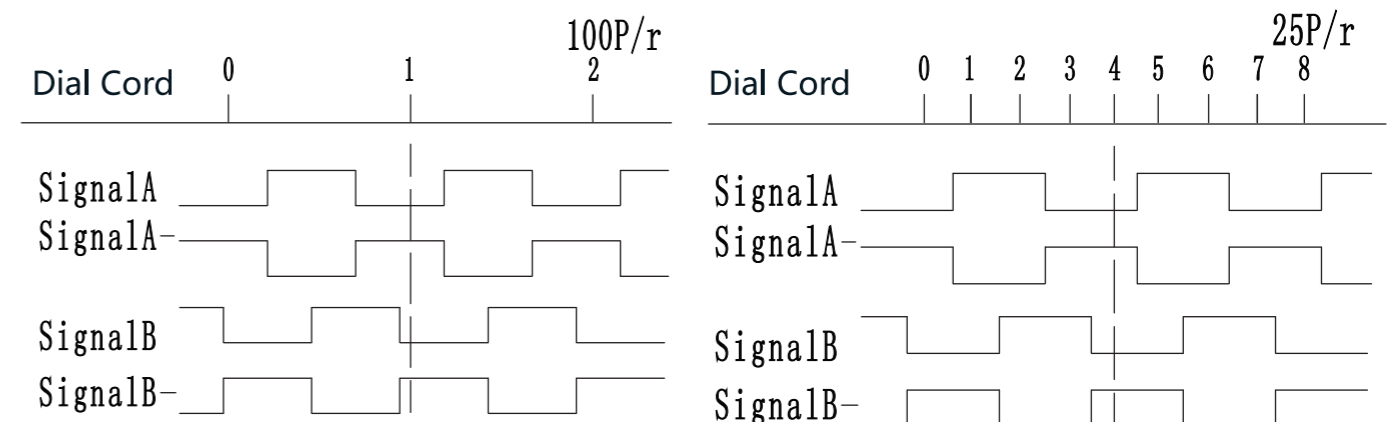
### MODEL SELECTION INSTRUCTIONS

Series Code	Selection of Axes	Operating Voltage	Output Pulse	Switching Mode	Cable Length	Connectors	Emergency Stop Switch	Enable Switch
SE	2:OFF.X.Z	1:5V voltage output	25P/r	D: Corresponding type	0: No cable	P: Straight Connector	E: ne-way emergency stop	S: Enable switch
SS	3:OFF.X.Y.Z	2:5V differential output	100P/r	B: Coding type (Total 24V)	3: 3M	P1: 90° Connector	E2: Two-way emergency stop	No labeling & none
SM	4:OFF.X.Y.Z.4	3:12V voltage output		B0: Coding type (Total 0V)	5: 5M(default)	Empty: NO Connector	No labeling & none	
SF	5:OFF.X.Y.Z.4.5	4:24V voltage output			10: 10M	P/XXM: Socket solder wire		
	6:OFF.X.Y.Z.4.5.6							
	7:X.Y.Z.4.5.6.7							

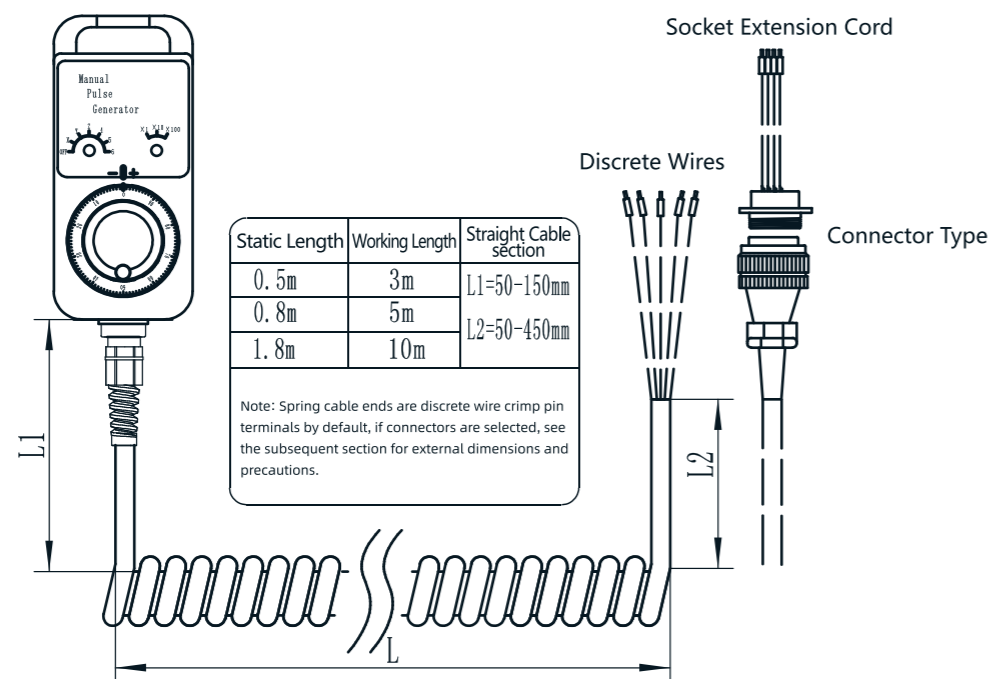
### EXAMPLES OF MECHANICAL & ELECTRICAL CHARACTERISTICS

Model No.	SE-31-100-D	SS-42-100-B	SM-54-100-B0	SF-43-25-D
Applicable systems	Fanuc/domestic system	Siemens/Fagor	Siemens PLC/PLC	Mitsubishi
Pulse output	100P/r	100P/r	100P/r	25P/r
Scope of supply	DC5V ± 5%	DC5V ± 5%	DC24V ± 5%	DC12V ± 5%
Axis selection	OFF、X、Y、Z	OFF、X、Y、Z、4	OFF、X、Y、Z、4、5	OFF、X、Y、Z、4
Membrane switch	3 bits.	None	None	None
Magnification	3-4 gears	3rd gear	3rd gear	3rd gear
Switching output method	Corresponding type	Coding type (total 24V)	Coding type (total 0V)	Corresponding type
Frequency response	0~20kHz			
Isolation resistor	≥20MΩ			
Operating temperature	-10~+60℃ (without freezing)			
Output form	Voltage output	Differential output	Voltage output	

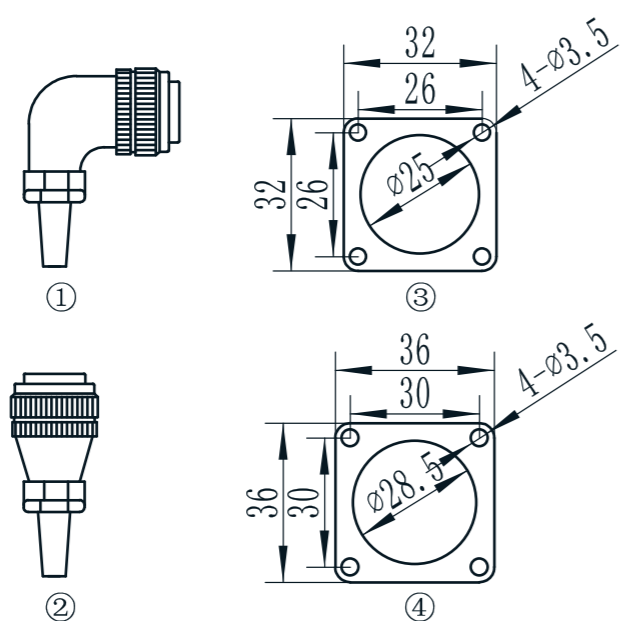
### RELATIONSHIP BETWEEN WAVEFORM OUTPUT VS. SCALE POSITION



### SPRING CABLE SPECIFICATIONS



### CONNECTOR SPECIFICATIONS



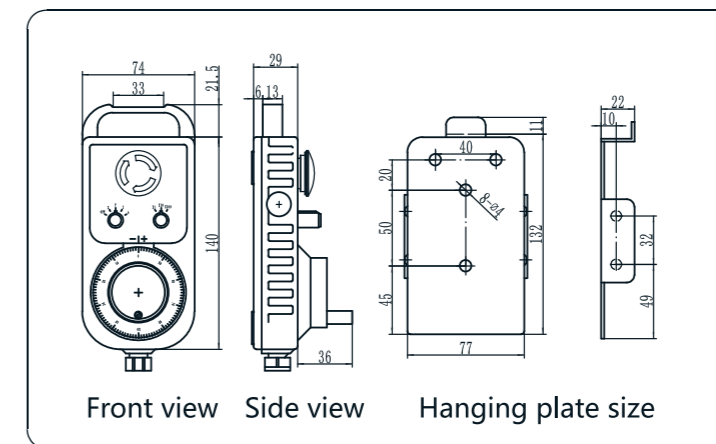
① : 90°Connector    ② : Straight Connector

③ : 19-pole Socket Opening Size    ④ : 20, 24 & 26-pole Socket Opening Size

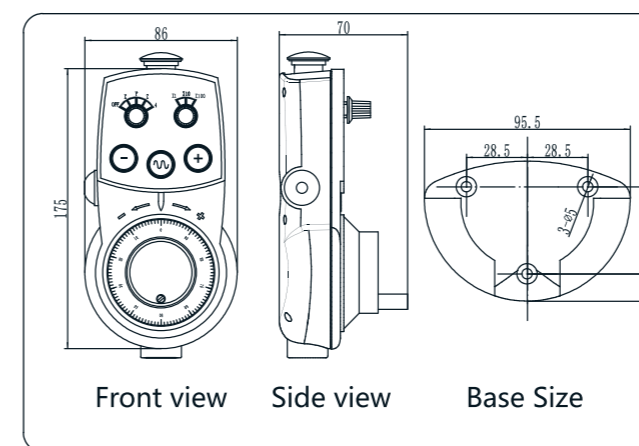
Note: See drawing for special connector dimensions

### DIMENSION APPEARANCES

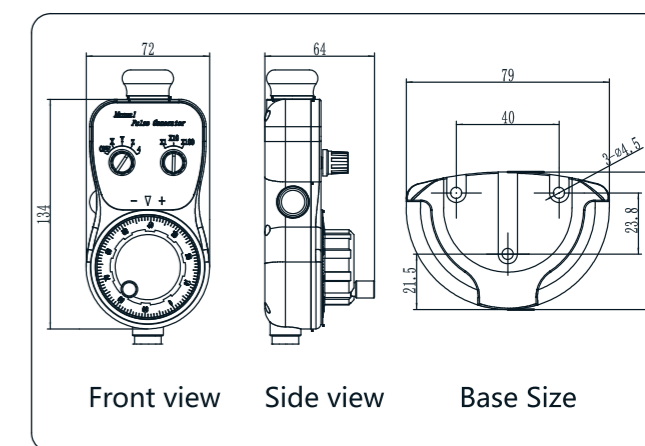
SS Series



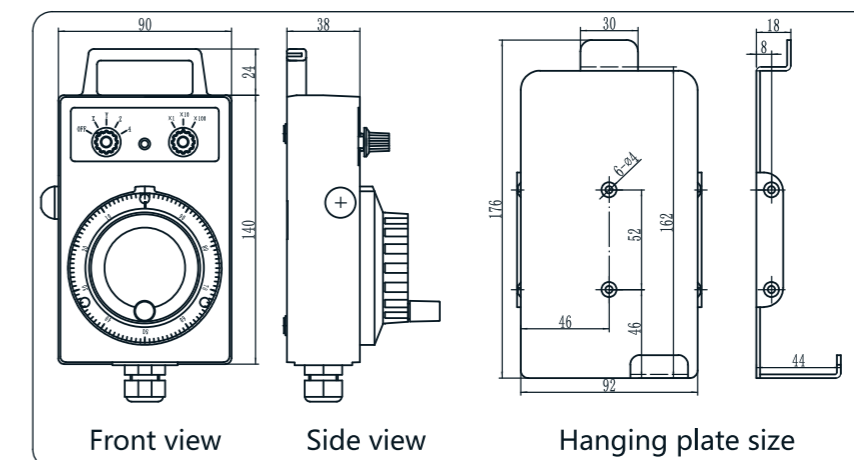
SE Series



SM Series



SS Series



### WIRING DIAGRAM

#### SE Series

S/N	Wire Color	Signal (Corresponding Type)	Signal (Coding Type)	Item
1	Red	+5V	+5V	Manual Pulse Generator
2	Black	0V	0V	
3	Yellow	HA	HA	
4	White	HB	HB	Differential selection
5	Pink	HA-	HA-	
6	Dark green	HB-	HB-	Input common port
7	Purple	COM	COM	
8	Yellow/Black	X1	R1	Magnification
9	Light Blue/Black	X10	R2	
10	Transparent/Black	X100	R4	
11	Brown	X	L1	Axis selection
12	Orange	Y	L2	
13	Pale blue	Z	L4	
14	Deep Blue	4	L8	
15	Transparent	-	-	Manual feeding
16	Pale purple	RAPID	RAPID	
17	Gray	+	+	
18	Red and white	EMG	EMG	Emergency stop
19	Red and black	EMGC	EMGC	
20	Light green	EMG1	EMG1	
21	Red and green	EMG1C	EMG1C	

#### SS/SM Series

S/N	Wire Color	Signal (Corresponding Type)	Signal (Coding Type)	Item
1	Red	+5V	+5V	Manual Pulse Generator
2	Black	0V	0V	
3	Yellow	HA	HA	
4	White	HB	HB	Differential selection
5	Pink	HA-	HA-	
6	Dark green	HB-	HB-	Input common port
7	Transparent	L+	L+	
8	Pale purple	L-	L-	Indicator light
9	Purple	COM	COM	Input common port
10	Yellow/Black	X1	R1	Magnification
11	Light Blue/Black	X10	R2	
12	Transparent/Black	X100	R4	
13	Gray	5		Axis selection
14	Brown	X	L1	
15	Orange	Y	L2	
16	Pale blue	Z	L4	
17	Deep Blue	4	L8	Emergency stop
18	Red and white	EMG	EMG	
19	Red and black	EMGC	EMGC	
20	Light green	EMG1	EMG1	
21	Red and green	EMG1C	EMG1C	

#### SF Series

S/N	Wire Color	Signal (Corresponding Type)	Item
1	Red	+5V	Manual Pulse Generator
2	Black	0V	
3	Yellow	HA	
4	White	HB	Differential selection
5	Pink	HA-	
6	Dark green	HB-	Input common port
7	Transparent	L+	
8	Pale purple	L-	Indicator light
9	Purple	COM	Input common port
10	Yellow/Black	X1	Magnification
11	Light Blue/Black	X10	
12	Transparent/Black	X100	
13	Gray	5	Axis selection
14	Brown	X	
15	Orange	Y	
16	Pale blue	Z	
17	Deep Blue	4	Emergency stop
18			
19			

### CODING TABLE

Item	Gray code		
	L4	L2	L1
Axis selection	OFF	0	0
	X	0	1
	Y	0	1
	Z	0	1
	4	1	0
	5	1	1
	6	1	0
7	1	0	
Magnification	Gray code		
	R4	R2	R1
	X1	0	1
	X10	0	1
X100	0	1	
X1000	1	0	

### Precautions

- 1. The color in the wiring diagram is for reference only, the specific use of color shall prevail.
- 2. The ends of spring cables are in the form of discrete wires with wire numbers and pressed in pin-type terminals by default. When the selection is P, the socket will not weld the wire and will be shipped with the goods. When the selection is P/XXM, the socket will weld XX meters of cable, and the other side of the loose wire will be pressed in 0508 pin-type terminal.
- 3. When the switching method is coding type, the coding method is Gray Code (the common terminal is 24V by default). If the common terminal is 0V or used in Yamamori matrix panel, it needs to be specified.
- 4. Accept customization.

### PRODUCT FEATURES

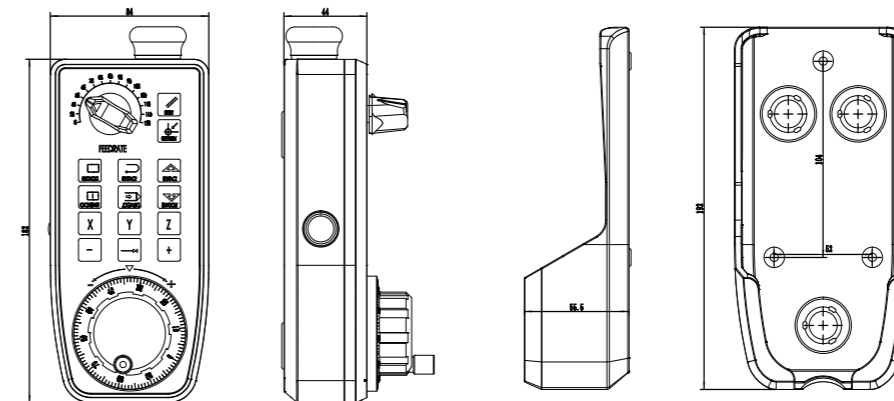
- ◆ The core circuit board is controlled by a single-chip computer with matrix keyboard input;
- ◆ Universal shape design, more comfortable and beautiful hand feeling;
- ◆ High-performance core encoder, non-contact optical check-out structure;
- ◆ Built-in strong magnet, base type hanging box, more convenient and firm to place;
- ◆ High-quality standard spring cable, guaranteed 200,000 times stretching;
- ◆ Optional emergency stop, enable, and diversified key styles;
- ◆ Customized design is available according to customers' requirements.



### APPLICATION AREAS

- ◆ Siemens, Mitsubishi, Fanuc, Guangzhou CNC, Huazhong CNC and other CNC systems
- ◆ Specialized automation equipment, CNC machine tools, printing machines, PLC control systems, etc.

### OUTLINE DRAWING



### WIRING DIAGRAM

#### Aviation Outlet

	Pin No.	Code	Color
Input matrix	1	IN1	White and red
	2	IN2	White and green
	3	IN3	White and blue
	4	IN4	White and black
	5	IN5	White and brown
	6	IN6	White and purple
	7	IN7	Pale blue
	8	IN8	Orange
Output matrix	9	IN9	Gray
	10	01	Yellow and red
	11	02	Yellow and green
	12	03	Yellow and blue
	13	04	Yellow and black
	14	05	Transparent
	15	06	Transparent black
	16	07	Blue and black
Handwheel Signal	17	08	Blue and brown
	18	+5V	Red
	19	0V	Black
	20	HA	White
	21	HA-	Yellow
	22	HB	Green
	23	HB-	Purple
Emergency stop	24	EMG	Brown
	25	EMGC	Blue

### INPUT SIGNAL ADDRESS TABLE OUTPUT SIGNAL ADDRESS TABLE

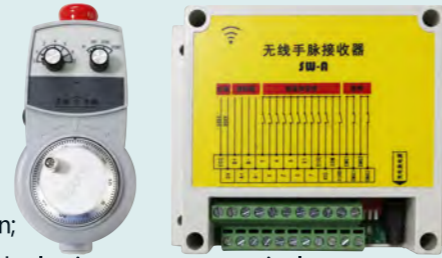
Address Matrix	IN5	IN4	IN3	IN2	IN1
Intermediate Address	M100.4	M100.3	M100.2	M100.1	M100.0
IN6					
Intermediate Address	M101.4	M101.3	M101.2	M101.1	M101.0
IN7					
Intermediate Address	M102.4	M102.3	M102.2	M102.1	M102.0
IN8					
Intermediate Address	M103.4	M103.3	M103.2	M103.1	M103.0
IN9		F0V8	F0V4	F0V2	F0V1

Address Matrix	08	07	06	05
Intermediate Address	M104.3	M104.2	M104.1	M104.0
01				
Intermediate Address	M105.3	M105.2	M105.1	M105.0
02				
Intermediate Address	M106.3	M106.2	M106.1	M106.0
03	X1			
Intermediate Address	M107.3	M107.2	M107.1	M107.0
04		X1000	X100	X10

Note: The wiring diagrams, input/output address lists, and key function definitions are customized for Siemens systems, and the specific wiring diagrams and address lists are based on the customer's system and functional requirements.

### FEATURES IN BRIEF

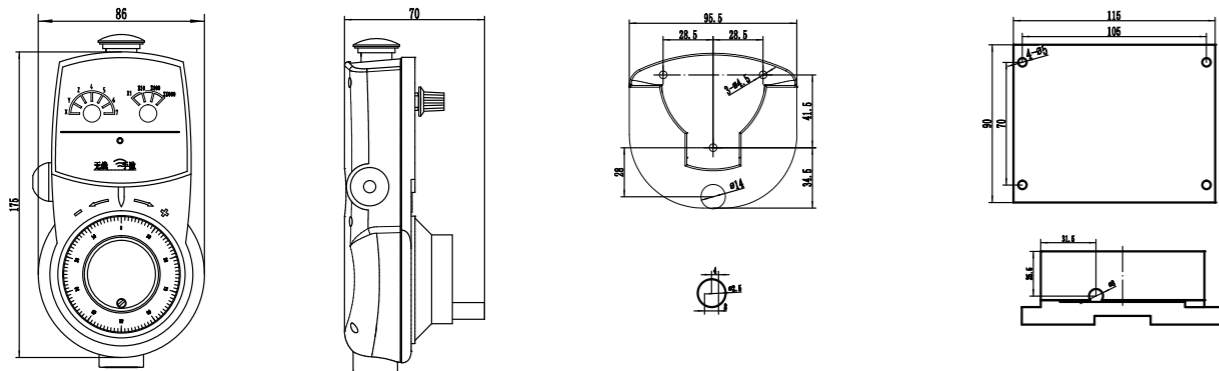
- ◆ Adopting 433M wireless transmission technology, data encrypted transmission, stable and reliable, strong anti-interference;
- ◆ Wireless transmission distance 100 meters (open), stable and reliable;
- ◆ Response speed is fast, complete signal transmission and reception within 1ms;
- ◆ Low voltage alarm function, standby automatically enters the dormant mode;
- ◆ Adopting alloy encoder, stable and reliable performance; good hand feeling and clear tooth position;
- ◆ With emergency stop, enable, axis selection (max. 7 axes) and multiplier function;
- ◆ It has the functions of selecting axis selection and multiplier coding mode and selecting common terminal;
- ◆ 3.7v rechargeable lithium battery, low power consumption design, energy saving and environmental protection, random charging.



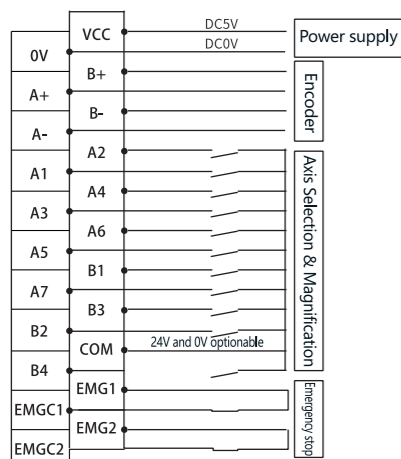
### APPLICATION AREAS

- ◆ CNC lathes, CNC engraving and milling machines, machining centers, large gantry machines, laser cutting machines and other equipment
- ◆ Adapted to Siemens, Mitsubishi, Fanuc, Guangzhou CNC, Huazhong CNC, KND and other systems.

### OUTLINE DRAWING



### WIRING DIAGRAM



### P2P STATUS TABLE

Terminal No.	X	Y	Z	4	5	6	7
A1	●						
A2		●					
A3			●				
A4				●			
A5					●		
A6						●	
A7							●

Terminal No.	X1	X10	X100	X1000
B1	●			
B2		●		
B3			●	
B4				●

### GRAY CODE STATUS TABLE

Terminal No.	X	Y	Z	4	5	6	7
A1	●	●			●	●	
A2		●	●	●	●		
A3			●	●	●	●	●

Terminal No.	X1	X10	X100	X1000
B1	●	●		
B2		●	●	
B3			●	●



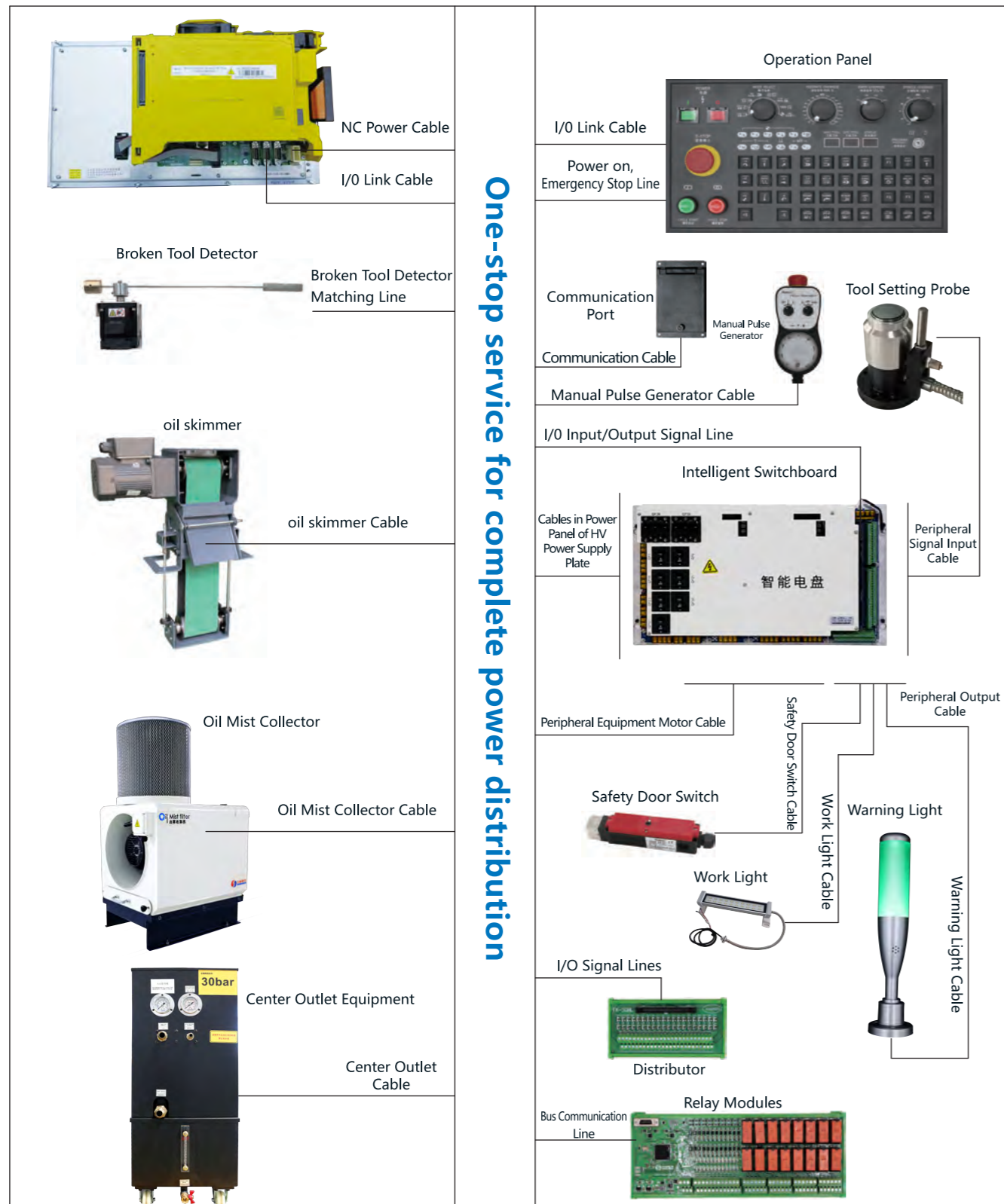
Switchboard Production & Assembly Site

In line with the concept of serving customers, SHANSEN CNC has launched the overall power distribution program, making OEM CNC machine tool distribution cabinets and switchboards, supporting the company's production of machine Operation Panels, safety door switches, hand-held pulse generators, warning lamps, work lights, intelligent electrical panels, relay modules, splitters, broken tool detector, oil mist collector, oil-water separator, center water equipment, complete sets of cables, etc., in order to facilitate the convenience of the customer! One-stop stocking.



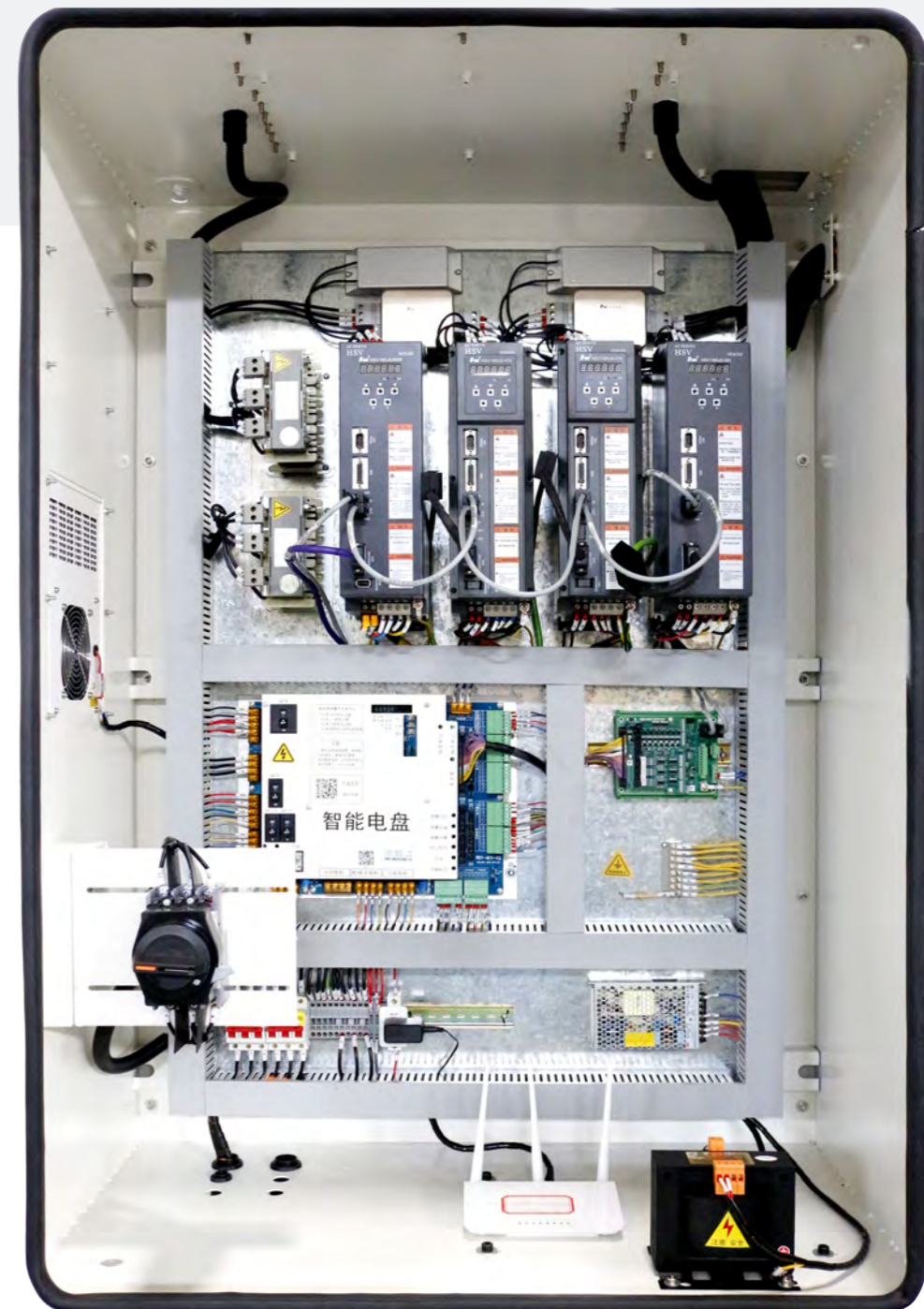
Control Box & Assembly Site

## MULTIPLE PRODUCT MATCHING



## DOMESTIC AND FOREIGN SYSTEMS WITH INTELLIGENT SWITCHBOARD ELECTRICAL CABINET

Highly integrated, separation of strong and weak power, reasonable layout, easy wiring, overall aesthetics; scalability, circuit design considerations and reserved functions, additional functions can save costs when not needed, need to directly add, convenient and quick.



## INTEGRATED SUPPLY OF CONVENTIONAL ELECTRICAL PANELS AND WIRING HARNESES

The company specializes in providing electrical cabinet design and construction, the overall layout is reasonable, wiring operation standards, clear marking, quality, safety and reliability; wiring harness supporting the production, according to the customer's actual need for reasonable selection of materials, wire length flexible control, to meet the customer's site under the circumstances of the use of the environment, and strive to achieve environmental protection, energy saving, cost reduction.



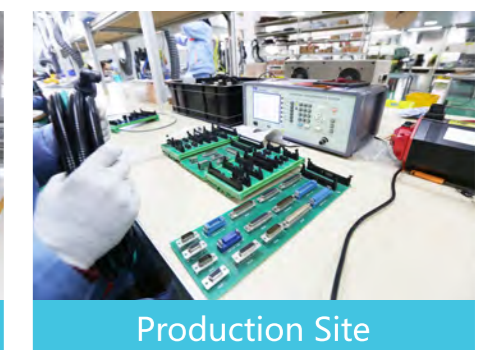
- ◆ 1. Familiar with various domestic and foreign CNC systems, servo drive and other signal interface cable production.
- ◆ 2. According to the wire harness use environment and occasions and other requirements, reasonable selection of wire materials for design and production.
- ◆ 3. System wiring harness and peripheral supporting function wiring harness can be made according to customer requirements.



Production Site



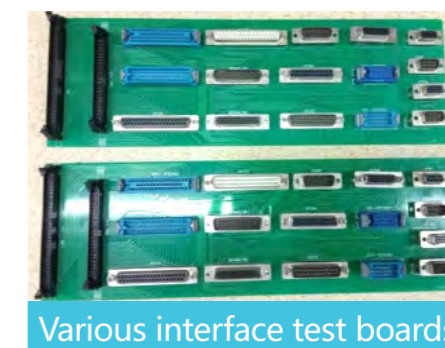
Production Site



Production Site



Equipment Tester



Various interface test boards



Wire Harness Tester



Oil & folding-resistant servo cables



Cables for CNC systems



Cable sets for peripheral equipment

## PRODUCT OVERVIEW

Relay module is the integration and modularization design of several groups of single relays in the electrical control cabinet, which saves the space of the equipment, reduces the intermediate wiring links and improves the production efficiency. Mainly used for signal output port amplification and isolation, suitable for CNC machine tools, automation equipment, electrical control part. Applicable to Fanuc, Mitsubishi, Siemens, GSK, Huazhong CNC, KND, Lynuc and other domestic and foreign CNC systems or industrial control PLC.

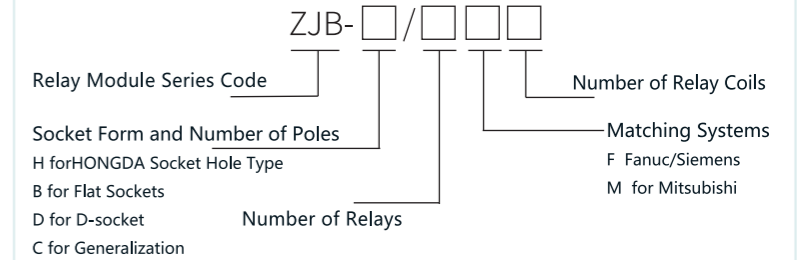
Installation method : 35mm U-rail.

## INSTRUCTIONS FOR USE

### ZJB-50B/16F16

- ◆ Suitable for FANUC/ Siemens etc. system I/O expansion
- ◆ Connecting plug is a 50-pole bullhorn plug and I/O connection
- ◆ 24V power supply connected to the right-side terminal of bullhorn
- ◆ The common terminal of all relay coils is OV
- ◆ KA1-KA16 are 16 NO/NC relays.
- ◆ Relay brand optional (OMRON, TAIKO, WAIZUMI)

## MODEL DESCRIPTION

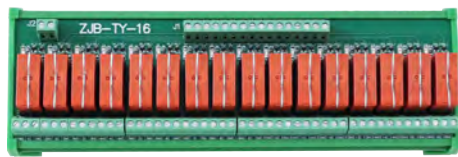


## PRODUCT EXAMPLES

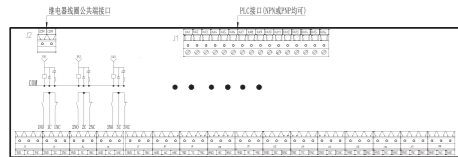
ZJB-50B/16F16	
ZJB-FL50/16	ZJB-50B/10(TE)
ZJB-50B-MOS	ZJB-40B_16(M70_M80)
TB16OUT-6.1	TB16OUT-R8-1.0
	ZJB-16C_16



## GENERAL PURPOSE RELAY MODULES



ZJB-TY-16

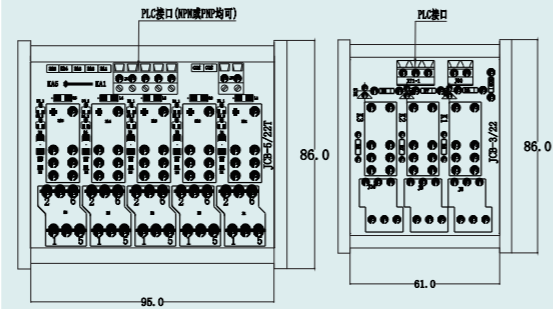


ZJB-16C/16

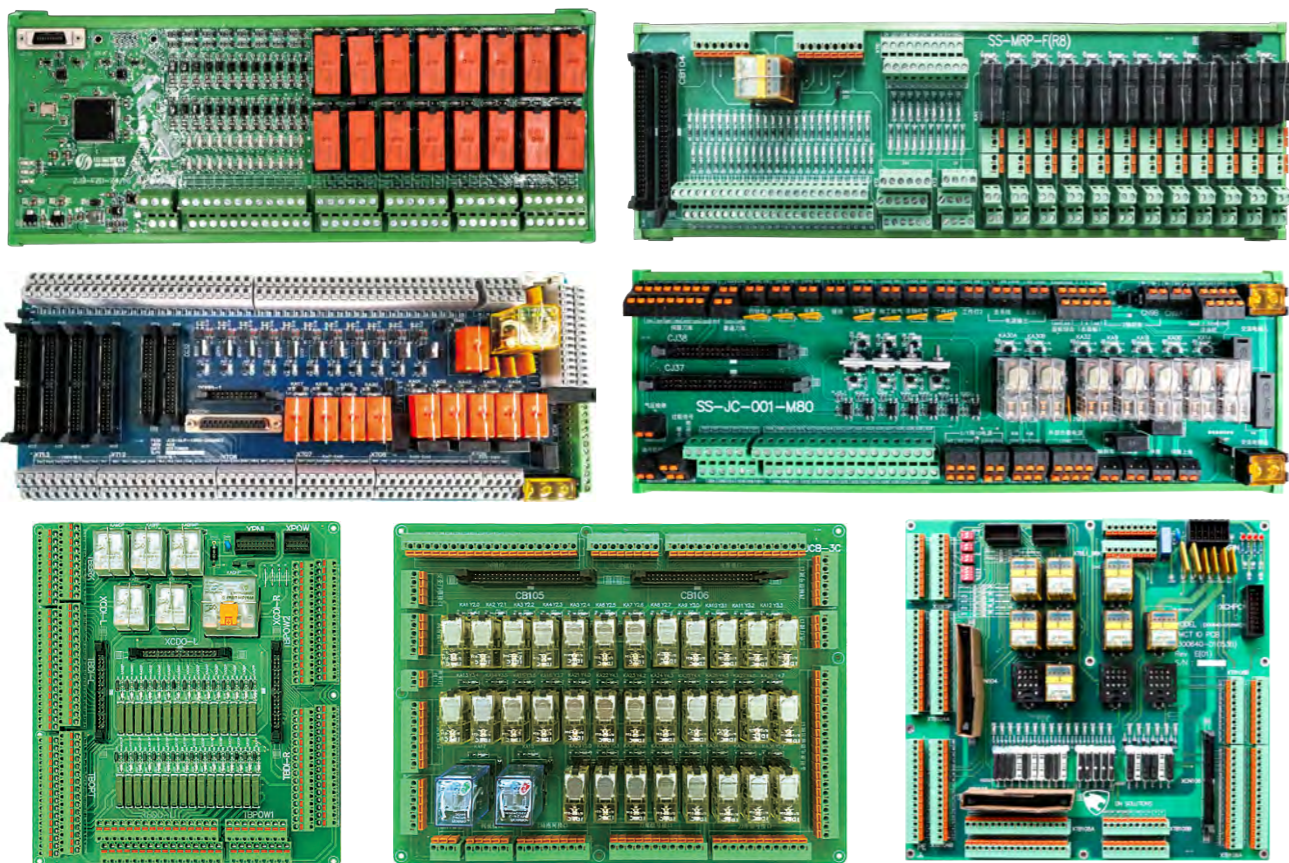
## INSTRUCTIONS FOR USE

### ZJB-TY-16

- ◆ Applicable to various PLC output controls
- ◆ Common OV or common 24V at the common terminal can be used.
- ◆ KA1-KA16 are 16 NO/NC relays.
- ◆ Relay brand optional (OMRON, TAIKO, WAIZUMI)



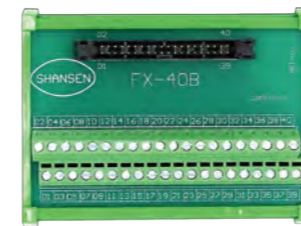
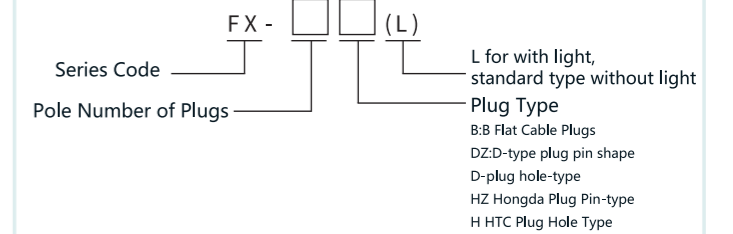
## CUSTOMIZED PRODUCT SHOW



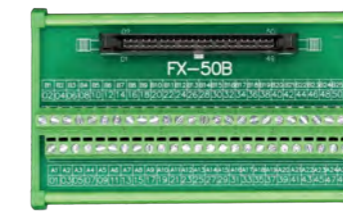
## PRODUCT OVERVIEW

Distributor modules are wiring interface modules that break down any cable signal in the form of a plug into terminals for easy connection and measurement, optimizing the assembly and wiring process, saving space in the equipment and increasing wiring efficiency.

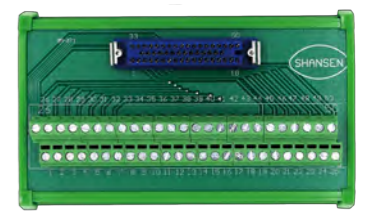
## MODEL DESCRIPTION



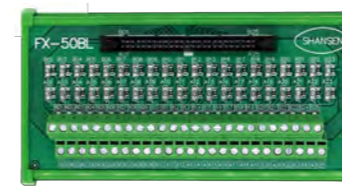
FX-40B



FX-50B



FX-50K



FX-50BL



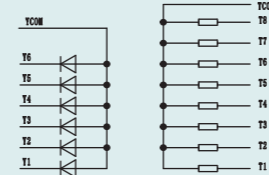
FX-D25/Z



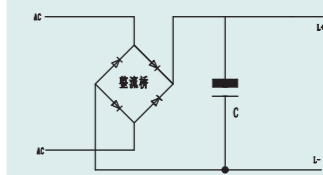
FX-40BL

## FUNCTIONAL MODULE

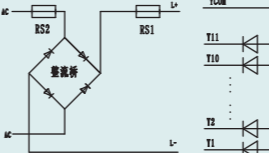
CK-D8-Y6 pull-up resistors and counter-voltage boards are used for pull-up resistors for tool position signals on CNC lathes for counter-voltage release of solenoid valves and other devices on the machine.



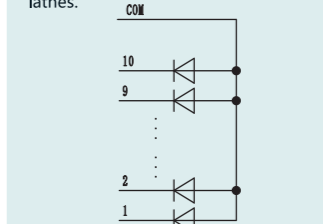
AC/DC-24 power supply module, small size, easy to install alignment, suitable for a variety of CNC machine tool power supply.



MJ-AD-Y11 power supply and counter-voltage board module, DC24V power supply is used to provide 5A power supply for CNC machine tools, and the diode is used for releasing counter-voltage of machine solenoid valve and other devices.



FX-KV10 type counter-voltage plate is suitable for counter-voltage release of devices such as solenoid valves on CNC lathes.



## LA340B-3-S SERIES WARNING LIGHT SERIES



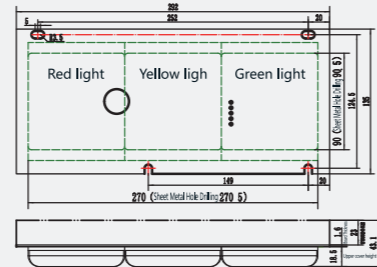
### PRODUCT FEATURES

- ◆ 1. Horizontal or vertical installation, simple style, easy to install;
- ◆ 2. Uniform light distribution, strong color rendering, good visual effect;
- ◆ 3. Built-in buzzer with pleasant sound.

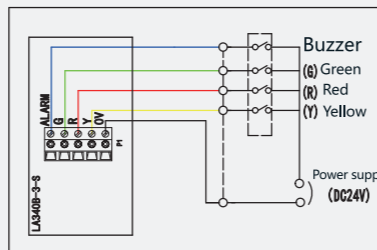
### TECHNICAL PARAMETERS

Rated Voltage	DC24V $+10\%$ $-15\%$
Operating Temperature	$-20\sim 60^{\circ}\text{C}$
Light Color	red, yellow, green
Power Consumption	$\leq 3\text{W}$

### INSTALLATION INSTRUCTIONS



### WIRING METHOD



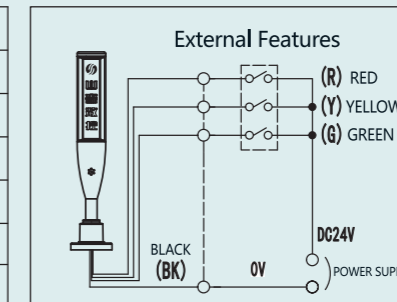
## JCB-7 SERIES WARNING LIGHT SERIES

### PRODUCT FEATURES

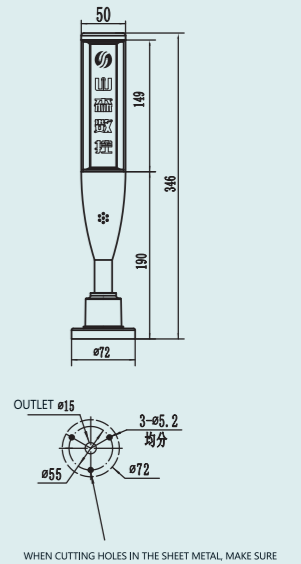
- ◆ 1.The light guide layer adopts double-layer design, the inner light guide column can accept personalized LOGO and company name design according to the user's requirements, with the outer light guide cover, the three-dimensional sense is stronger, the recognition degree is higher, the overall appearance of high-end atmosphere;
- ◆ 2.Built-in buzzer, good warning effect;
- ◆ 3.Constant current drive power supply, LED chip high brightness lamp beads, long service life;
- ◆ 4.The tube base can be bent 90°, which is convenient for delivery after installation and lying down.

### TECHNICAL PARAMETERS ■ WIRING METHOD

Rated voltage	DC24V
Operating voltage rang	80%~120% of rated voltage
Operating Temperature	$-30\sim 60^{\circ}\text{C}$
Light Color	red, yellow, green
Power Consumption	$\leq 3\text{W}$
Buzzer Noise	$\geq 90\text{dB}$
Waterproof and Dustproof Level	IP30



### INSTALLATION INSTRUCTIONS



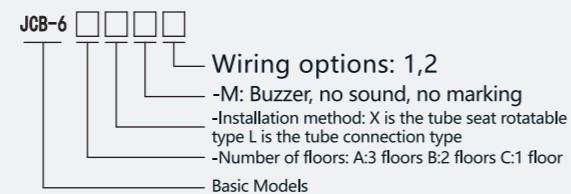
## JCB-6 SERIES WARNING LIGHT SERIES



### PRODUCT FEATURES

- ◆ 1.Plug-in module structure, according to the requirements of any combination, installation and dismantling more convenient and quicker.
- ◆ 2.The light source adopts super bright LED, high luminous intensity, pure light color, large irradiation angle; long service life.
- ◆ 3.Intersecting and straight, shiny and long-lasting.
- ◆ 4.Flash frequency  $60\pm 10\%$ /minute.
- ◆ 5.The wiring color corresponds to the color of the lampshade, which is convenient for quick wiring.
- ◆ 6.Tube base rotatable warning light can be bent 90°, convenient for packaging and transportation.
- ◆ 7.Won the national invention patent, patent number ZL2011102287197.

### MODEL DESCRIPTION



### TECHNICAL PARAMETERS

Rated voltage	AC/DC24V $+10\%$ $-15\%$
Operating Temperature	$-20\sim 60^{\circ}\text{C}$
Wiring method	Lead Wire(1,2)
Light Color	Red, yellow, green
Power Consumption	$\leq 3\text{W}$

## JCB-8 SERIES WARNING LIGHT SERIES



### PRODUCT FEATURES

- ◆ 1.The structure adopts the soft curve design, modern and beautiful, is novel and features convenient installation and maintenance.
- ◆ 2.The light guide cover is made of acrylic inner threaded light guide, and the lamp body and lamp base are made of ABS engineering plastic.
- ◆ 3.The light source adopts super bright LED, strong luminous intensity, light reflection through the light guide material, soft light, high visibility.
- ◆ 4.DC power supply, after constant current source power supply output, constant current high precision, lamp beads use long life.
- ◆ 5.The tube base can be bent 90°, convenient for packing and transportation.
- ◆ 6.Won the national invention patent, patent number: ZL2017101850276.

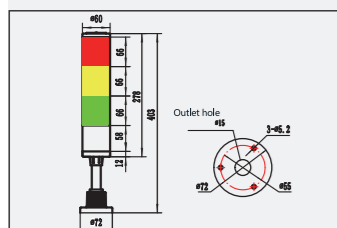
### MODEL DESCRIPTION



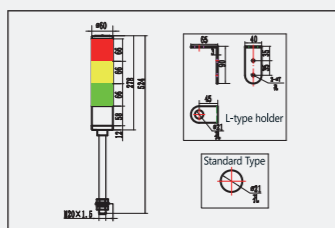
### TECHNICAL PARAMETERS

Rated voltage	DC24V
Operating voltage rang	80%~120% of rated voltage
Operating Temperature	$-30\sim 60^{\circ}\text{C}$
Light Color	red, yellow, green
Power Consumption	$\leq 3\text{W}$
Waterproof and Dustproof Level	IP54

### INSTALLATION INSTRUCTIONS

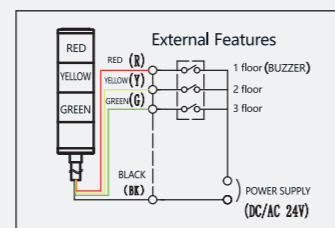


Swivel Mounting Diagram for Tube Holder

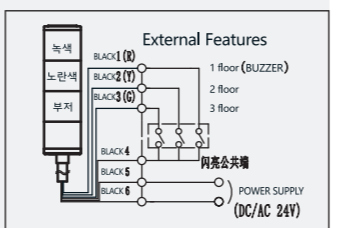


Tube Connection Mounting Diagram

### WIRING INSTRUCTIONS

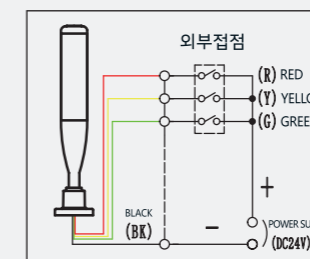
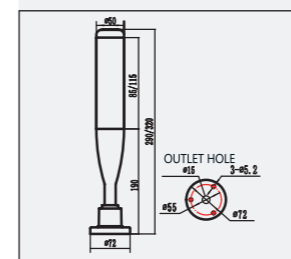


Connection type 1: Normally-on type

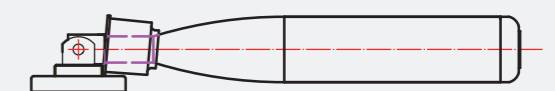


Connection type 2: Flashing type

### INSTALLATION INSTRUCTIONS ■ WIRING



### SHIPPING INSTRUCTIONS: EQUIPMENT CAN BE ROTATED WHEN PACKAGED FOR SHIPPING



Note: Before installing the equipment shipped, in order to protect the light cover, it is recommended to use plastic foam packaging to wrap the body of the light, and then lying down.

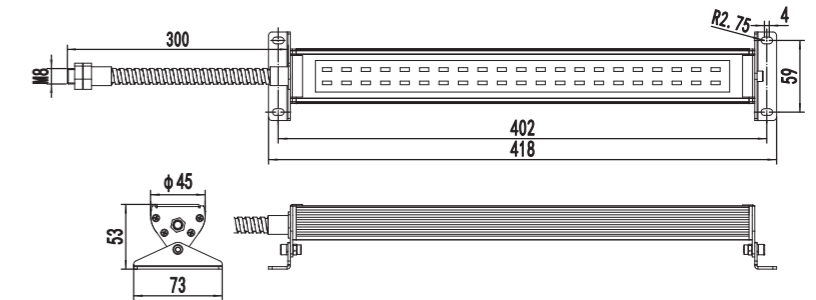
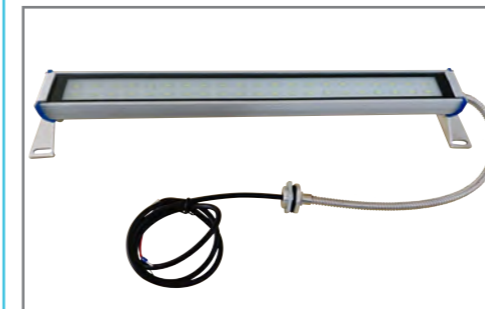
## TECHNICAL PARAMETERS AND FEATURES

Model	GZD-L210-40	GZD-L236KB	GZD-L236KB (New)	GZD-L402-59-KB (New)	GZD-L402-59-KB	GZD-L402-59-MS	GZD-21W-KB
Technical Parameters	Transparent glass	Transparent glass	Transparent glass	Transparent glass	Transparent glass	Transparent glass	Transparent glass
Color temperature	60Lm/W 6000~6500	60Lm/W 6000~6500	60Lm/W 6000~6500	60Lm/W 6000~6500	60Lm/W 6000~6500	60Lm/W 6000~6500	60Lm/W 6000~6500
Angle of illumination	138°	138°	138°	138°	138°	138°	138°
Operating voltage	DC24V±2V	DC24V±2V	DC24V±2V	DC24V±2V	DC24V±2V	DC24V±2V	AC/DC24V±2V
Rated power	6W	6W	6W	12W	12W	12W	21W
Service life	50000h	50000h	50000h	50000h	50000h	50000h	50000h
Ambient temperature	-30°C至+60°C	-30°C至+60°C	-30°C至+60°C	-30°C至+60°C	-30°C至+60°C	-30°C至+60°C	-30°C至+60°C
Installation	Fixed bracket	Adjustable bracket	Adjustable bracket	Adjustable bracket	Adjustable bracket	Fixed bracket	Adjustable bracket
Protection class	IP67	IP67	IP67	IP67	IP67	IP67	IP65
Note			Fully potted seal on both end caps	Fully potted seal on both end caps			
Product Features	★ Shell using aviation aluminum profile, beautiful and durable. ★ Superior structural design, excellent heat dissipation. ★ Convenient lighting, the lamp body can earth 45° rotation. ★ High-quality LED lamp chip, light division uniform, energy efficient. ★ With 304 stainless steel bellows, effectively protect the cable. ★ Waterproof and dustproof rating up to IP67.						
Scope of application	Widely used in CNC machine tools, combined machine tools, and other industrial equipment lighting						

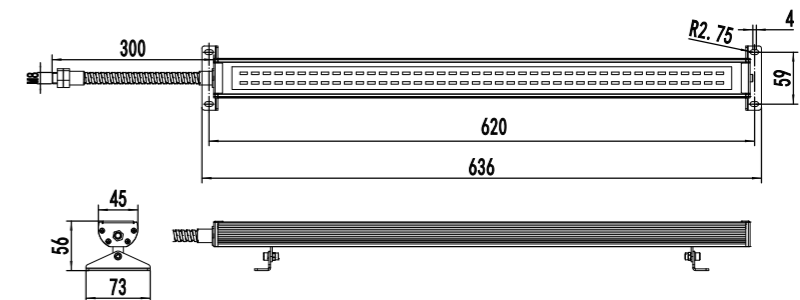
## PRECAUTIONS

- ◆ 1.The screw at the bellows outlet hole is M8, and the Sheet Metal Hole Drilling size is φ8.2mm.
- ◆ 2.This product should be installed and wired for commissioning by professional personnel.
- ◆ 3. Please use this product within the specified parameters, beyond the range of this product is easy to damage.
- ◆ 4. Avoid false and reverse connections when connecting cables.
- ◆ 5.Put it down carefully and gently, do not hit it with heavy objects.

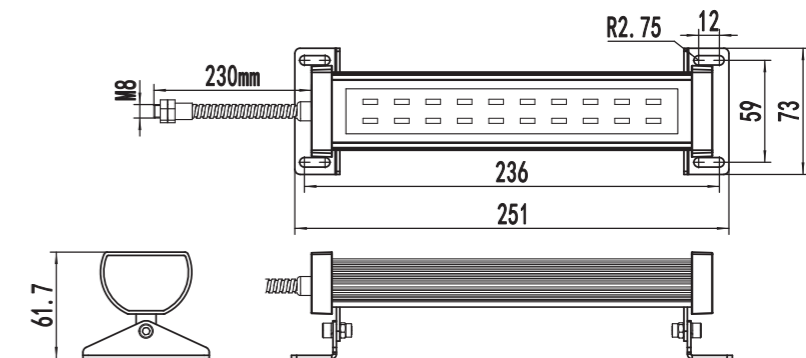
### GZD-L402-59-MS



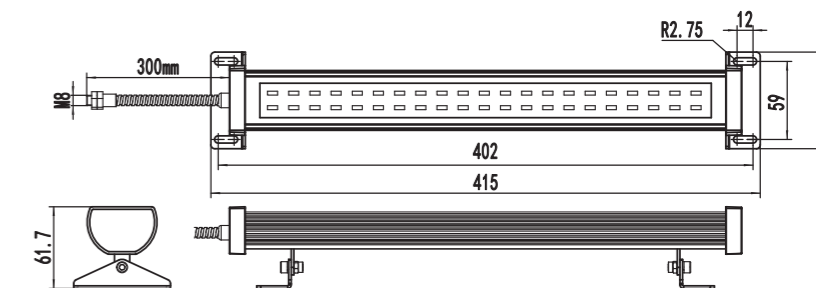
### GZD-21W-KB



### GZD-L236KB (NEW)



### GZD-L402-59-KB (NEW)



### FUNCTIONAL DESCRIPTION

Mechanical equipment in the processing, generally produces oil mist, water mist, pollution of the environment, jeopardizing the health of workers, reduce productivity, shorten the service life of the equipment. Installation of oil mist separator can eliminate oil mist, create a comfortable working environment and protect the health of workers.



### USE

The oil mist collector is used to purify and recycle the oil mist generated by various processing equipment. It has a wide range of applications and is suitable for fully enclosed and semi-enclosed processing equipment, such as CNC numerical control equipment, gear processing equipment, and is especially suitable for metal processing, sheet metal processing and welding, mold manufacturing, automotive parts manufacturing, fasteners production, and other manufacturing industry equipment.

### STRUCTURAL FEATURES

- ◆ 1. The oil mist collector adopts mechanical structure, adopts the principle of three-stage filtration and multi-stage precision to effectively collect and recover the oil mist, the collection rate is above 99%, and has excellent recovery efficiency for different concentrations of oil mist.
- ◆ 2. Multi-stage filtration method, filtration accuracy is constantly improving, effective collection and recovery equipment is stable and reliable, in line with industry standards JB/T12907-2016.
- ◆ 3. Low initial investment and later maintenance costs.
- ◆ 4. Low noise design <75dB(A), improve the quality of the workshop working environment.
- ◆ 5. Scientific design, simple structure, easy to install and maintain.
- ◆ 6. Further reduce the space occupation rate and improve the applicability of installation scenarios.
- ◆ 7. Flexible cartridge selection and matching mode, suitable for different applications.

### ADVANTAGES OF USE

- ◆ 1. Reduced impact on employees: Oil mist particles of 0.3 to 3.5 um can remain in the body, posing a health hazard.
- ◆ 2. Reduce workplace accidents: Oil mist deposition makes the work area, floor, and walkways slippery and prone to fall accidents.
- ◆ 3. Reduce the damage to mechanical equipment: a large amount of oil mist generated by high-speed cutting for a long time adsorbed on the equipment and workpiece, may become the cause of mechanical equipment and electrical system failure. To the maintenance of machinery and equipment work to bring a lot of trouble, but also make the processing accuracy of machinery and equipment is greatly reduced.
- ◆ 4. Reduce the consumption of coolant: the recovered oil mist can be reused, reducing the expenditure of coolant for the factory.
- ◆ 5. Reduce damage to the environment and waste of resources: If the oil mist gas is discharged to the outdoor, it will damage the environment and cause waste of resources.

### YWS2 SERIES



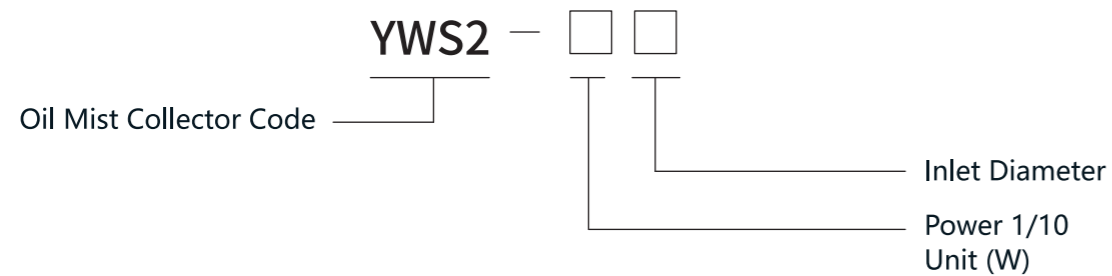
### MODEL SELECTION METHOD

According to the general use of the situation and the relevant standards of the machinery industry, you can refer to the following recommended values, the specific selection can be based on the actual use of the customer to choose the most appropriate model.

Closed Type	Oil Mist Models	Inlet Diameter(mm)	Air Volume	Door openings and closings per minute, general value (times/minute)	Suitable for processing room volume(m <sup>3</sup> )
	YWS2-55	Φ148	600	4~10	1~2.5
YWS2-75	Φ148	800	4~10	1.5~3.5	
YWS2-150	Φ148	1000-1300	4~10	3~5	
YWS2-150A	Φ198	1300-1500	4~10	4~6	
YWS2-220	Φ148	1500-1800	4~10	5~7	
YWS2-220A	Φ198	1800-2100	4~10	7~10	
General Formula	Airflow = Volume*Opening Frequency*60				

Open-mouthed Type	Oil Mist Models	Inlet Diameter(mm)	Air Volume	Estimated air speed required to absorb oil mist, general value(m/s)	Suitable for the opening area of the processing room(m <sup>2</sup> )
	YWS2-55	Φ148	600	0.5<V<1	0.3~0.6
YWS2-75	Φ148	800	0.5<V<1	0.4~0.8	
YWS2-150	Φ148	1000-1300	0.5<V<1	0.5~1.0	
YWS2-150A	Φ198	1300-1500	0.5<V<1	0.6~1.2	
YWS2-220	Φ148	1500-1800	0.5<V<1	0.9~1.8	
YWS2-220A	Φ198	1800-2100	0.5<V<1	1.1~2.2	
General Formula	Air volume = open area * estimated wind speed * 3600				

### MODEL DESCRIPTION



### PRODUCT PARAMETERS

Model No.	YWS2-55	YWS2-75	YWS2-150	YWS2-150A	YWS2-220	YWS2-220A
Power supply	3-phase, 220V/380V	3-phase, 220V/380V	3-phase, 220V/380V	3-phase, 220V/380V	3-phase, 220V/380V	3-phase, 220V/380V
Power (kW)	0.55	0.75	1.5	1.5	2.2	2.2
Rotating speed (R.P.M)	2740	2840	2840	2840	2840	2840
Current (A)	2.33/1.35	3.06/1.77	5.77/3.33	5.77/3.33	8.15/4.72	8.15/4.72
Air Volume (m <sup>3</sup> /h)	600	800	1000-1300	1300-1500	1500-1800	1800-2100
Noise dB (A)	66±2	66±2	68±2	68±2	68±2	68±2
Efficiency (%)	99	99	99	99	99	99
Inlet Diameter (mm)	Φ148	Φ148	Φ148	Φ198	Φ148	Φ198
Diameter of Oil Return Port (mm)	16	16	16	16	16	16
Element Material	Synthetic Fiber	Synthetic Fiber	Synthetic Fiber	Synthetic Fiber	Synthetic Fiber	Synthetic Fiber
Dimensions (L × W × H) (mm, without three-stage cartridge and holder)	610 × 400 × 530	630 × 410 × 550	640 × 450 × 586	640 × 450 × 586	640 × 450 × 586	655 × 450 × 586
Power Cord	4芯	4芯	4芯	4芯	4芯	4芯
Color	RAL9010 Customizable	RAL9010 Customizable	RAL9010 Customizable	RAL9010 Customizable	RAL9010 Customizable	RAL9010 Customizable

Note: Customers with special requirements for products support customization

### OPTIONAL ACCESSORIES



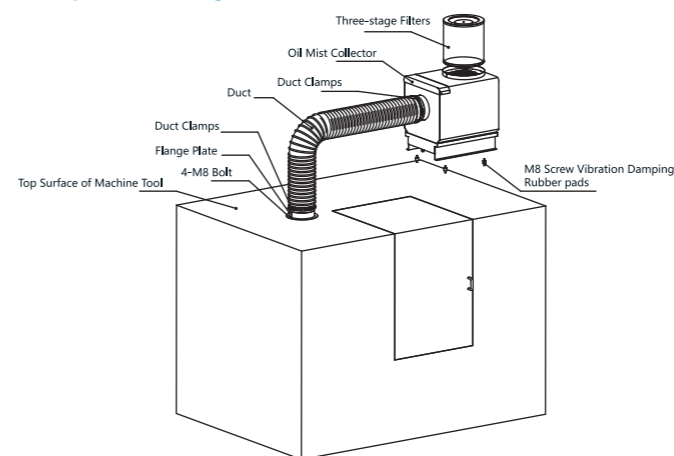
For different applications, three-stage HEPA filters can be selectively configured according to the needs and environmental requirements.

air inlet and oil return ducts (with appropriate size clamps), choose the appropriate length according to the installation location. Recommended to be purchased together with the oil mist collector.

Bracket (can be customized): Depending on the installation location, it is reasonable to decide whether or not the bracket needs to be installed. The oil mist collector is shipped with the oil mist collector by default.

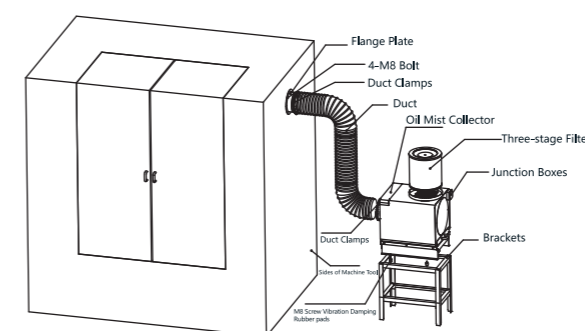
### INSTALLATION METHOD

Top Mounting as Shown



Top Mount

Side Mounting as Shown



Side Mount

### COLLECTION METHOD

Centrifugal aggregation, return pipe return

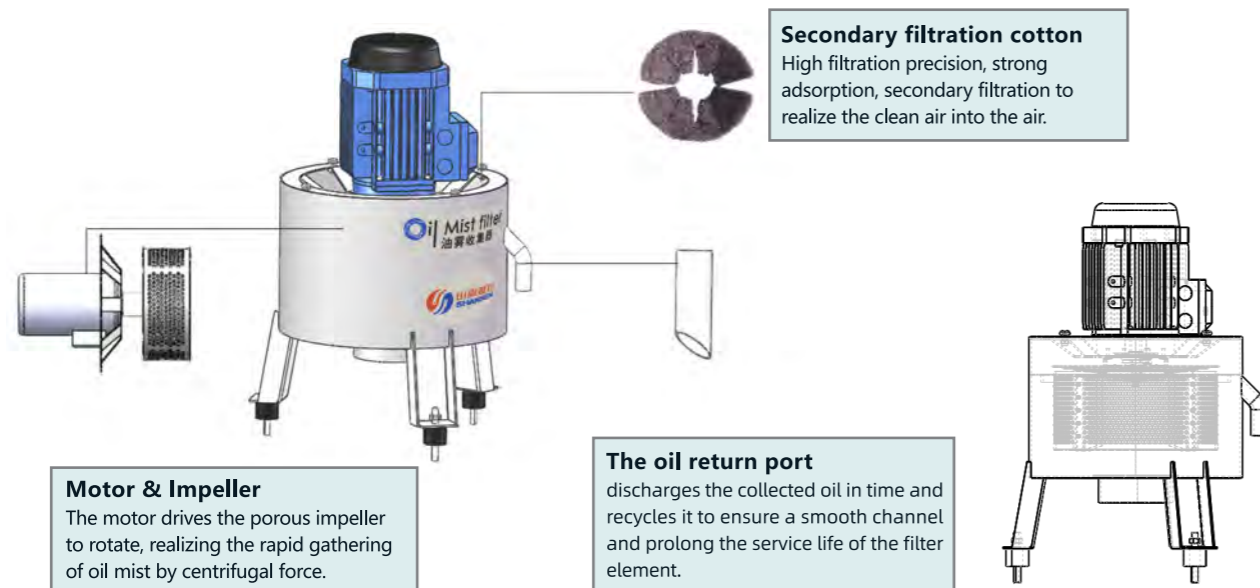
### STRUCTURAL FEATURES

- Oil mist collector adopts mechanical centrifugal structure, using porous centrifugal impeller collision, fine filter cotton cohesion on the effective collection and recovery of oil mist, the collection rate of more than 99%, and for different concentrations of oil mist All have excellent recycling efficiency.
- High working efficiency, high filtration precision, effective collection and recycling.
- The equipment is stable and reliable, and complies with the industry standard JB/T12907-2016.
- Low upfront investment and post maintenance costs.
- Low noise design to improve the quality of workshop working environment.
- Scientific design, simple structure, easy to install and maintain.



### ADVANTAGES

- Reduce the impact on employees: 0.3-3.5um oil mist particles are inhaled and difficult to expel, jeopardizing health.
- Reduces workplace accidents: Oil mist deposits make work areas and floors slippery and prone to fall accidents.
- Reduced damage to machinery and equipment: oil mist adsorbed on equipment and workpieces for long periods of time can lead to mechanical and electrical system failures. Obstacles. Affects the work of mechanical equipment and reduces the machining accuracy of mechanical equipment.
- Reduce the consumption of coolant: the recovered oil can be reused, reducing the cost of the enterprise.
- Reduces environmental damage and resource waste: Oil mist discharged into the air damages the environment and also causes resource waste.
- Reduces environmental damage and resource waste: Oil mist discharged into the air damages the environment and also causes resource waste.



### CONSUMABLES REPLACEMENT



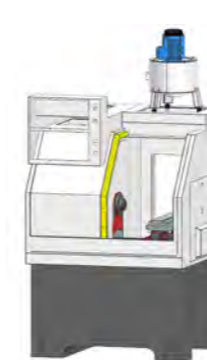
Unscrew the Allen screws and remove the secondary filter wool for replacement.



Remove the fine filter wool directly for replacement.

### MODEL SELECTION METHOD

According to the general use of the situation and the relevant standards of the machinery industry, you can refer to the following recommended values, the specific selection can be based on the actual use of the customer to choose the most suitable model.



	Oil Mist Models	Air Volume	Door openings and closings per minute, general value (times/minute)	Suitable for processing room volume(m³)
Closed Type	YWV1-12	400	4~10	0.5~1
	YWV1-37	600	4~10	1~2
General Formula	Airflow = Volume*Opening Frequency*60			

	Oil Mist Models	Air Volume	Estimated air speed required to absorb oil mist, general value(m/s)	Suitable for the opening area of the processing room(m²)
Open-mouthed	YWV1-12	400	0.5<V<1	0.05~0.1
	YWV1-37	600	0.5<V<1	0.1~0.15
General Formula	Open Area * Estimated Wind Speed * 3600			

### CLOSED-ENDED TYPE CALCULATION METHOD

**Q—Oil mist collector air volume, in cubic meters per hour (m³ / h);**

W×D×H—The volume of the processing chamber cavity (length×width×height), unit is meter (m)

a—The number of air changes per minute in the processing room, in units of times per minute (times/min).

### OPEN-ENDED TYPE CALCULATION METHOD

**Q—Oil mist collector air volume, in cubic meters per hour (m³ / h);**

A x B—Opening size of the processing chamber (length x width), in meters (m)

V—Oil mist suction is expected to require wind speed, the unit is meters per second (m/s), generally more than 0.5m/s

## PRODUCTS

Oil skimmer to separate non-water-soluble oil floating on the surface of the tank for the purpose of removing lubricants, cutting oil and other liquid oils. Mechanical equipment cooling system and lubrication system, in the process of processing operation, all kinds of liquid oil will enter the water tank, and participate in the cooling cycle, cutting cooling function received impact, while generating odor, negative impact on environmental protection and health. Therefore, the use of oil skimmer can be a purposeful solution to this type of problem, help enterprises to normal production.

## PRODUCT ADVANTAGES

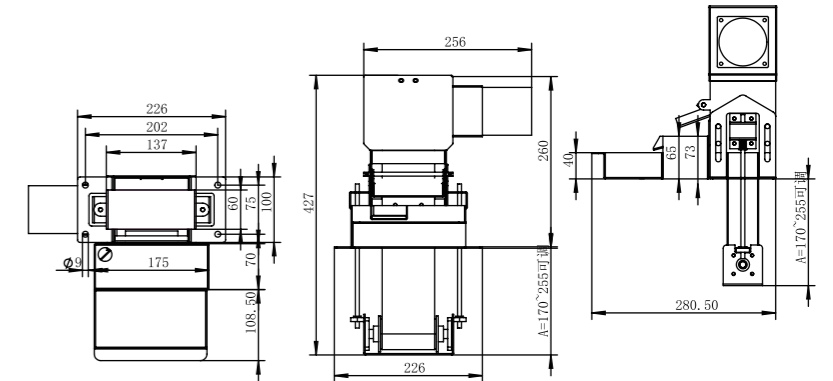
- ◆ 1.Simple structure, easy to maintain.
- ◆ 2.Using waterproof bearings, high reliability.
- ◆ 3.Using guide rail sliding bar with compression spring tensioning form, easy to disassemble and replace.
- ◆ 4.Scraper provides adjustable angle function, which is convenient for users.

## TECHNICAL PARAMETERS

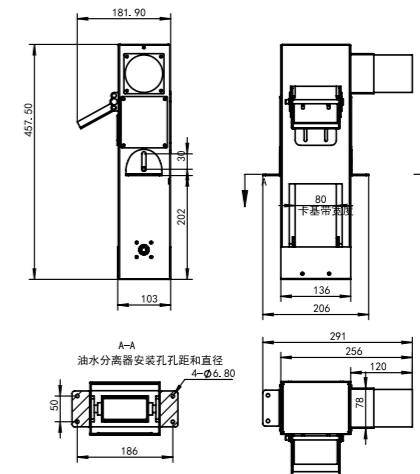
Model No.	YSF1-25150	YSF2-25150	YSF3-350
Power Supply	3-phase, 380V	3-phase, 380V	Single-phase, 50Hz, AC110V
Power (W)	25	25	6
Motor Speed (r/min)	1250	1250	1400
Gear Reduction Ratio	1: 150	1:150	1:120
Current (A)	0.4	0.4	0.3 (Capacitance 3μF)
Separation Efficiency and Flow Rate(Uh)	99%, 1.5	99%, 1.5	99%, 1.5
Synchronous Belt Material	PU	PU	PU
Dimensions(L×W×H, without oil box)	301*165*450	291*206*460	265*130*465
Color	Black/gray (customizable)		

## OUTLINE AND MOUNTING DIMENSIONS

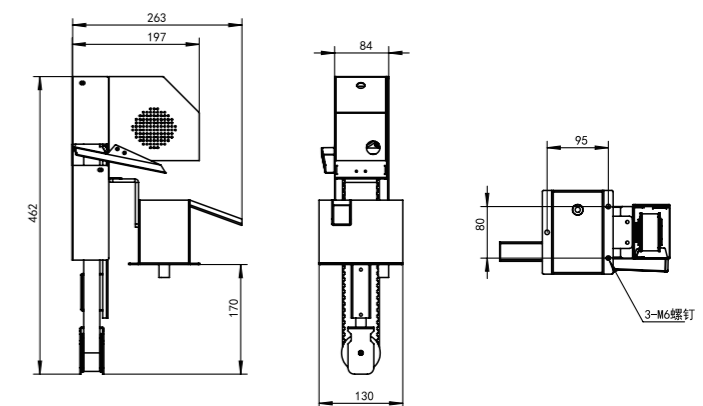
### YSF1-25150 Size Description



### YSF2-25150 Size Description



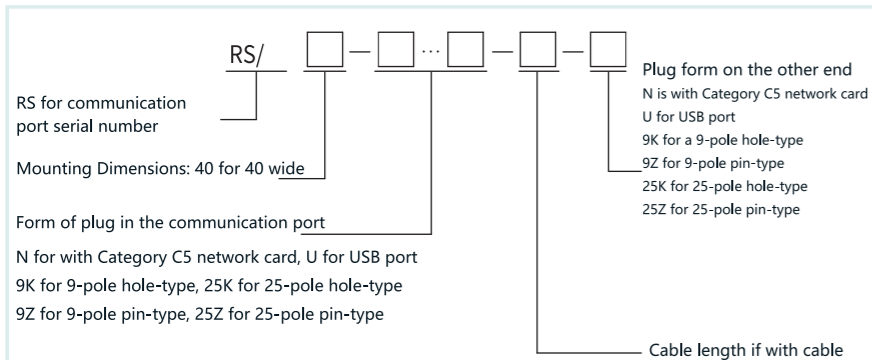
### YSF3-350 Size Description



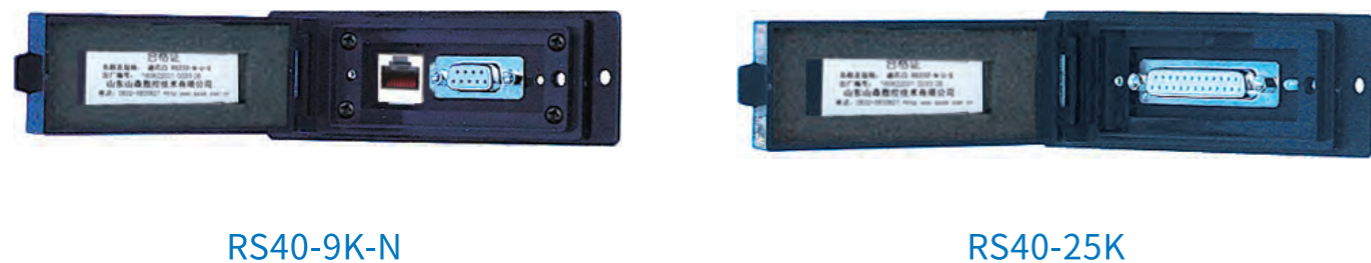
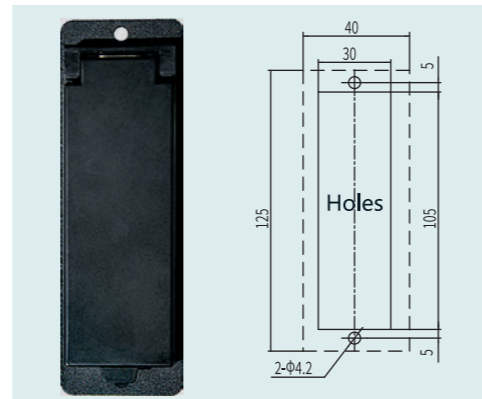
## RS40 COMMUNICATION PORT

Communication interface module is mainly used for communication between CNC machine tools and computers, there are 9-core, 25-core, USB port, network card socket and other combinations, according to user requirements can be with the transmission line and with the CNC system end of the connection plug.

### MODEL DESCRIPTION



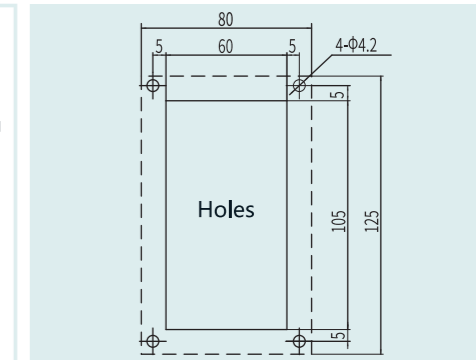
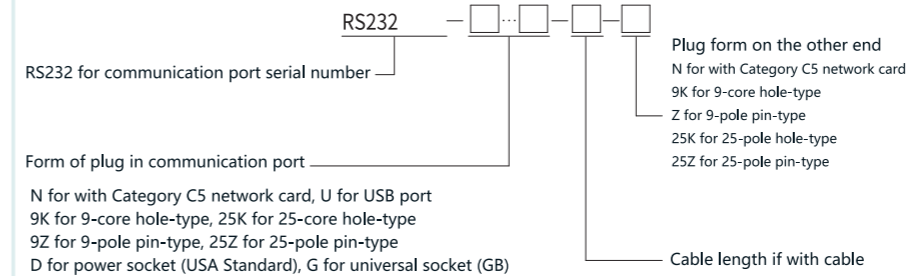
### RS40 MOUNTING DIMENSIONS



## RS232 COMMUNICATION PORT

### DIMENSION INSTALLATION

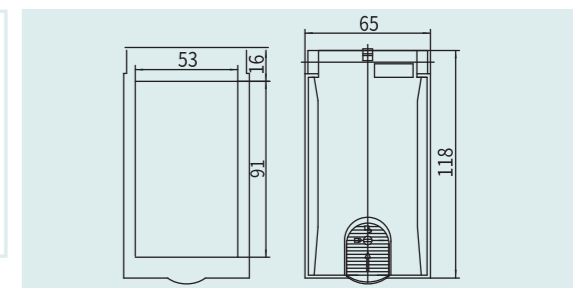
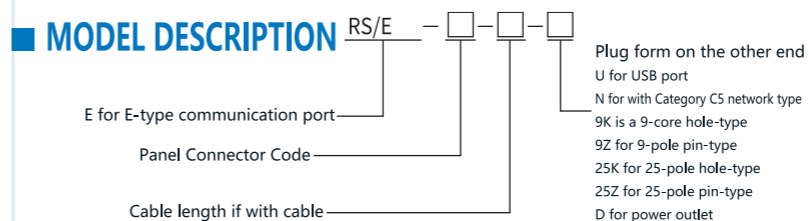
### MODEL DESCRIPTION



## E-TYPE COMMUNICATION PORT

Communication port module is mainly used for communication between CNC machine tools and computers, with 9-core, 25-core, USB port, NIC socket and other combinations, according to user requirements can be with the transmission line and the plug connected to the end of the CNC system. Won the national utility model patent, patent number ZL2008200246001.

### MODEL DESCRIPTION



### E-TYPE COMMUNICATION PORT CODE DESCRIPTION

Code	1	2	3	4	5	6	7	8
Panel Connectors								
Note	China Standard Multi-function Socket Single-phase 220V5A	With USB Socket RJ45 Socket D-shape 9-pole Socket	With USB Socket RJ45 Socket D-shape 9-pole Socket	With BNC Socket RJ45 Socket D-shape 9-pole Socket	With D-type 25-pole Socket D-type 9-pole Socket	German Standard (VDE) Multi-function Socket Single Phase 230V6A	American Standard (NEMA5-15) Multi-function Socket Single-phase, 120V, 5A D-shape 9-pole Socket	Australia Single Phase 220V5A

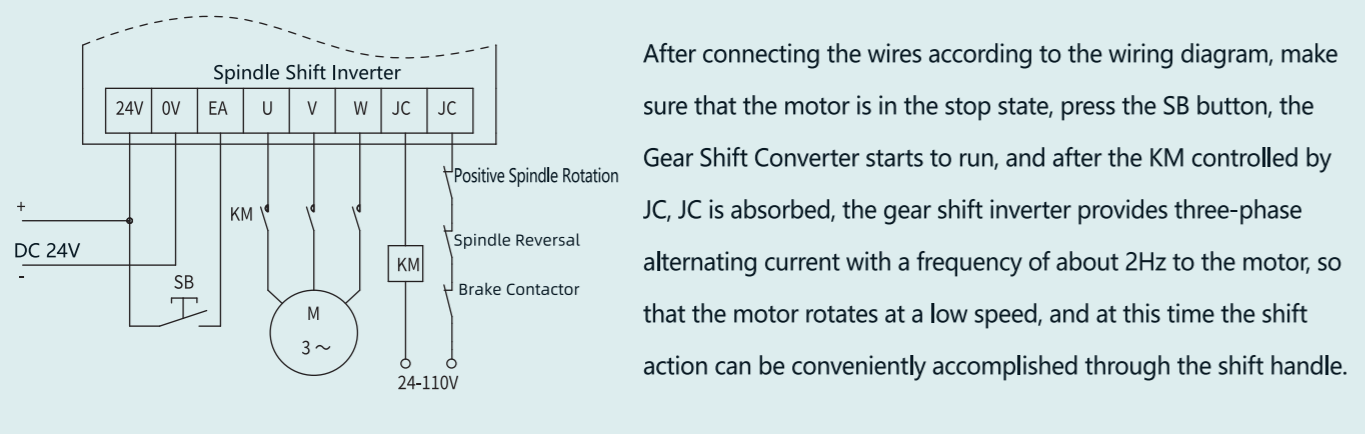




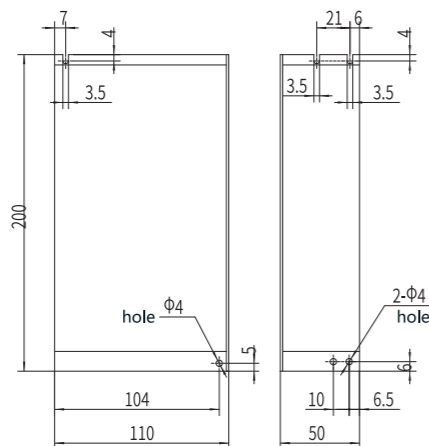
## MODEL DESCRIPTION AND FUNCTIONAL FEATURES

- HB - 08
- ◆ Installed in mechanical equipment operated by mechanical gear shifting to replace manual gear shifting.
  - ◆ Suitable for single-speed motors, two-speed motors, and three-speed motors.
  - ◆ Suitable for three-phase AC 220V, 380V asynchronous motors
  - ◆ It is characterized by low cost, small size, low noise, low output voltage and low power rating.
  - ◆ Won the national utility model patent No. ZL2016200098714
- Applicable Motors  $\leq 7.5KW$
- Shift Inverter

## WIRING INSTRUCTIONS



## PRODUCTS MOUNTING DIMENSIONS ELECTRICAL PARAMETERS



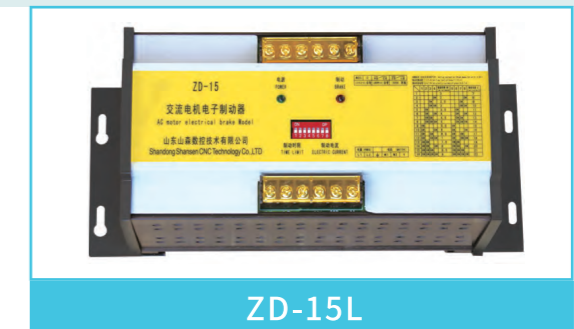
Applicable Motor Power:  $\leq 7.5KW$

Rated Current:  $< 16A$

Input Voltage:  $DC24V \pm 18\%$

## PRODUCTS

ZD-15 AC motor electronic brake is an electronic control device to realize fast and effective braking of AC asynchronous motor. ZD-15S is mounted by 35mm standard clamping rail and ZD-15L is mounted by connecting plate.



## PRODUCT FEATURES PRECAUTIONS

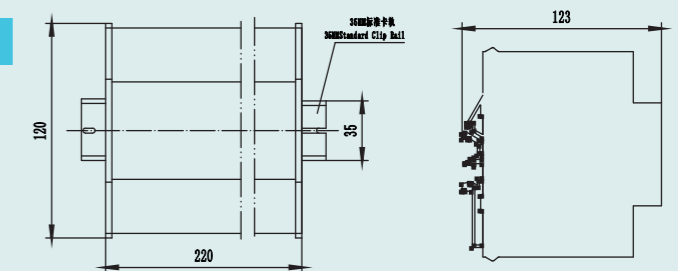
- ◆ 1. Braking effect is fast, effective and long service life.
- ◆ 2. Braking current and braking time can be set according to AC motor and load.
- ◆ 3. can monitor whether the AC motor braking stall, in the motor braking stall half a second to one second to stop the output of the braking signal.
- ◆ 4. Conveniently connected with the main circuit of AC motor, applicable to single-speed, multi-speed, star connection, angle connection, and can be interlocked with the control circuit to ensure safe and reliable operation.
- ◆ 5. for the user, the use of the device relative to the use of traditional braking device has the advantages of low cost, easy to install, rapid braking, long service life and so on.

- ◆ 1. In the case of braking time allows to reduce the braking current, in order to avoid overheating and vibration of the motor, generally set the braking current should be less than 1.2 times the rated current of the motor.
- ◆ 2. When connecting the external line, you must ensure that the brake contactor and the motor forward and reverse contactor are interlocked to prevent the power supply from short-circuiting.

## INSTALLATION INSTRUCTIONS

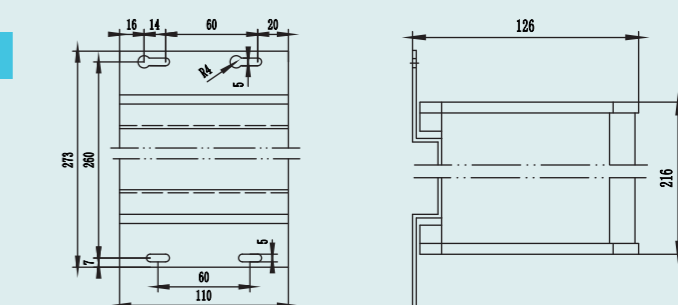
### ZD-15S installation dimensions and description

Mounted on a 35mm rail, firmly grounded, the input power supply should be connected to a two-phase air switch before connecting to the power supply side of the brake.



### ZD-15L installation dimensions and description

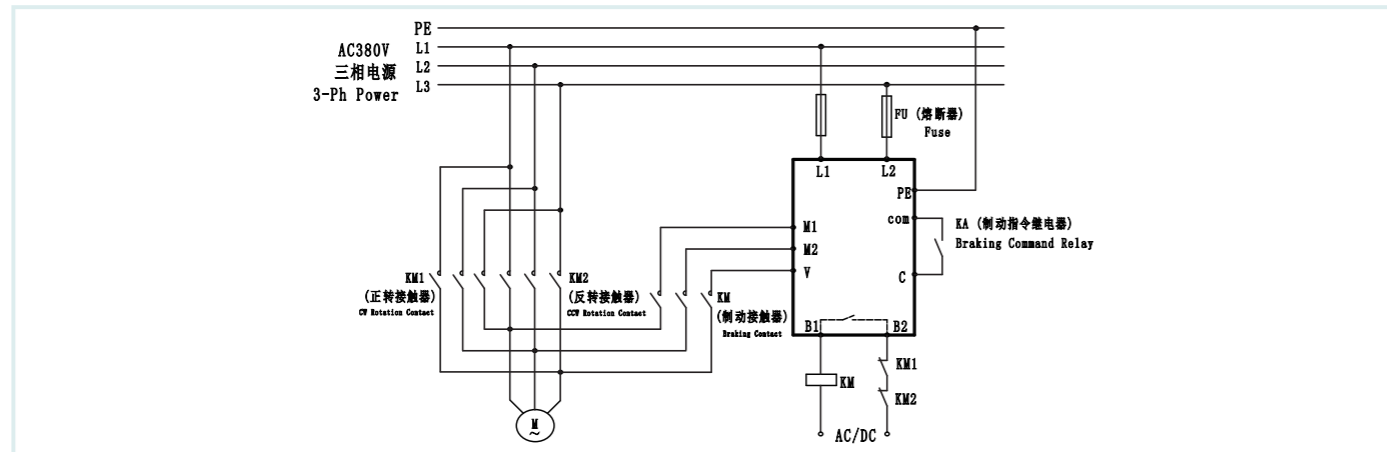
Mounted with a connection plate and firmly grounded, the input power supply terminal should be connected to a two-phase air switch before connecting to the power supply terminal of this brake.



## ELECTRICAL PARAMETERS

Model No.	Applicable Motors	Braking Current	Input Voltage
ZD-15	≤7.5KW	≤22A	AC380V±10% (AC220V to be Customized)

## ELECTRICAL DRAWINGS



## TERMINAL DESCRIPTION

B1、B2	Two normally open contacts of the brake's internal relay for controlling the brake contactor, capacity AC240V3ADC28V3A.
B3、B4	The two normally open contacts of the brake's internal relay can be backed up.
C、COM	Brake internal power supply, when the need for motor braking, external brake trigger signal control C and COM closed for more than 0.1 seconds to trigger the braking process.
L1、L2	Brake operating power input, usually AC380V (when AC220V is required, special order is required).
M1、M2	The brake current output terminals are connected to any two-phase leads of the motor through the two main contacts of the brake contactor.
V	The speed measurement input terminal is connected through the other main contact of the brake contactor to the other phase terminal of the motor except the one connected to M1 and M2.
PE	Ground wire terminal, need to be firmly grounded.
Braking Time	Used to set the braking time limit in the range of 1.5 to 9 seconds.
Braking Current	Used to set the braking current, range 7-22A, adjusted to match the motor.

## SETTING INSTRUCTIONS

1. Braking time limit setting (blank for switch downward OFF)

스위치	설정값															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1									ON	ON	ON	ON	ON	ON	ON	ON
2					ON	ON	ON	ON					ON	ON	ON	ON
3			ON	ON			ON	ON			ON	ON			ON	ON
4		ON	ON		ON	ON		ON	ON		ON	ON			ON	ON
계동시한(s)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9

2. Brake current setting (blank for switch down OFF)

스위치	설정값																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
5																ON	ON	ON	ON	ON	ON	ON
6																ON	ON	ON	ON	ON	ON	ON
7																ON	ON	ON	ON	ON	ON	ON
8																ON	ON	ON	ON	ON	ON	ON
계동전류(A)	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22						

## PRODUCT OVERVIEW

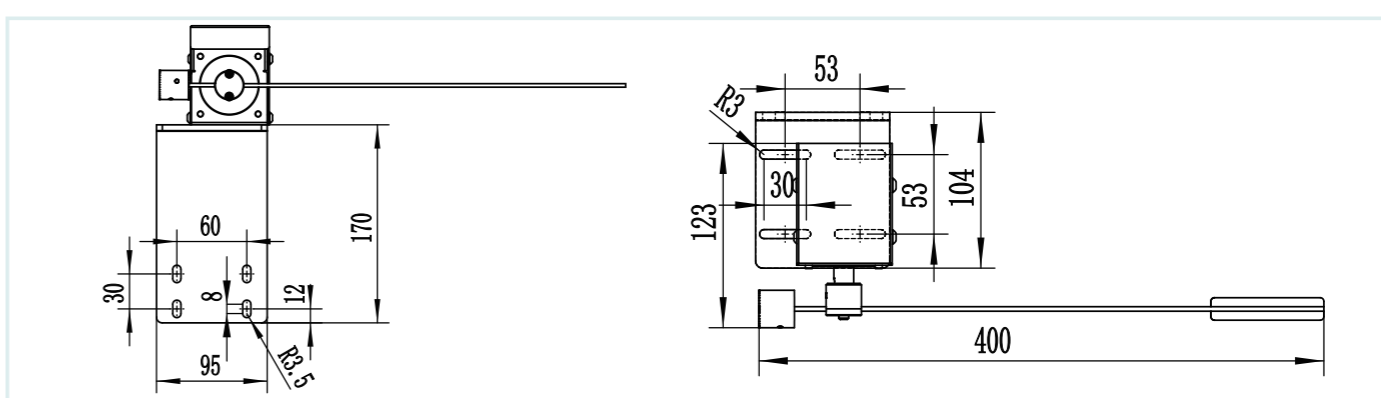
CNC machine tools in the process of automatic machining, due to high cutting intensity, high temperature, residual cutting, tool aging and other factors, may lead to tool wear or breakage, if you can not find the damage of the tool in time, it will cause major production and even safety accidents. This product can effectively detect the wear or breakage of the tool, and the whole inspection process is executed in the tool magazine, without taking up the processing time. It can be used for the detection of tools in disk-type tool magazine and chain-type tool magazine.



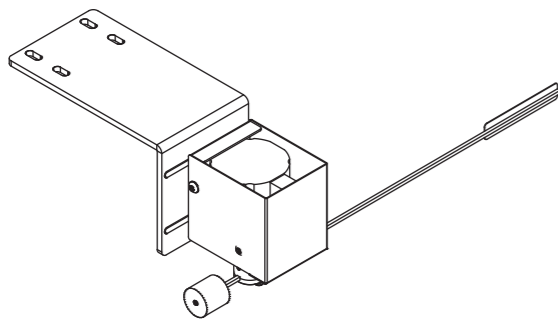
## MODEL DESCRIPTION

Markings	Serial No.	Markings	Motor Cable Length
SFBK21	Broken Tool Detection	22M	Line Length 22m
		33M	Line Length 33m
		Standard Type of 15m	
Markings	Customized Holder	Markings	Detection Rod Length
W	Horizontal Holder	480	Pole Length 480mm
L	Old Model Holder	Standard Type of 400mm	
Standard Type with No Holder			

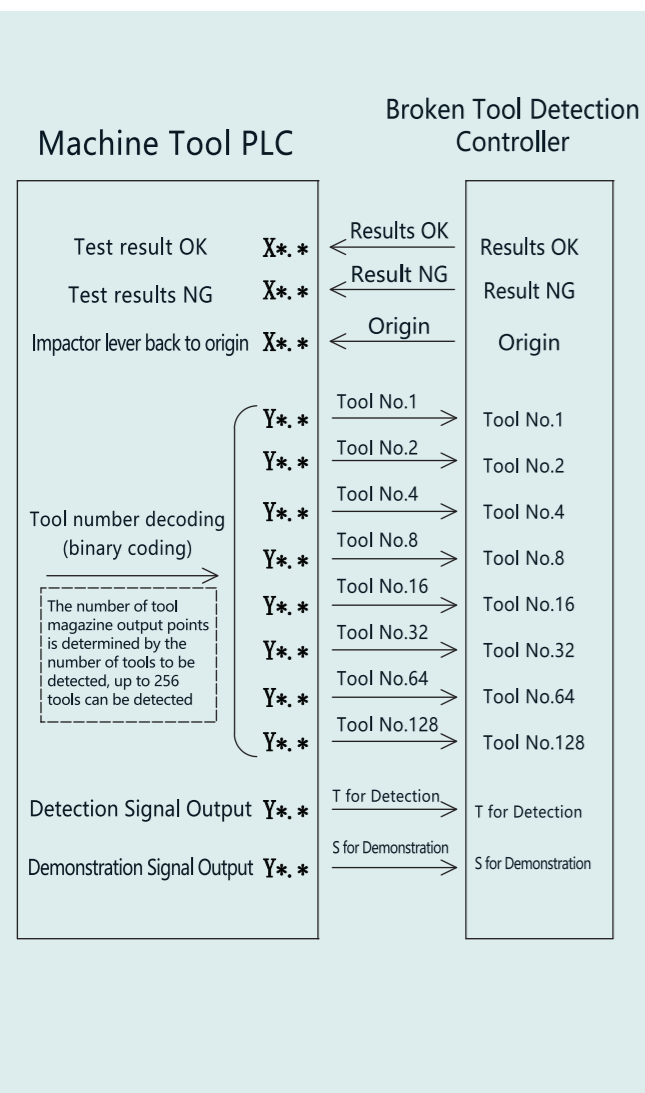
## OVERALL INSTALLATION DIMENSION DRAWING



## OVERALL EFFECT DIAGRAM



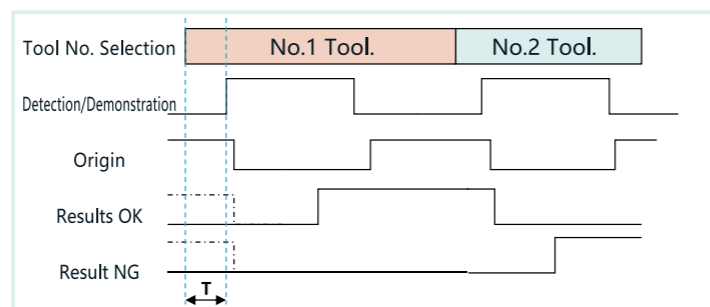
## MACHINE INTERFACE SCHEMATIC



## MAIN TECHNICAL PARAMETERS

Serial Number	Item	Standard
1	Rated Power	220W
2	Controller Power Supply	24V DC±10%
3	Driver Power Supply	220V AC
4	Input & Output Levels	24V effective
5	Ambient Temperature for Operation	-10°C~+60°C
6	Protection Level	Detection device IP67
7	Detection Rod Length	400mm
8	Detection Angle	5°~150°
9	Detection times/life	10 million times
10	Single Detection Time	0.3-2 sec
11	Detection Accuracy	Adjustable up to 1mm
12	Detecting the strength of touching the tool	Adjustable
13	Detection of the direction of rotation of the rod	Adjustable
14	Mounting Holder	Adjustable Position

## DETECTION/DEMONSTRATION TIMING CHART



## DEMONSTRATION INSTRUCTIONS

Detect No. 1 tool, output result OK, detect No. 2 tool, output result NG.

The demonstration/detection signal needs to lag the tool number selection signal by at least time T50ms.

The output of the demonstration/detection signal needs to be greater than 50ms.

The CNC can check the status of OK or NG after the home position is in place.

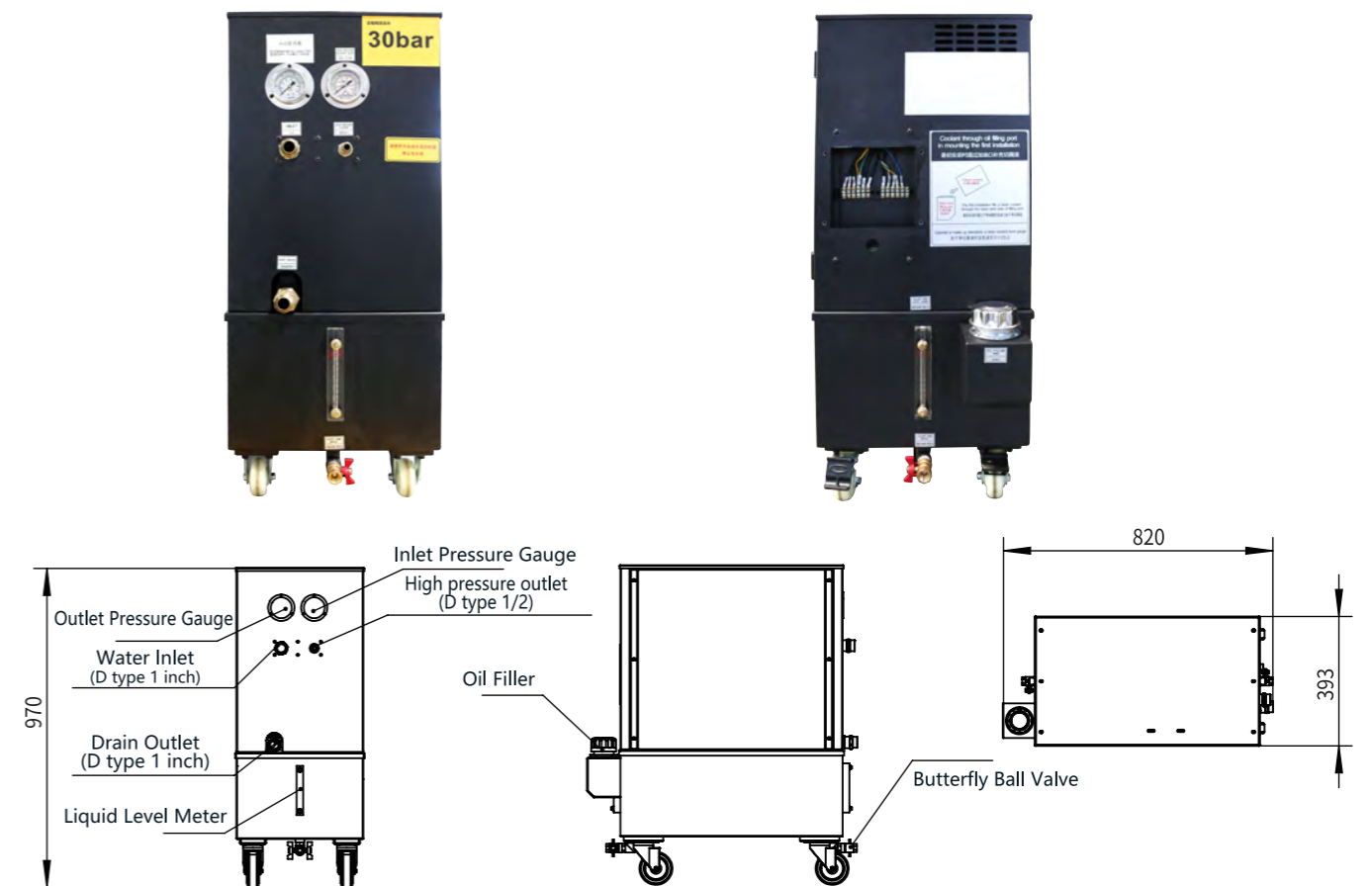
## PRODUCTS INTRODUCTION

Cutting workpiece will produce high temperature vapor, the water vapor on the surface of the workpiece will isolate the cutting fluid from adhering, resulting in less than 20% of the cooling effect of the workpiece or tool, the only way to achieve the most efficient cooling effect is to pressurize the cutting fluid to more than 30 bar, so that the cutting fluid can directly contact the workpiece and tool.

### Advantages of Use

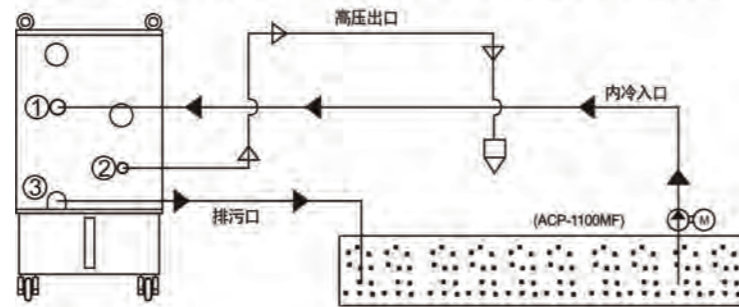
- 1. Reduce tool wear during cutting and machining, saving tool costs.
- 2. Improvement of iron filings generated by cutting, which is conducive to the introduction of automation.
- 3. The high-pressure center water discharge function effectively improves the drilling depth and cutting speed of the machine. It greatly improves the stability of cutting size during machine tool machining and increases the qualified rate of workpiece at the same time. Increase the feeding speed and cutting speed, increase the eating force, tap more productivity in production.
- 4. Fine filtration of the cartridge optimizes the cutting water quality and avoids the blockage of the circulating pipeline.
- 5. Reduce the risk of tool breakage, significantly reduce the local high temperature during machining, and extend tool life.

## MSHC-30P20LT OUTLINE AND MOUNTING DIMENSIONS



### TECHNICAL PARAMETERS

Applicable Liquids	Semi-synthetic Water-soluble Cutting Fluid
MAX Working Pressure	30-40bar
Maximum Flow Rate	14L/min
Filtration Accuracy	25u
Sizes	820*393*970
Standard Type	Vortex Separator



- ◆ 1. Lift pump connection: D-type 1 inch - from the cooling tank to the high-pressure system (vortex filter) supply cutting fluid line ACP-1100MF connection;
  - ◆ 2. High-pressure outlet: D-type 1/2.
  - ◆ 3. Sewage pump outlet: D type 1 inch;
  - ◆ 4. Clean suction net once per 2 months, and clean water tank once per 6 months;
  - ◆ 5. Use water-soluble cutting fluid (use non-water-soluble cutting fluid with a filter after consultation), initially used through the center of the oil filling port out of the water system injected more than half of the clean cutting fluid, up to the required level of liquid through the oil filling port to replenish;
- 3-phase, 220V, 50Hz (3-phase, 380V, 50Hz)

### AUTOMATION SOLUTIONS

The company has a number of experienced mechanical, electrical, process, commissioning engineers, mainly engaged in automation design, automation upgrading and transformation, to provide users with overall solutions, turnkey projects.



Hydraulic Cylinder Automation Cases



Automotive Half Shaft Automation Cases



Ball Iron Head Automatic Line Cases

### INDUSTRY-SPECIFIC MACHINE SOLUTIONS

For the auto parts industry, construction machinery, agricultural vehicles, forging, medical equipment, hydraulic industry and other mechanical parts design, manufacturing special equipment to improve processing efficiency and reduce labor intensity, the company has mature solutions in the milling and punching machine, differential special machine, worm special machine, front axis special machine and other industries.



### SUPPLY AND MAINTENANCE OF CNC PARTS

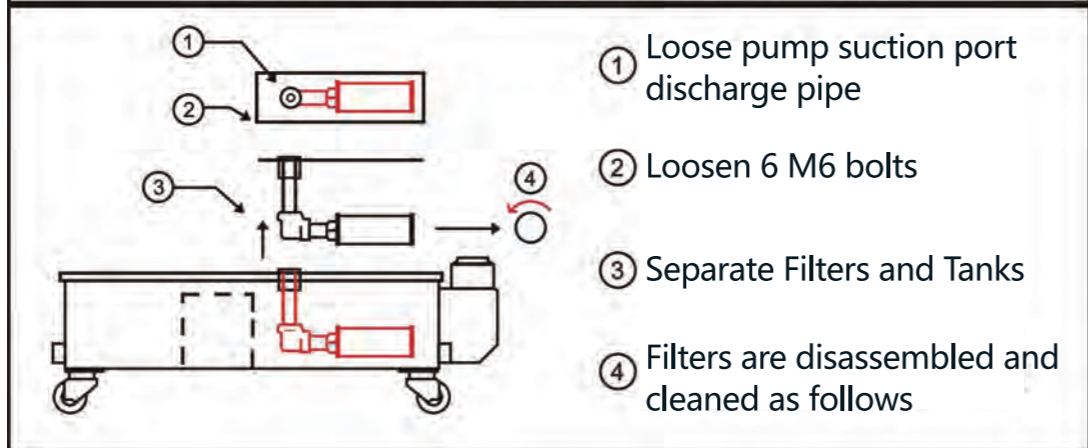
Shandong Rizhao SHANSEN CNC Equipment Co., Ltd. is mainly engaged in domestic and foreign CNC system parts sales, parts maintenance, and undertake CNC machine tool repair, transformation and other related services.



Fanuc system parts, Siemens system parts, Mitsubishi system parts, DASEN system parts sales and repair

### Filter cleaning method

After the filter has been cleaned, assemble it in the following reverse order



## SALES AND AGENCY OF DOMESTIC AND FOREIGN FAMOUS MACHINE TOOLS

Rizhao SHANSEN Machine Tool Sales Co., Ltd. was established in 2012, sales and agency of domestic and foreign famous machine tools; the company performs product quality and staff quality scientific management, from pre-sale to after-sale, quality to price have a perfect professional management system. According to the customer's specific requirements, we can develop a series of high-quality machine tool supporting and processing technology and other aspects of the solution.

## SEVERAL ADVANTAGES OF SHANSEN CNC MACHINE TOOL' S SALES CHAIN SHOPS

The product supply channel is smooth, SHANSEN CNC now has supporting business with thousands of machine tool enterprises. Pre-sale and after-sale service is guaranteed.

SHANSEN CNC has a large number of machine tool design, installation, manufacturing, maintenance professionals, a wide range of locations in the country, a professional after-sales service team, fast response time, excellent service quality.

Based on the company's advantages in the field of electrical support, it can provide a complete range of electrical and mechanical support services. Strong security, the group has six branches, a number of chain stores, machine tool showroom, electrical parts store, mechanical parts store.



## EQUIPMENT TRADE-IN, USED MACHINE TOOL EXCHANGE, TRANSFER



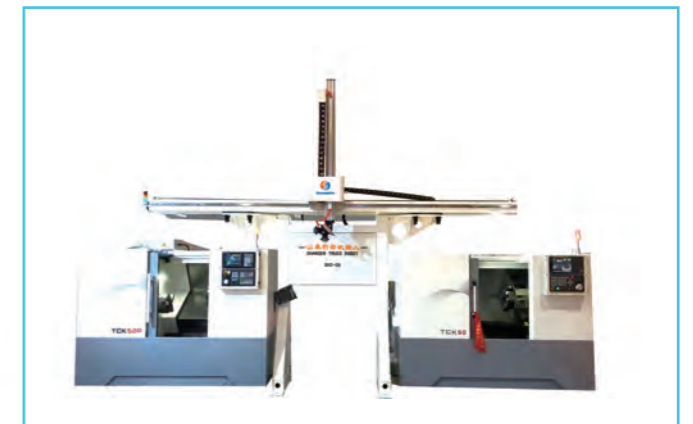
Shandong SHANSEN Robotics Co., Ltd. is a science and technology-based technology enterprise integrating research, development and manufacturing services of industrial robots, automated production lines, intelligent automated CNC machine tools and intelligent logistics equipment.

The company specializes in CNC machine tool truss manipulator, joint robot automatic loading and unloading production line, automated storage silo, non-standard automation equipment research and development and intelligent manufacturing factory system integration and application, the product involves aerospace, automotive, defense industry, engineering machinery, machine tool manufacturing, rail transportation and other fields. The company has a complete and experienced R & D and manufacturing team, all kinds of precision CNC machining equipment and automated assembly and debugging production lines, we always adhere to the high quality products, first-class service to provide customers with automation, digitalization, informationization of intelligent manufacturing solutions.

## PRODUCT APPLICATIONS



One Truss Robot



One-two Truss Robot



Multi-machine Truss Robot



Ground Track Robot

## SH SERIES ONE-TWO TRUSS ROBOT

SH series robots are highly encapsulated truss robots, which encapsulate the robot body, column, gripper system, control cabinet, human-machine interface, silo, tilting table (optional), sampling station (optional) and so on into a standard robot automatic loading and unloading cell, which can realize the overall installation and commissioning and transportation. The robot adopts the arrangement of "one to two", one robot can complete the automatic loading and unloading of two machine tools, especially suitable for the occasions of short processing beat and large production batch.



SH	5	10	20
Robot Load	2.5kg	5kg	10kg
X-axis (Horizontal) MIN Speed	120m/min	120m/min	120m/min
Z-axis (Vertical) MAX Speed	90m/min	90m/min	90m/min
Carrying Guide	Linear guide	Linear guide	Linear guide
Transmission Method	Gear Drive	Gear Drive	Gear Drive
Repeat Positioning Accuracy	±0.05mm	±0.05mm	±0.05mm
Driving Method	Servo + Reducer	Servo + Reducer	Servo + Reducer
Control Method	Dedicated Controller for Robots	Dedicated Controller for Robots	Dedicated Controller for Robots



## SH SERIES ONE-TWO TRUSS ROBOT

SH series heavy duty truss robot belongs to the more intelligent automation equipments, which can be connected with multiple CNC machines. When connected with multiple CNC machines, it can complete the automatic production of the whole process of parts from embryo to finished products, and when equipped with on-line inspection, on-line marking, on-line reading, etc., it can completely monitor the production process of each part, which is a powerful tool for the establishment of digital factory.



SH	50	100	ZX
Robot Load	25kg*2	50kg*2	100-500kg
X-axis (Horizontal) MIN Speed	120m/min	80m/min	100-70m/min
Z-axis (Vertical) MAX Speed	90m/min	60m/min	80-50m/min
Carrying Guide	Linear guide	Linear guide	Linear guide
Transmission Method	Gear Drive	Gear Drive	Gear Drive
Repeat Positioning Accuracy	±0.05mm	±0.05mm	±0.1mm
Driving Method	Servo Motor	Servo Motor	Servo Motor
Control Method	Dedicated Controller for Robots	Dedicated Controller for Robots	Dedicated Controller for Robots



## FEEDING SYSTEM

Parts in the automated processing process, the preparation of materials, the collection of finished products and the transfer between processes need to use automated storage system according to the differences between the parts, can be roughly divided into three categories of automated storage system disk parts warehouse, shaft parts warehouse and general-purpose recycling silo.



## AUTOMATION TOOLING

According to the different needs of customers, customized design and production of jigs and fixtures and automation solutions to meet different types of automation needs.



Shandong ZAOKE Intelligent Equipment Research Institute, was founded on July 1, 2018. In order to accelerate the transformation of old and new kinetic energy, deepen school-enterprise cooperation and integration of industry and education, and build a platform for professional and technical personnel to research and practice, it is led by Shandong SHANSEN CNC Technology Co. Ltd, and jointly organized by Zaozhuang Institute of Science and Technology Vocational College and Tengzhou City Machinery Industry Association. Currently in the field of mechanical engineering and automation is responsible for technology research and development, process improvement and other aspects of the professional staff of a total of more than 40 people, including 1 doctor and 30 masters.

Shandong ZAOKE Intelligent Equipment Research Institute, through the integration of talents, technology, capital and other innovation elements, combined with the teaching resources of Zaozhuang Science and Technology Vocational College and the data resources of Tengzhou Machinery Industry Association, focuses on researching the key technologies of intelligent equipment, developing high-end complex intelligent equipment series products, incubating a number of market competitiveness and high-growth intelligent equipment enterprises, and constructing a complete industrial group of intelligent equipment technology research, product research and development, parts supply and intelligent equipment application. It will build a complete industrial group of intelligent equipment technology research, product research and development, parts and components supporting supply, and application of intelligent equipment, and promote the improvement of the overall technical level of intelligent equipment in our province.

At present, the Institute is mainly engaged in machining process, sheet metal design and processing technology, tool magazine design and production process, the introduction and development of educational equipment, and at the same time, it undertakes provincial and municipal scientific research projects, technological transformation projects of the project research work.



Opening Ceremony of ZAOKE Research Institute

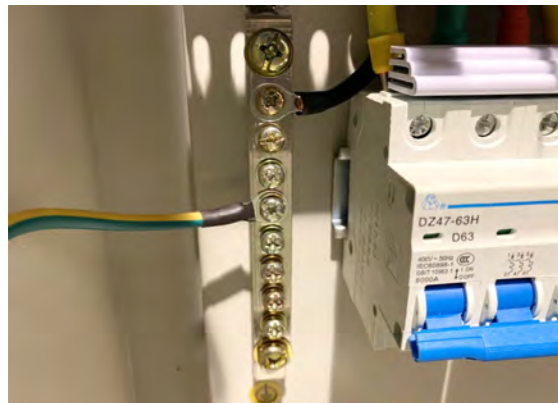


YIMU Technology Co., Ltd. is located in Tengzhou City, Shandong Province, is a holding subsidiary of Shandong SHANSEN CNC Technology Co., Ltd. with a registered capital of 50 million yuan, is a modernized manufacturer of electrical integration solutions, mainly serving municipal and civil high and low-voltage complete sets of equipment, mechanical equipment electrical cabinet integration, industrial automation robots, electronic control equipment and accessories.

## PRODUCTION SITE



## PRODUCT DETAILS



Neutral Bar & Grounding Bar



Inside of Power Cabinet



Doorknob



Wiring Terminals



Dual Power Supply Wiring

## PRODUCT SHOW



Power Cabinet XL



GGD Double Door Cabinet



Box Transformer



GGD Single Door Cabinet

The company specializes in the research, development, manufacture and sale of low-voltage switchgear GCD, CCK low-voltage distribution cabinets, MNS low-voltage withdrawable switchgear, XL power cabinets, JLX metering box (distribution board), PZ integrated distribution box, SDY dual power supply cabinets, box-type substation, medium-voltage KYN28A in the cabinet and other electrical cabinets series, cable bridge series products, high-low-voltage cable line series products, machine tool electrical cabinet integration. series of products.