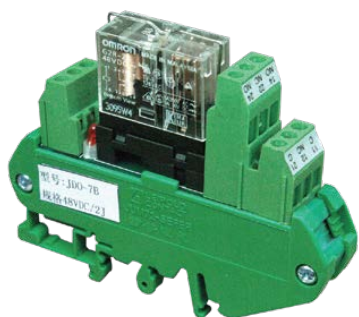




JDO继电器耦合器 JDO relay coupler

继电器耦合器是以小型电磁继电器为主，具有指示与保护功能的端子型模块接口器件。它广泛适用于自动化过程控制的外围设备、控制信号和调节装置之间的接口，来实现电频和功率的匹配。

我公司在该应用领域尽量提供适用于不同电压和功率范围的各种规格的继电器耦合器。它的特点是微型模块化，在标准 NS35/7.5 或 NS32 导轨上安装，使用安全、可靠、方便。

Relay coupler is mainly made of small electromagnetic relay. It is terminal-type module joggle of indication and protective function. It's widely used in the joggle among peripheral equipment, control signal and adjustable equipment automatically controlled to come true matching of electric frequency and power.

Our company tries to provide various specs relay couplers applying to different voltage and power in the applicable field. Character of product—is minimum modularization. Install it on the standard NS35/7.5 or NS32 lead rail and it is possible to use safely, reliably and conveniently.

一、电磁继电器图形符号和耦合器电路 Drawing symbol of electromagnetic relay and circuit of coupler

1) 继电器的图形符号 Drawing symbol of relay

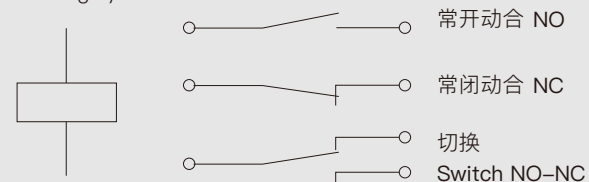
线圈和触点符号共同表示 Show with symbol of coil and contact

本系列产品中的继电器有直流线圈和交流线圈。触点有双极动合常开、常闭和单、双极切换。

Relays in the series of products have DC and AC coil. Contact has double-pole NO and NC and single-and-double-pole switch.

继电器图形符号

Drawing symbol of coil

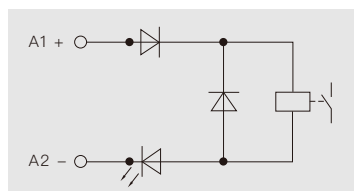


2) 耦合器电路 Circuit of coupler

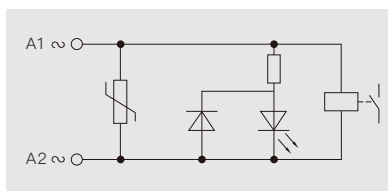
耦合器的输入端有直流、交流和交、直流两用的三种基本电路（仅举单极动合常开输出）如下：

Input end of coupler has three basic circuits, i.e., DC, AC, and AC and DC to be equally possible (only enumerate single-pole NO output):

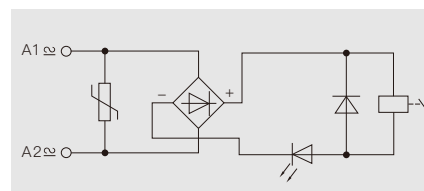
① 直流输入 DC input



② 交流输入 AC input



③ 交、直流输入 AC and DC input



以上三种基本电路中都有发光二极管指示电路和对线圈的保护，消除其断路产品的感应电压对元件的损坏。对直流输入还设有防错二极管保护。在交流或直流输入电路前端设有桥式整流电路，输入端的压敏电阻起过压保护作用。

There is indication circuit of LBD and protected coil above three basic circuits to eliminate the element is damaged by inductive voltage of breaker. DC input is set up wrong-avoiding LBD to protect. Set up bridge-type rectifier circuit at the front end of AC and DC input circuit. Resistance of input end plays a role in over-voltage protection.

二、技术数据的定义 Definition of technical data

1) 输入回路 Return circuit of input

- 输入电压 (V) 继电器耦合器的基准工作电压。典型输入电压：12V DC、24V DC、48V DC、110V DC、220V DC

Input voltage (V): basic working voltage of relay coupler Typical input voltage: 12 V DC, 24 V DC, 48 V DC, 110 V DC and 220V DC

- 输入电流 (MA) 输入电压与输入电阻的商。输入电阻 = 线圈电阻 + 驱动电路电阻

Input current (MA): quotient between input voltage and resistance Input resistance = coil resistance + resistance of drive circuit

- 额定功耗 (W/VA) 输入电压 × 输入电流。Rating consumption (W/VA): input voltage input current

- 动作电压 (V) 是继电器耦合器动作的最小输入电压。Motive voltage (V): minimum input voltage that has relay coupler move

- 复位电压 (V) 是继电器可靠返回静止状态时的输入电压。

Reposition voltage (V): input voltage that has relay reliably return immobile state

2) 输出回路 Return circuit of output

- 输出电压 (V) 允许加在继电器触点上的最大电压值
Output voltage (V): maximum voltage value to allow adding on the contact of relay
- 持续电流 (A) 继电器接通后其触点上所允许的长时间通过的电流
Continuous current (A): current contact of relay is allowed to pass for a long time on afterputting through relay
- 切换功率 (W/VA) 阻性、感性或容性负载下，输出电压与接通瞬时电流的乘积
Switch power (W/VA): product of output voltage and instant current under the load of resistance, inductor and capacitor
- 吸动延时 (MS) 从加上动作电压开始到继电器的触点闭合或断开的持续时间
Absorption delay (MS): continuous time from adding motion voltage to closing or cutting off contact of relay
- 返回滞后 (MS) 从去掉动作电压开始到继电器的触点闭合或断开的持续时间
Return delay (MS): continuous time from deleting motion voltage to closing or cutting off contact of relay
- 切换频率 (HZ) 脉冲比 = 1:2 (t 通 = t 断) 时的每秒切换次数
Switch frequency (HZ): switching times every second when ratio of pulse is 1:2 (t put through = t cut off)
- 寿命直到触点损坏为止继电器的全部切换操作次数。Life: all switch times of relay till contact is damaged
机械寿命: 不带负载。Life of machine: without load
电气寿命: 带阻性负载或感性交、直流负载。Electric life: with load of resistance or one of inductive AC and DC

三、继电器耦合器的应用 Application of relay coupler

1) 应用与保护电路图示 Graphic expression of application and protection circuit

① 接直流输出回路 Connect return circuit of DC output

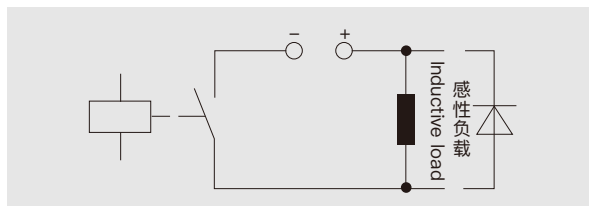


图 a、二极管保护 Picture a: diode protection

② 接交流输出回路 Connect return circuit of AC output

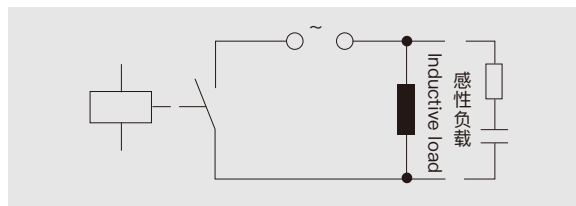


图 c、阻容 RC 保护 Picture c: RC protection

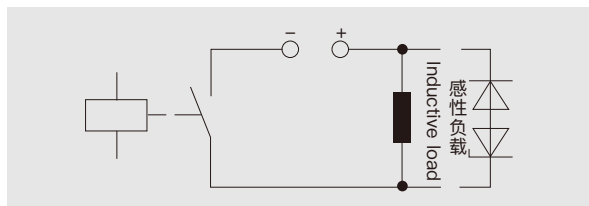


图 b、二极管及稳压管保护
Picture b: protection of diode and voltage-stabilized pipe

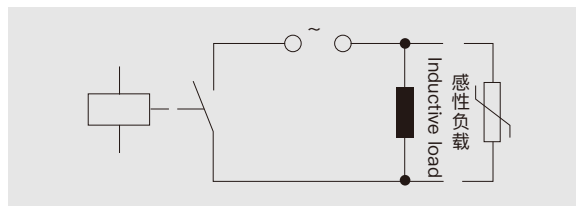


图 d、压敏电阻保护 Picture d: Resistance protection

在具体应用中，继电器触点开关接在直流或交流回路中，当它关断时会在感性或容性负载中产生较高的感应电压，从而对触头产生火花蚀磨损，为延长继电器的寿命，来用以上保护措施（见图 a、b、c、d）现大多数接触器、电磁阀等生产厂家已有配套保护器件出售，希选用时注意它们的优缺点，合理使用。

In concrete application, contact switch of relay is in DC or AC return circuit. When cutting it off, produce higher inductive voltage in load of inductor and capacitor, and damage contact. In order to delay life of relay, it is possible to use above protective measure (show as picture a, b. c and d). lost of manufacturers of contactor and electromagnetic valve, etc have had necessary protective elements to sell. When choosing and using it, pay ttention to their merit and defect to use it reasonably.

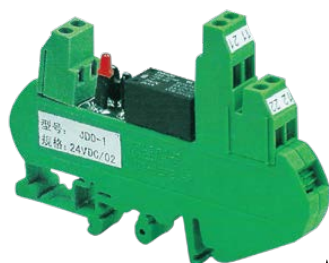
2) 注意事项 Points for attention

- 继电器的外壳请勿拆卸，破损，保持它的密封状态，继电器因焊脚在印制电路板上，不必拆换。
Please don't disassemble and damage shell of relay, and keep its sealing state. Don't change relay because welding feet is on the printing circuit board.
- 在耦合器输入输出电路中注意直流电源的正、负极性，正确接入。
Pay attention to positive pole and cathode of DC power supply in input and output circuit of coupler. It is necessary to connect right.
- 工作环境温度 $-25^{\circ}\text{C} \sim 40^{\circ}\text{C}$ 。Working environmental temperature $-25^{\circ}\text{C} \sim 40^{\circ}\text{C}$
- 使用寿命应以电气寿命（因低于机械寿命）为参考，一般在十万次左右。
Using life should have electric life (it is lower than machine life) as reference. In general, its life is about 100,000 times.

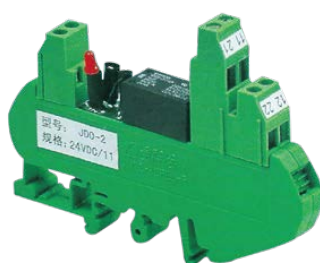
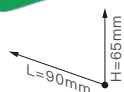
继电器耦合器

JDO 系列继电器耦合器

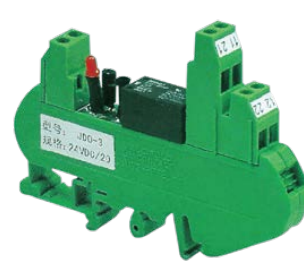
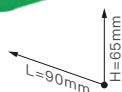
型号 Reference	JDO-1	JDO-2	JDO-3
规格 Specification	24V DC/02	24V DC/11	24V DC/20
订货号 Order code			



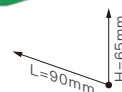
厚Thickness: 10.5mm



厚Thickness: 10.5mm

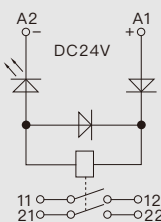
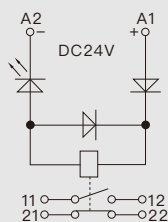
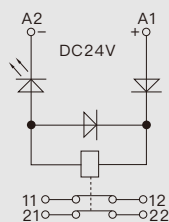


厚Thickness: 10.5mm



电路图

Circuit diagram



技术数据 Technical parameters

输入激励端: Input invigorative end			
额定电压 Rating voltage	24V DC	24V DC	24V DC
最大电压 Maximum voltage	额定值 Rating value 110%	额定值 Rating value 110%	额定值 Rating value 110%
额定电流 Rating current	12.5mA	12.5mA	12.5mA
动作电压 Motive voltage	额定电压 Rating voltage 80% max	额定电压 Rating voltage 80%	额定电压 Rating voltage 80%
复位电压 Reposition voltage	额定电压 Rating voltage 10% min	额定电压 Rating voltage 10%	额定电压 Rating voltage 10%
消耗功率 Consumption	≈300mw	≈300mw	≈300mw
输出触点端 Output contact end			
触点类型 Type of contact	2 极 单接点 二常闭 Two-pole, single contact, two-pole NC	2 极 单接点 一常开一常闭 Two-pole, single contact, one-pole NO, one-pole NC	2 极 单接点 二常开 Two-pole, single contact, two-pole NO
触点材料 Material of contact	AgCdO	AgCdO	AgCdO
最大切换电压 Max switch voltage	380V AC, 125V DC	380V AC, 125V DC	380V AC, 125V DC
额定通电流 Rating current	5A	5A	5A
电阻负载 $\cos\phi=1$ Load of resistance	1250VA, 150W	1250VA, 150W	1250VA, 150W
诱导负载 $\cos\phi=0.4$ Load of inductance	375VA, 80W	375VA, 80W	375VA, 80W
吸动延时 Absorption delay	5ms (≈3ms)	5ms (≈3ms)	5ms (≈3ms)
返回滞后 Return delay	5ms (≈1ms)	5ms (≈1ms)	5ms (≈1ms)
最高动作频率 Highest motive frequency	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)
测试耐压 Test compression	线圈与触点 Coil and contact 3000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 3000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 3000VAC 50HZ 1 分钟 min
机械寿命 Life of machine	5×10^7 次开关动作 Switch motion	5×10^7 次开关动作 Switch motion	5×10^7 次开关动作 Switch motion
电气寿命 Electric life	1×10^5 次开关动作 Switch motion	1×10^5 次开关动作 Switch motion	1×10^5 次开关动作 Switch motion
储存温度 Storing temperature	-40℃ ~ +55℃	-40℃ ~ +55℃	-40℃ ~ +55℃
工作温度 Working temperature	-25℃ ~ +40℃	-25℃ ~ +40℃	-25℃ ~ +40℃
环境湿度 Environmental humidity	动作时 As moving: 45~85%	动作时 As moving: 45~85%	动作时 As moving: 45~85%

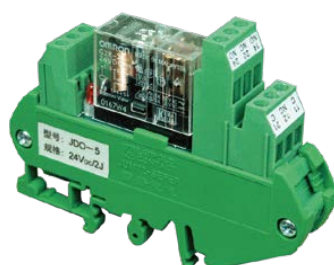
继电器耦合器

JDO 系列继电器耦合器

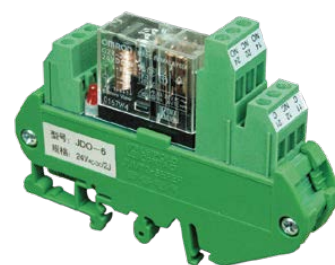
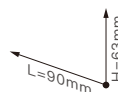
型号 Reference	JDO-4	JDO-5	JDO-6
规格 Specification	24V DC/1J	24V DC/2J	24V AC-DC/2J
订货号 Order code			



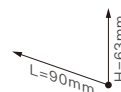
厚Thickness: 17mm



厚Thickness: 17mm

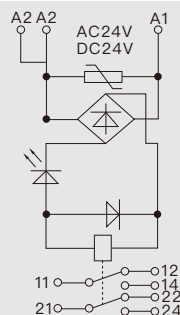
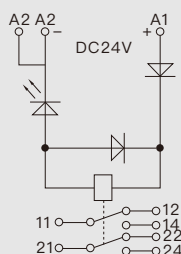
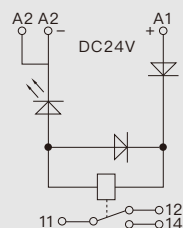


厚Thickness: 17mm



电路图

Circuit diagram



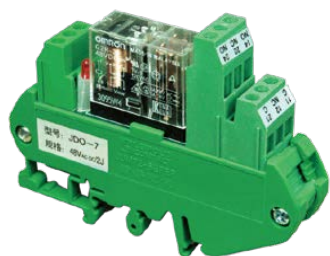
技术数据 Technical parameters

输入激励端: Input invigorative end			
额定电压 Rating voltage	24V DC	24V DC	24V DC
最大电压 Maximum voltage	额定值 Rating value 110%	额定值 Rating value 110%	额定值 Rating value 110%
额定电流 Rating current	21.8mA	21.8mA	21.8mA
动作电压 Motive voltage	额定电压 Rating voltage 70%	额定电压 Rating voltage 70%	额定电压 Rating voltage 70%
复位电压 Reposition voltage	额定电压 Rating voltage 15%	额定电压 Rating voltage 15%	额定电压 Rating voltage 15%
消耗功率 Consumption	360mw	360mw	360mw
输出触点端 Output contact end			
触点类型 Type of contact	1极单接点1转换 Single-pole, single contact, one switch	2极单接点2转换 Single-pole, single contact, two switch	2极单接点2转换 Single-pole, single contact, two switch
触点材料 Material of contact	AgCdO	AgCdO	AgCdO
最大切换电压 Max switch voltage	380V AC, 125V DC	380V AC, 125V DC	380V AC, 125V DC
额定通电流 Rating current	8A	4A	4A
电阻负载 Load of resistance	2000VA, 240W	1000VA, 120W	1000VA, 120W
诱导负载 Load of induction	1500VA, 120W	375VA, 75W	375VA, 75W
吸动延时 Absorption delay	15ms	15ms	15ms
返回滞后 Return delay	AC:10ms, DC:5ms	AC:10ms, DC:5ms	AC:10ms, DC:5ms
最高动作频率 Highest motive frequency	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)
测试耐压 Test compression	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min
机械寿命 Life of machine	2×10 ⁷ 次开关动作 Switch motion	2×10 ⁷ 次开关动作 Switch motion	2×10 ⁷ 次开关动作 Switch motion
电气寿命 Electric life	1×10 ⁵ 次开关动作 Switch motion	1×10 ⁵ 次开关动作 Switch motion	1×10 ⁵ 次开关动作 Switch motion
储存温度 Storing temperature	-40℃ ~ +55℃	-40℃ ~ +55℃	-40℃ ~ +55℃
工作温度 Working temperature	-25℃ ~ +40℃	-25℃ ~ +40℃	-25℃ ~ +40℃
环境湿度 Environmental humidity	动作时 As moving: 35~85%	动作时 As moving: 35~85%	动作时 As moving: 35~85%

继电器耦合器

JDO 系列继电器耦合器

型号 Reference	JDO-7	JDO-8	JDO-9
规格 Specification	48V AC-DC/2J	110V AC/2J	220V AC/2J
订货号 Order code			



厚Thickness: 17mm

L=90mm
H=63mm



厚Thickness: 17mm

L=90mm
H=63mm

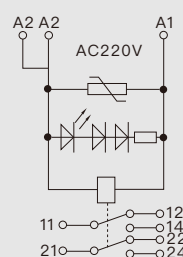
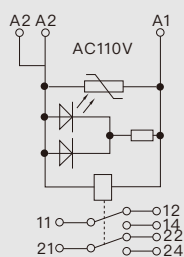
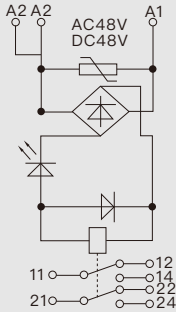


厚Thickness: 17mm

L=90mm
H=63mm

电路图

Circuit diagram



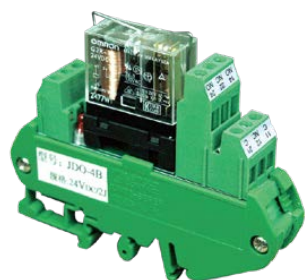
技术数据 Technical parameters

输入激励端: Input invigorative end			
额定电压 Rating voltage	48V DC	110V AC	220V AC
最大电压 Maximum voltage	额定值 Rating value 110%	额定值 Rating value 110%	额定值 Rating value 110%
额定电流 Rating current	11.5mA	10.2mA	5.1mA
动作电压 Motive voltage	额定电压 Rating voltage 70%	额定电压 Rating voltage 80%	额定电压 Rating voltage 80%
复位电压 Reposition voltage	额定电压 Rating voltage 15%	额定电压 Rating voltage 30%	额定电压 Rating voltage 30%
消耗功率 Consumption	≈360w	≈0.9VA	≈0.9VA
输出触点端 Output contact end			
触点类型 Type of contact	2极单接点2转换 Single-pole, single contact, two switch	2 极单接点2转换 Single-pole, single contact, two switch	2 极单接点2转换 Single-pole, single contact, two switch
触点材料 Material of contact	AgCdO	AgCdO	AgCdO
最大切换电压 Max switch voltage	380V AC, 125V DC	380V AC, 125V DC	380V AC, 125V DC
额定通电流 Rating current	4A	4A	4A
电阻负载 cosφ=1 Load of resistance	1000VA, 120W	1000VA, 120W	1000VA, 120W
诱导负载 cosφ=0.4 L/R= 7ms Load of inductance	375VA, 75W	375VA, 75W	375VA, 75W
吸动延时 Absorption delay	15ms	15ms	15ms
返回滞后 Return delay	AC:10ms, DC:5ms	AC:10ms, DC:5ms	AC:10ms, DC:5ms
最高动作频率 Highest motive frequency	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)
测试耐压 Test compression	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min
机械寿命 Life of machine	2×10 ⁷ 次开关动作 Switch motion	2×10 ⁷ 次开关动作 Switch motion	2×10 ⁷ 次开关动作 Switch motion
电气寿命 Electric life	1×10 ⁵ 次开关动作 Switch motion	1×10 ⁵ 次开关动作 Switch motion	1×10 ⁵ 次开关动作 Switch motion
储存温度 Storing temperature	-40℃ ~ +55℃	-40℃ ~ +55℃	-40℃ ~ +55℃
工作温度 Working temperature	-25℃ ~ +40℃	-25℃ ~ +40℃	-25℃ ~ +40℃
环境湿度 Environmental humidity	动作时 As moving: 35~85%	动作时 As moving: 35~85%	动作时 As moving: 35~85%

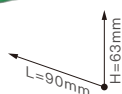
继电器耦合器

JDO 系列继电器耦合器

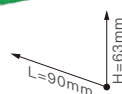
型号 Reference	JDO-4B	JDO-5B	JDO-6B
规格 Specification	24V DC/1J	24V DC/2J	24V AC-DC/2J
订货号 Order code			



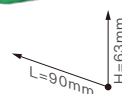
厚Thickness: 17mm



厚Thickness: 17mm

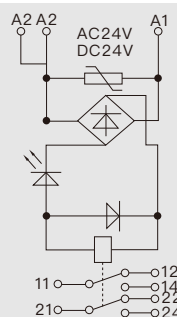
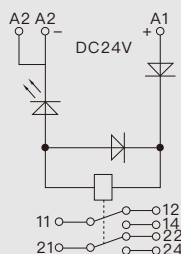
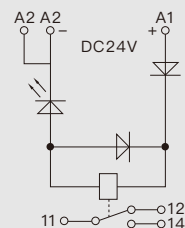


厚Thickness: 17mm



电路图

Circuit diagram



技术数据 Technical parameters

输入激励端: Input invigorative end			
额定电压 Rating voltage	24V DC	24V DC	24V DC
最大电压 Maximum voltage	额定值 Rating value 110%	额定值 Rating value 110%	额定值 Rating value 110%
额定电流 Rating current	21.8mA	21.8mA	21.8mA
动作电压 Motive voltage	额定电压 Rating voltage 70%	额定电压 Rating voltage 70%	额定电压 Rating voltage 70%
复位电压 Reposition voltage	额定电压 Rating voltage 15%	额定电压 Rating voltage 15%	额定电压 Rating voltage 15%
消耗功率 Consumption	360mw	360mw	360mw
输出触点端 Output contact end			
触点类型 Type of contact	1极 单接点1转换 Single-pole, single contact, one switch	2极 单接点2转换 Single-pole, single contact, two switch	2极 单接点2转换 Single-pole, single contact, two switch
触点材料 Material of contact	AgCdO	AgCdO	AgCdO
最大切换电压 Max switch voltage	380V AC, 125V DC	380V AC, 125V DC	380V AC, 125V DC
额定通电流 Rating current	8A	4A	4A
电阻负载 $\cos\phi=1$ Load of resistance	2000VA, 240W	1000VA, 120W	1000VA, 120W
诱导负载 $\cos\phi=0.4$ Load of inductance	1500VA, 120W	375VA, 75W	375VA, 75W
吸动延时 Absorption delay	15ms	15ms	15ms
返回滞后 Return delay	AC:10ms, DC:5ms	AC:10ms, DC:5ms	AC:10ms, DC:5ms
最高动作频率 Highest motive frequency	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)
测试耐压 Test compression	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min
机械寿命 Life of machine	2×10^7 次开关动作 Switch motion	2×10^7 次开关动作 Switch motion	2×10^7 次开关动作 Switch motion
电气寿命 Electric life	1×10^5 次开关动作 Switch motion	1×10^5 次开关动作 Switch motion	1×10^5 次开关动作 Switch motion
储存温度 Storing temperature	-40°C ~ +55°C	-40°C ~ +55°C	-40°C ~ +55°C
工作温度 Working temperature	-25°C ~ +40°C	-25°C ~ +40°C	-25°C ~ +40°C
环境湿度 Environmental humidity	动作时 As moving: 35~85%	动作时 As moving: 35~85%	动作时 As moving: 35~85%

继电器耦合器

JDO 系列继电器耦合器

型号 Reference	JDO-7B	JDO-8B	JDO-9B
规格 Specification	48V AC-DC/2J	110V DC/2J	220V AC-DC/2J
订货号 Order code			



厚Thickness: 17mm

L=90mm
H=63mm



厚Thickness: 17mm

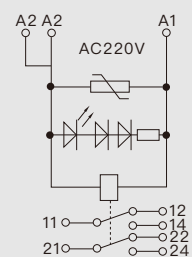
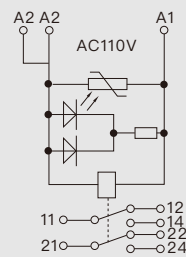
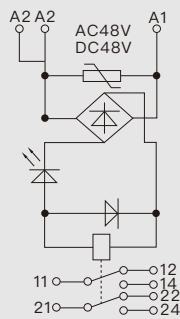
L=90mm
H=63mm



厚Thickness: 17mm

L=90mm
H=63mm

电路图
Circuit diagram



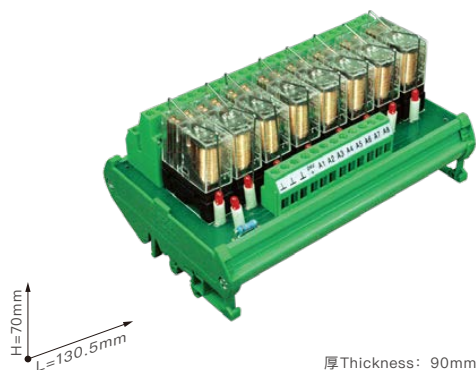
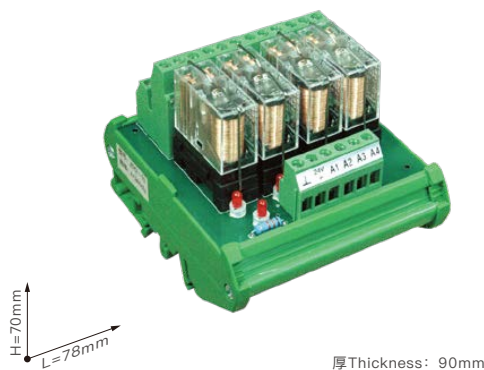
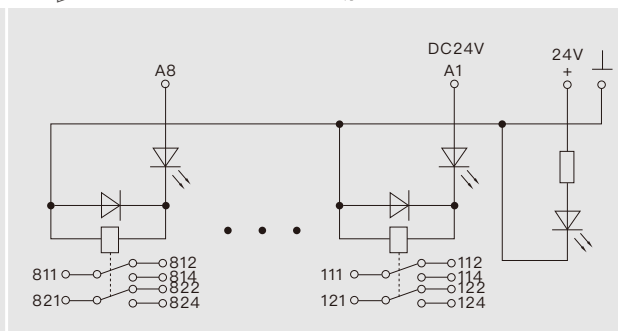
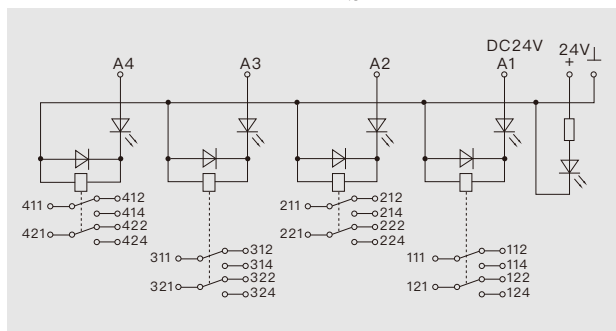
技术数据 Technical parameters

输入激励端: Input invigorative end			
额定电压 Rating voltage	48V DC	110V AC	220V AC
最大电压 Maximum voltage	额定值 Rating value 110%	额定值 Rating value 110%	额定值 Rating value 110%
额定电流 Rating current	11.5mA	10.2mA	5.1mA
动作电压 Motive voltage	额定电压 Rating voltage 70%	额定电压 Rating voltage 80%	额定电压 Rating voltage 80%
复位电压 Reposition voltage	额定电压 Rating voltage 15%	额定电压 Rating voltage 30%	额定电压 Rating voltage 30%
消耗功率 Consumption	≈360w	≈0.9VA	≈0.9VA
输出触点端 Output contact end			
触点类型 Type of contact	2极 单接点2转换 Single-pole, single contact, two switch	2极 单接点2转换 Single-pole, single contact, two switch	2极 单接点2转换 Single-pole, single contact, two switch
触点材料 Material of contact	AgCdO	AgCdO	AgCdO
最大切换电压 Max switch voltage	380V AC, 125V DC	380V AC, 125V DC	380V AC, 125V DC
额定通电流 Rating current	4A	4A	4A
电阻负载 cosφ=1 Load of resistance	1000VA, 120W	1000VA, 120W	1000VA, 120W
诱导负载 cosφ=0.4 L/R= 7ms Load of inductance	375VA, 75W	375VA, 75W	375VA, 75W
吸动延时 Absorption delay	15ms	15ms	15ms
返回滞后 Return delay	AC:10ms, DC:5ms	AC:10ms, DC:5ms	AC:10ms, DC:5ms
最高动作频率 Highest motive frequency	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)
测试耐压 Test compression	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min
机械寿命 Life of machine	2 × 10 ⁷ 次开关动作 Switch motion	2 × 10 ⁷ 次开关动作 Switch motion	2 × 10 ⁷ 次开关动作 Switch motion
电气寿命 Electric life	1 × 10 ⁵ 次开关动作 Switch motion	1 × 10 ⁵ 次开关动作 Switch motion	1 × 10 ⁵ 次开关动作 Switch motion
储存温度 Storing temperature	-40℃ ~ +55℃	-40℃ ~ +55℃	-40℃ ~ +55℃
工作温度 Working temperature	-25℃ ~ +40℃	-25℃ ~ +40℃	-25℃ ~ +40℃
环境湿度 Environmental humidity	动作时 As moving: 35~85%	动作时 As moving: 35~85%	动作时 As moving: 35~85%

继电器耦合器

JDO 系列继电器耦合器

型号 Reference	JDO-10	JDO-11
规格 Specification	4×24V DC/2J	8×24V DC/2J
订货号 Order code		

电路图
Circuit diagram

技术数据 Technical parameters

输入激励端: Input invigorative end		
额定电压 Rating voltage	24V DC	24V DC
最大电压 Maximum voltage	额定值 Rating value 110%	额定值 Rating value 110%
额定电流 Rating current	21.8mA	12.5mA
动作电压 Motive voltage	额定电压 Rating voltage 70%	额定电压 Rating voltage 80%
复位电压 Reposition voltage	额定电压 Rating voltage 15%	额定电压 Rating voltage 10%
消耗功率 Consumption	360mw	≈300mw
输出触点端 Output contact end		
触点类型 Type of contact	每个2极 单接点2转换 Single-pole, single contact, two switch	每个2极 单接点2转换 Single-pole, single contact, two switch
触点材料 Material of contact	AgCdO	AgCdO
最大切换电压 Max switch voltage	380V AC, 125V DC	380V AC, 125V DC
额定通电流 Rating current	4A	4A
电阻负载 $\cos\phi=1$ Load of resistance	1000VA, 120W	1000VA, 120W
诱导负载 $\cos\phi=0.4$ Load of inductance	375VA, 75W	375VA, 75W
吸动延时 Absorption delay	15ms	15ms
返回滞后 Return delay	AC:10ms, DC:5ms	AC:10ms, DC:5ms
最高动作频率 Highest motive frequency	1800 次/小时 (times/hour)	1800 次/小时 (times/hour)
测试耐压 Test compression	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min	线圈与触点 Coil and contact 5000VAC 50HZ 1 分钟 min
机械寿命 Life of machine	2×10^7 次开关动作 Switch motion	2×10^7 次开关动作 Switch motion
电气寿命 Electric life	1×10^5 次开关动作 Switch motion	1×10^5 次开关动作 Switch motion
储存温度 Storing temperature	-40℃ ~ +55℃	-40℃ ~ +55℃
工作温度 Working temperature	-25℃ ~ +40℃	-25℃ ~ +40℃
环境湿度 Environmental humidity	动作时 As moving: 35~85%	动作时 As moving: 35~85%

JUM72-F 端子接插模块 Terminal interconnecting modules JUM72-D

乃是工业自动化现场必不可少的转接口 It is necessary interface in industrial automation locale.

VARIOFACE 可变接口 Variable Interfaces

VARIOFACE 是一系列已规范化的接口组件的简化统称。它从连接原理、插接头针数和标记功能上完全是为满足现代化的电连接技术的各种需要而设计的。

VARIOFACE 模块是用于测量和控制技术、工艺流程控制技术或监控技术中外围设备与自动化仪器的 I/O 板之间的通用转接传输单元。

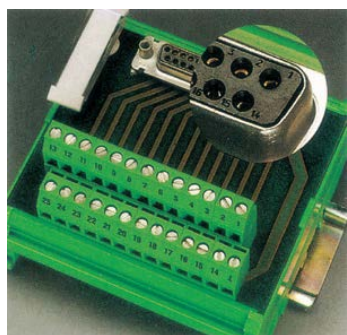
VARIOFACE 模块简化并优化了设计和装配过程，这一通用、清晰的布线方案使投入运行、改动装置和查找故障变的更为容易。

VARIOFACE is a simplified general designation of serious of standard interfaces groupware. It is designed on connection theory, needles of interconnecting and marks in order to meet modern electric connection technology.

VARIOFACE module is used to transfer between the measure and control technology, process flow control technology, monitor technical plant and I/O module of automatic instrument.

VARIOFACE module simplify and optimize the design and equipment process. The general and clear plan let us easily bring into service, change the equipment and look for the trouble.

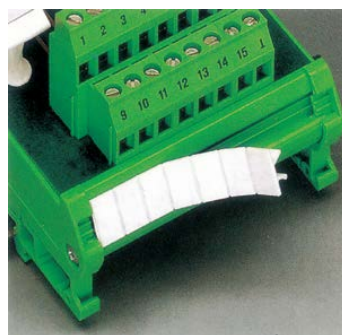
无源 VARIOFACE 模块 Passive VARIOFACE modules



VARIOFACE 无源模块通过一组导电路径实现输入端与输出端之间的极对极的直接电连接。扁平电缆插头模块和 JUM72-D 块的组合端子标记是如此设计的，以使端子与高针数插头的位置一一对应，也就是说，接插头上相邻近的位置同样反映在螺钉型接线端子上。

VARIOFACE passive modules connect input with fan-out through a set of circuit. The flat cable plug module and JUM72-D interconnecting module combination terminal are designed like that in order to make terminal and amount of the high-needle correspond. In other words, the position adjacent to plug is also reflectible on bolt type of terminal.

明确的 VARIOFACE 模块标记 Clear VARIOFACE module mark



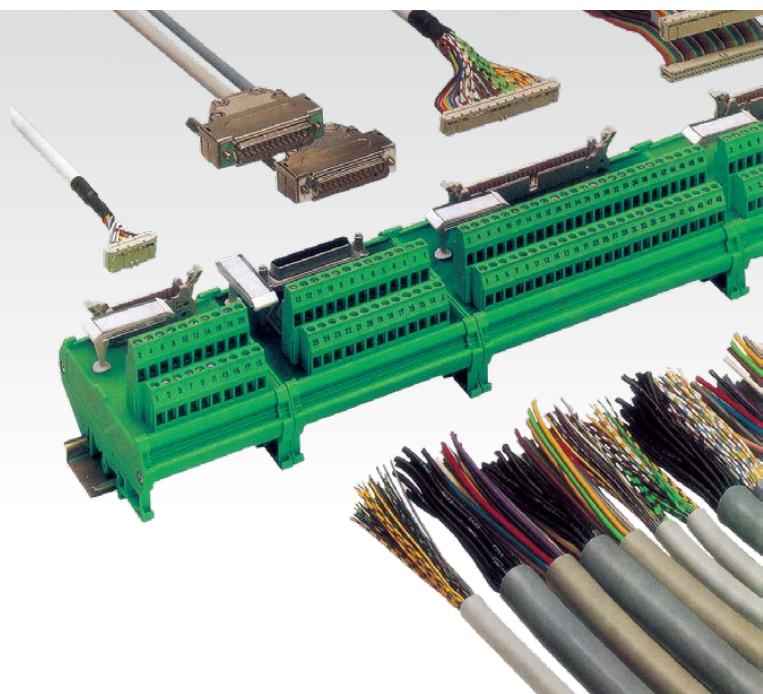
为了对每个信号进行明确的标记，VARIOFACE 模块上除了有易读的端子编号标记外，作为常规配置还提供一个标志牌，作为选项在 VARIOFACE 模块上可额外地作进一步的特殊标记。JUM72 型条的两侧具有特制的标记用凹槽，可卡放入快速标记条 (ZB...)。我们可提供不同宽度、印制不同符号的每条十位的标记条。

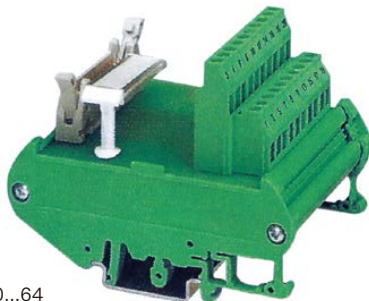
In order to clearly mark every signal there is a sign card as a normal equipment besides readable terminal marks. You may make added marks as options. There are special flute mark on the two sides of the JUM72 in which mark bars may be put. We offer mark bars which have different width, different printed signs, and every mark bar has ten-bit.

应用 VARIOFACE 的众多好处 many advantages using VARIOFACE

VARIOFACE 意味着：
ARIOFACE means that:

- 可实现多针的接插件与根据工业现场需要所采用的连接方式间最佳的接口匹配；
Realize the best interface matching between connector and adoptive connection according to industrial locale needs;
- 通过清晰的布线、对模块和针位的确标注来实现快速接线和迅速排除故障；
Realize fast connect and speedy remove the trouble through clear wiring and marks to modules and needle position.
- 实现在 U 型和 C 型导轨上的简捷安装。
Realized easily fix on U and C guides.





JUM72-F10...64
10-64针 needles

JUM72-F series of terminal interconnecting module is connect 10-64 needles type of jack to the double bolt type of connector terminal on a module through the circuit board. You may choose the needle-place according to need, and easily realize that the needles type of flat cable plug in the control center of electrical control cupboard (according to IEC807-2/DIN41652standard) and the lead on the double terminal leading to industrial locale are connected on number corresponding and fixed on NS35/7.5 and NS32 normal guides. The module can insert and pull out, is general, safe and convenient.

The module may be numbered with the numbers. It may be numbered with the sign bar ZB.. on the crust of the module, too, but it must be ordered especially.

JUM72-F系列端子接插模块

JUM72-F series of terminal interconnecting modules

JUM72-F 系列端子接插模块是将 10 至 64 针的针式插座与双层螺钉型接线端子通过电路板连接在一个模块上。根据需要选择针位，可方便地实现电控柜中的控制中心，如工控机 I/O 接口的多针扁平电缆接头（符合 IEC603-1/DIN41651 标准）与通往工业现场双层端子的导线，采用编号对应连接，安装在标准导轨 NS35/7.5 或 NS32 上，具有通用性，可插拔性，使用安全可靠方便。

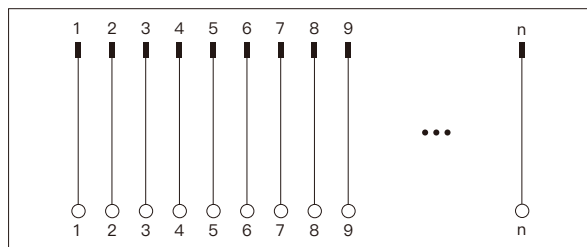
模块可以用标号座编号，也可以在模块外壳图标记条 ZB... 标号，但须另外订购。

型号规格 model, type	针数 needle number	模块厚度 B (mm) thickness B of the module	接插件与端子编号布置 collocation of the connector and terminal numbers
JUM72-F10	10	45	
JUM72-F14	14	45	
JUM72-F16	16	67.5	
JUM72-F20	20	67.5	
JUM72-F26	26	90	
JUM72-F34	34	112.5	
JUM72-F40	40	112.5	
JUM72-F50	50	135	
JUM72-F60	60	180	
JUM72-F64	64	180	

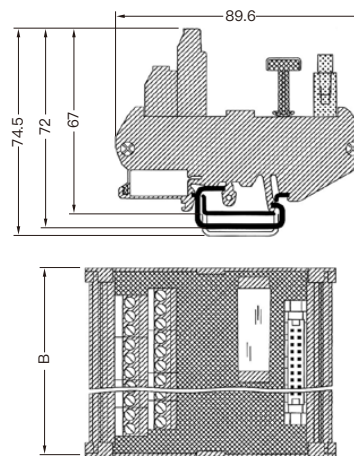
技术数据: 1) 接导线截面 the section of wiring: 0.2~2.5mm²
 Technical data 2) 允许电流 allowable current I: 1A
 3) 允许电压 allowable voltage U: AC/DC 60V

标准符合 IEC664/IEC664A/DIN VDE 0110;
 Standards compliance DIN VDE 0160 (部分the part)

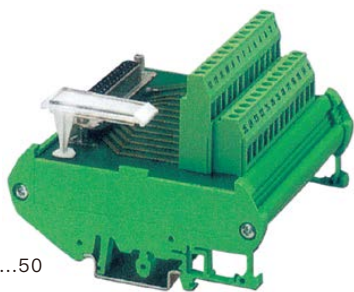
连接图 Size layout JUM72-F10...64



外型尺寸图 Connection layout JUM72-F10...64



JUM72-D系列端子接插模块 JUM72-D serious of terminal interconnecting modules



JUM72-D/S 9...50
 JUM72-D/B
 9-50针 needles

该模块系列分针式接插模块 JUM72-D/S 和孔式接插模块 JUM72-D/B。

JUM72-D 系列端子接插模块是将 9 至 50 针的 D-SUB 针式或孔式插座与双层螺钉型接线端子通过电路板连接在一个模块上。根据需要选择针位, 可方便地实现电控柜中的控制中心的 I/O 接口控制线缆的针式或孔式插座 (符合 IEC807-2/DIN41652 标准) 与通往工业现场双层端子上导线, 采用编号对应连接, 安装在标准导轨 NS35/7.5 或 NS32 上, 具有通用性, 可插拔性, 使用安全、可靠、方便。

模块可以用标号座编号, 也可以在模块外壳用标记条 ZB.. 标号, 但须另外订购。

The serious of module is made of JUM72-D/S needle type of interconnecting modules and JUM72-D/B hole type of interconnecting module.

JUM72-D serious of terminal interconnecting modules are connect 9-50 needles D-SUB needle or hole type of jack to the double bolt type of connector terminal on a module through the circuit board. You may choose the needle-place according to need, and easily realize that the I/O interfaces control cable needle or hole type of jack in the control center of electrical control cupboard (according to IEC807-2/DIN41652standard) and the lead on the double terminal leading to industrial locale are connected on number corresponding and fixed on NS35/7.5 and NS32 normal guides. The module can insert and pull out, is general, safe and convenient.

The module may be numbered with the numbers. It may be numbered with the sign bar ZB.. on the crust of the module, too, but it must be ordered especially.

型号规格 model, type	针数 needle number	模块厚度 B (mm) thickness B of the module	接插件与端子编号布置 collocation of the connector and terminal numbers
JUM72-D/S9	9	45	
JUM72-D/S15	15	67.5	
JUM72-D/S25	25	90	
JUM72-D/S37	37	112.5	
JUM72-D/S50	50	112.5	

端子接插模块

JUM72 系列端子接插模块

型号规格 model, type	针数 needle number	模块厚度 B (mm) thickness B of the module	接插件与端子编号布置 collocation of the connector and terminal numbers
JUM72-D/B9	9	45	
JUM72-D/B15	15	67.5	
JUM72-D/B25	25	90	
JUM72-D/B37	37	112.5	
JUM72-D/B50	50	112.5	

技术数据: 1). 接导线截面 the section of wiring: 0.2~2.5mm²

Technical data

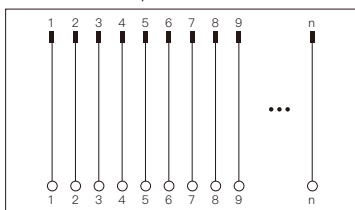
2). 允许电流 allowable current I: 2.5A

3). 允许电压 allowable voltage U: AC/DC 125V

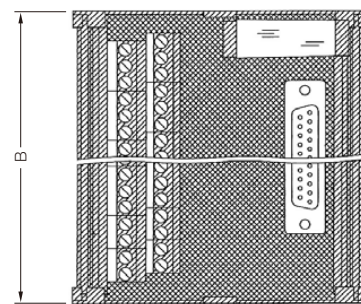
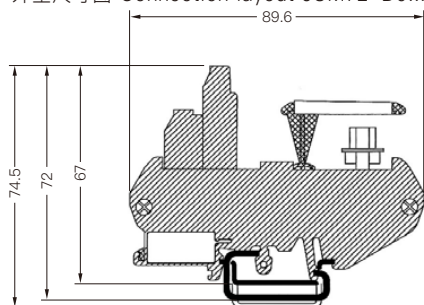
标准符合 IEC664/IEC664A/DIN VDE 0110; DIN VDE 0160 (部分the part)

Standards compliance

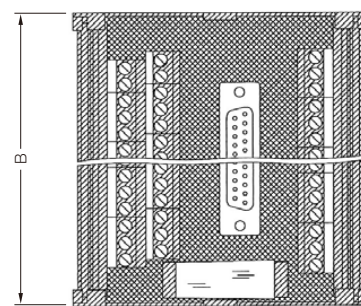
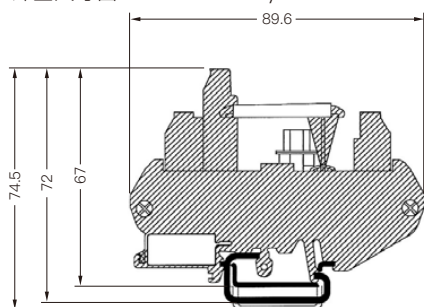
连接图 Size layout JUM72-D/S 9...50



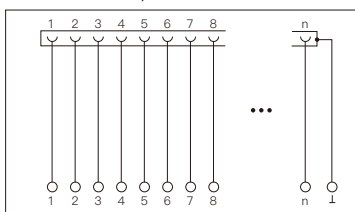
外型尺寸图 Connection layout JUM72-D9...37

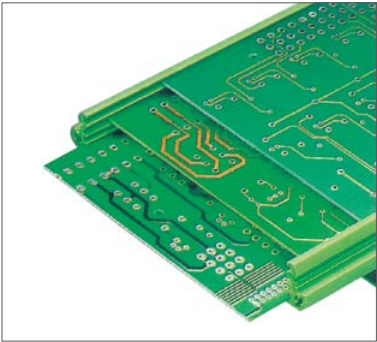


外型尺寸图 Connection layout JUM72-D50



连接图 Size layout JUM72-D/B 9...50

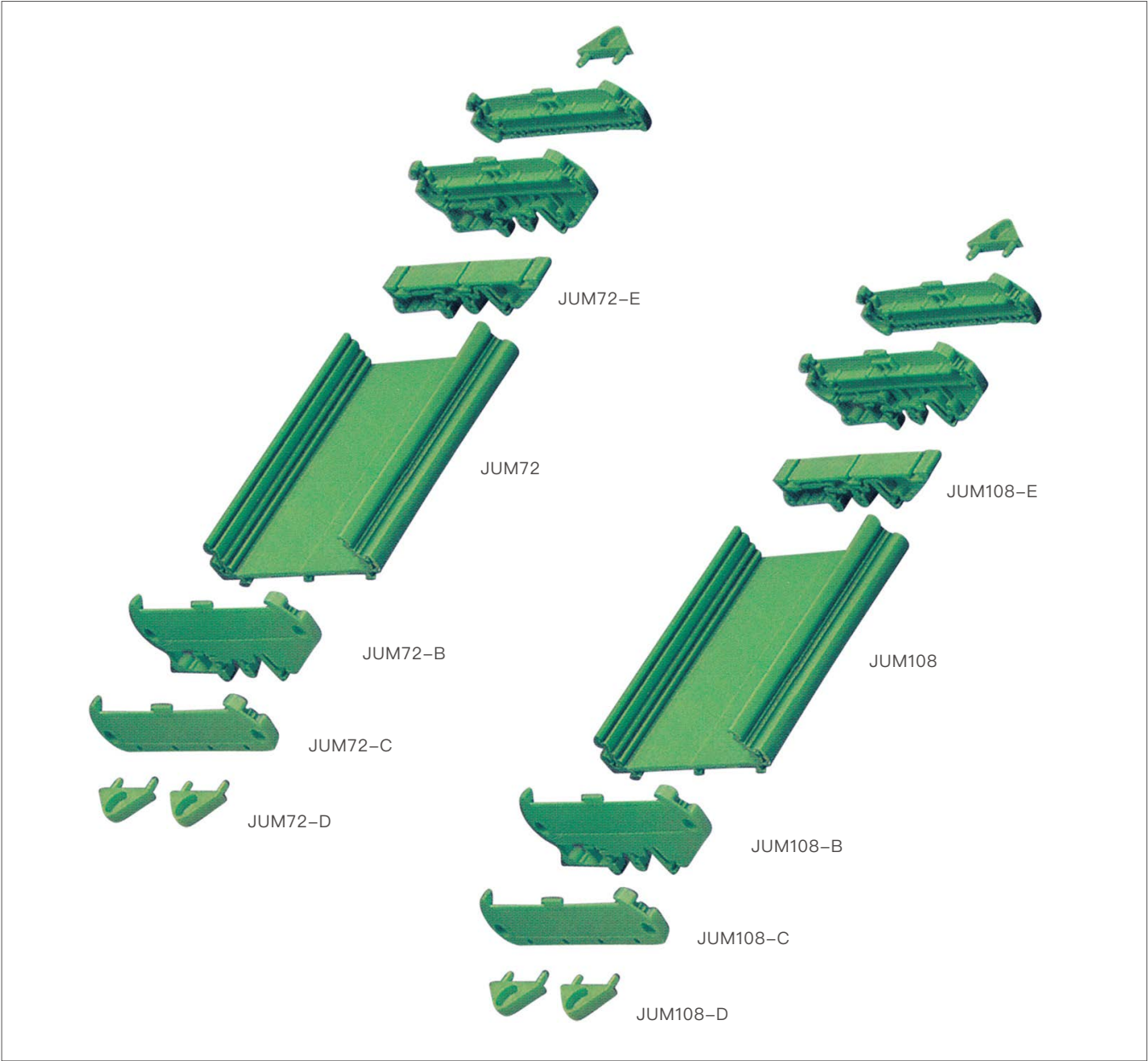




JUM/LUM 系列挤压型条外壳还有其它优点：

- 安装快捷；
 - 减少散件数目，提高经济效益；
 - 可按客户的需要来截取型材的长度，精确到毫米，没有固定的尺寸限制；
 - 由于底板型材和侧端板用螺钉连接，机械稳定性高；
 - 可放置三层印刷线路板（在应用 SMD 技术时），可使得整个电子线路非常紧凑；
 - 绝缘材料的阻燃等级按照 UL94 为 VO 级。
- 按实际需要截取型材的长度**
可按您的需要来截取型材的长度，精确到毫米，没有固定尺寸限制。这可使外壳与所装的电子线路相匹配。
- 可放置三层印刷线路板**
型材带有引导槽，可放置三层印刷线路板，如应用 SMD 技术可实现十分紧凑的电子线路。

挤压型条模块 JUM72/108的组件

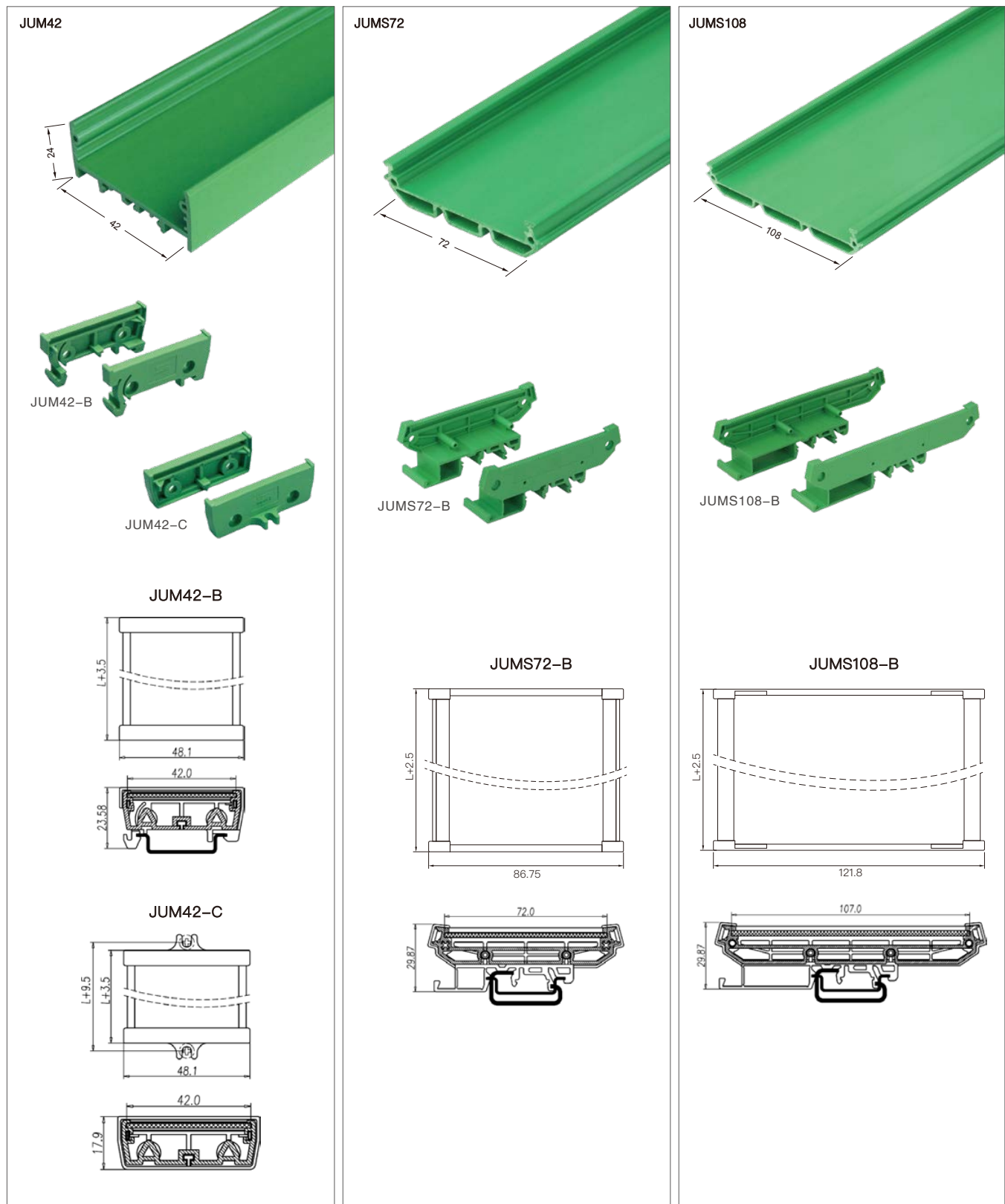


型号	JUM 72	JUM 72-B	JUM 72-C	JUM 72-D	JUM 72-E
订货号	7010.032	7010.033	7010.034	7010.035	7010.036
型号	JUM 108	JUM 108-B	JUM 108-C	JUM 108-D	JUM 108-E
订货号	7010.037	7010.038	7010.039	7010.040	7010.041

挤压型条模块

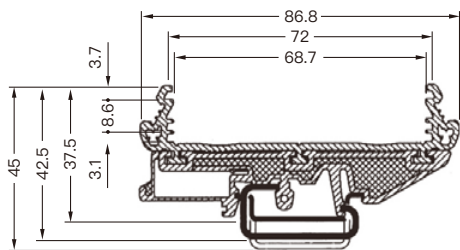
JUM/LUM 系列挤压型条模块

挤压型条模块 JUM42/JUMS72/JUMS108的组件

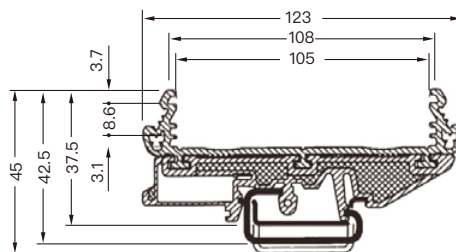


型号	JUM42	JUM42-B	JUM42-C	JUMS72
订货号	7010.028	7010.029	7010.031	7010.042
型号	JUMS72-B	JUMS108	JUMS108-B	-
订货号	7010.043	7010.044	7010.045	-

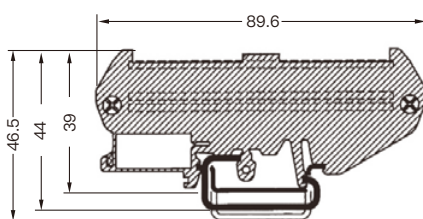
JUM72/108 型条



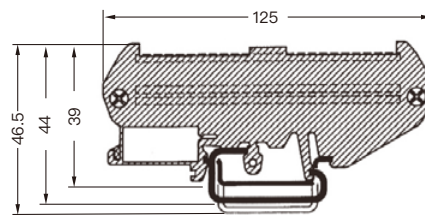
带通用安装脚单元 JUM72 -E 的挤压型材



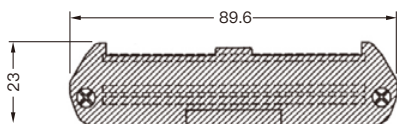
带通用安装脚单元 JUM108 的挤压型材



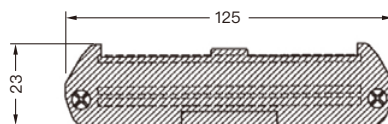
带通用安装脚的侧端板 JUM72-B



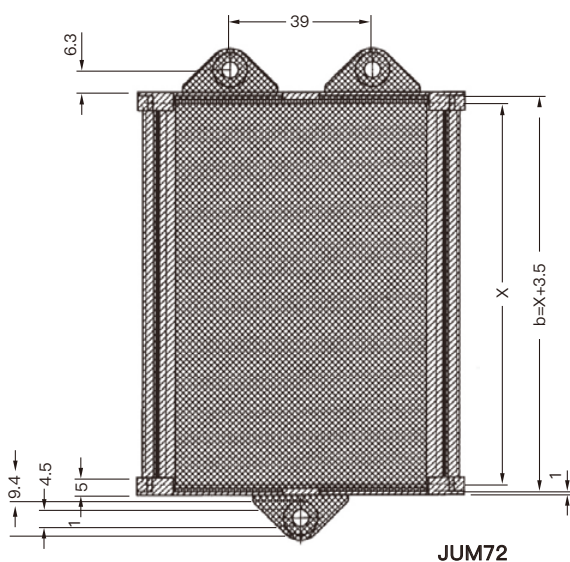
带通用安装脚的侧端板 JUM108B



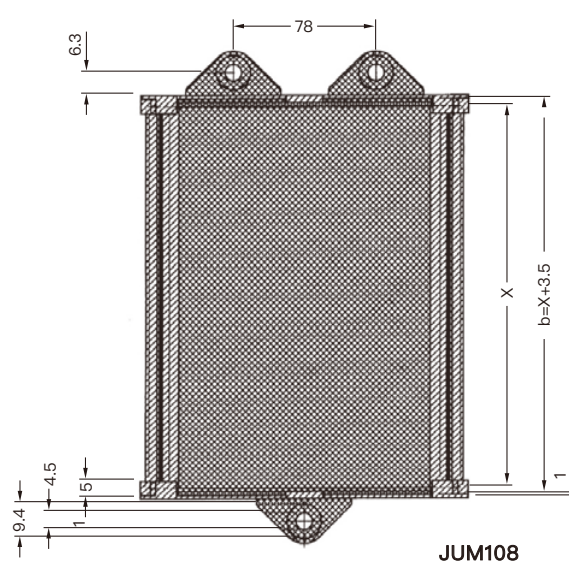
不带通用安装脚的侧端板 JUM72 - C



不带通用安装脚的侧端板 JUM108 - C



JUM72



JUM108

带通用安装脚 JUM72/108-B 和加固法兰 JUM-D(直接在板壁上安装之用) 的挤压型材 JUM72/108

x= 型材长度 b= 印刷线路板长度