

## Industrial Robot Manipulator 工业机器人本体







# For robot control cabinet 机器人控制柜

- ── Wiring Connection Solution in the Cabinet 柜体内接线连接方案
- ── Functional Product 功能性产品
- Teaching Pendant Unit Connectivity 示教器连接
- ── Ethernet Connectivity 以太网连接
- ── Servo Motor Connectivity 伺服电机连接





# For robot servo and drive system 机器人伺服和驱动系统

- Relays Solution 继电器方案
- ── Industrial Communication Connectivity 工业通讯连接
- → Print Circuit Board Connectivity 印刷电路板连接

IO Connector for Extension Sensor and Visual System 外接传感器及视觉 系统IO连接器



M8 M12 Panel Mount Connector M8 M12面板安装连接器

Robot IO Connectivity for Signal and Power 机器人信号及电源IO连接



Circular Plastic Connector 圆形塑料连接器



RAYCHEM INSTALITE Molded Boots 瑞侃INSTALITE模塑靴型热缩



Dynamic Multi Enclosure Series Dynamic 复合外壳系列



Heavy Duty Connector 重载连接器



Ethernet Connectivity 以太网连接



M8 M12 Panel Mount Connector M8 M12面板安装连接器



Mini IO Wire to Wire Connector Mini IO 线到线连接器



Industrial RJ45 Connector 工业RJ45连接器

Servo Motor Connectivity 伺服电机连接



Intercontec Connector Intercontec连接器

Robot Arm inside Connectivity 机器人手臂内部连接



Mini IO Wire to Wire Connector
Mini IO 线到线连接器



Dynamic Wire to Wire Connector Dynamic 线到线连接器





Wiring Connection Solution in the Cabinet 柜体内接线连接方案



DIN Rail Terminal Block 导轨接线端子



Dynamic Connector (Danatap Series) Dynami连接器 (分线模块系列)



PIDG Pre-Insulated Diamond Grip PIDG 预绝缘端子

**Functional** Product 功能性产品



Power Resistor- HS Series 功率电阻 HS系列



Corcom EMI/RFI Filter Corcom 电磁干扰/射频 干扰滤波器

**Ethernet** Connectivity 以太网连接



Industrial RJ45 Connector 工业RJ45连接器

**Teaching Pendant Unit** Connectivity 示教器连接



Intercontec连接器



Heavy Duty Connector 重载连接器

#### Print Circuit Board Connectiity 印刷电路板连接

ALTONIA DECIMAN						
Product Series	Wire to Board 线到板			Board to Board 板到板		
产品系列	Discrete wire 散线	Ribbon cable 扁平电缆	FFC	Parallel 水平	Right Angle 垂直	Co-Planar 平铺
AMPMODU 50/50 Grid Connector System AMPMODU 1.27X1.27mm间距连接器系列		•		•	•	
AMPMODU System 50 Connector AMPMODU 1.27mm间距连接器		•	•	•	•	•
AMPMODU 2mm Connector AMPMODU 2mm间距连接器				•	•	•
AMPMODU 2.54mm Connector AMPMODU 2.54mm间距连接器				•	•	
AMPMODU MTE Connector AMPMODU MTE连接器	•					
Micro MaTch Connector Micro MaTch 连接器	•	•		•	•	
0.8mm Free Height (FH) Connectors 自由高度 0.8mm间距连接器				•	•	
Micro Stack Connectors Micro Stack连接器				•		
Flexstrip Jumpers Flex Strip柔性跳线				•	•	•
RITS Connector RITS连接器	•					
Dynamic Connector D1000 Series Dynamic连接器D1000系列	•					
Dynamic x900 Spring Clamp Series Dynamic x900弹片接线系列	•					
Dynamic Connector D2000 Series Dynamic连接器D2000系列	•					
Dynamic Connector D3000 Series Dynamic连接器D3000系列	•					
Dynamic Connector D4000 Series Dynamic连接器D4000系列	•					
Dynamic Connector D5000 Series Dynamic连接器D5000系列	•				•	



#### 工业通讯连接 Ethernet 以太网 **Product Series** Encoder Normal Data 产品系列 编码器 一般数据 Industrial Mini I/O Connector 工业Mini I/O连接器 RJ45 Modular Jack RJ45 网络端口 Industrial RJ45 Jacks with Integrated Magnetics 集成变压器的工业RJ45端口 Latching USB Connector 带锁扣的USB连接器 Industrial SCSI Connector • 工业SCSI连接器 Interconnects for the IEEE 1394 Standard

Relays Solution 继电器方案					
Product Series 产品系列	Contact Type 触点类型	Electric Data 电气参数	Core Power 线圈功耗	Temperature 最高温度	Size 尺寸
RT Relay	1FormC/1FormA	250VAC 16A	400mW	85	29X12.7X15.7
RZ Relay	1FormC/1FormA	250VAC 16A	400mW	85	29X12.7X15.7
RE Relay	1FormC	250VAC 5A	200mW	85	20X10X10
PE Relay	1FormA	250VAC 6A	200mW	85	20X10X10.6
T9A Relay	1FormC/1FormA	250VAC 30A	1W	85	32.3X27.4X20.4
Force Guided Relay	Depend on detail	250VAC 6A/8A	700mW~1200mW	70	Depend on detail
SNR Relay	1FormC/1FormA	250VAC 6A	170mW	85	28X5X15
PCN Relay	1FormA	250VAC 5A	120mW	70	20X5X12.5
MSR Relay	1FormC/1FormA	250VAC 10A	220mW	85	28.6X10X15

IEEE1394标准的连接器



#### M8 M12 Panel Mount Connector M8 M12 面板安装连接器

The panel mount connectors of M8 M12 are mostly applicable for robot arm's extended function port to any visual system such as high quality industry camera or multiple sensor systems. TE Connectivity M8 M12 product family provide A Code from normal 3pin, 4pin to high density 12pin connector on sensor connections. D Code for Ethernet connector and X Code for 10 gigabit high speed connector are also available. These products are compatible to general sensors and devices. Furthermore This product family can also provide panel mount connectors with wires and mating cable assembles.

面板安装型 M8 M12 连接器最适合作为机器人手臂上的功能扩展接口诸如高清工业照相机或者各种功能的传感器系统的应用产品。TE Connectivity 的 M8 M12 连接器产品家族提供了适合传感器连接的 A 编码系列的一般 3 位,4 位产品到高密度的 12 位的产品。还有提供了适合以太网连接的 D 编码和适合高达 10G 传输速度的 X 编码的产品。这些产品都与通用型传感器和设备接口兼容。另外,本产品家族还提供带线的面板安装连接器和与之匹配的预制电缆组件。



### Mini IO Wire to Wire Connector Mini IO 线到线连接器

Mini IO Connector is a compact design product for industrial communication connector. The wire to wire series keep the small and reliable mechanical lock. It can support the cable up to 8 position wires with shielding. Both soldering and crimping can be applied for the termination. This series can be a good option in robot narrow space application.

Mini IO 连接器是一种用于工业通讯连接的紧凑型设计的产品。 其中的线到线系列保留了小巧和可靠的机械锁定结构。它支持最大 8 芯电线并且带屏蔽层的电缆。连接器可以用焊接和压接两种方式和电线连接。这个系列是应用于机器人狭小空间内的最佳选择。



### Dynamic Wire to Wire Connector Dynamic 线到线连接器

Dynamic wire to wire connectors can be a better connection solution inside robot arm between motors. From D1000 series with 5A current rating to D5000 series with 35A current rating this product provide user a rich product selection on power and signal. Dynamic's special contact design makes more reliable mating and lower contact resistance. The strong mechanical design on both contact and housing makes the mating to resist the high vibration and shock condition during robot's operation. The connector general locking structure makes the mating and unmating very comfortable .

Dynamic 线到线连接器提供了一种在机器人手臂内,电机之间更好的连接方案。从支持 5 安额定电流的 D1000 系列到支持 35A 额定电流的 D5000 系列,这种产品给用户提供了电源和信号连接的丰富选择。Dynamic 的特殊的端子设计确保了更可靠的连接和更小的接触电阻。端子和塑胶外壳的强壮结构确保了机器人在操作中的抗震动性和抗冲击性。连接器的通用互锁机构使得连接器的配合和解锁非常轻松。



#### Industrial RJ45 Connector 工业 RJ45 连接器

Since Ethernet is more often used in Industrial Machinery Applications the integration of production equipment, components and drives is becoming more and more important and offers various opportunities.

TE Connectivity Industrial RJ45 IP 20 Plug provides more reliable metal lock structure for vibration and shock resistance and easier assembly process to realize field installation possibility. The transfer speed covers normal Cat 5e to higher Cat 6A.

Another series with IP 67 water proof level with both push-pull structure and circular mating structure can provide more direct connection port on equipment to make the Ethernet connector between machines.

由于以太网在工业机械中的应用越来越广泛,各种生产设备、部件和驱动器的集成变得越来越重要,并提供了各种机会。

TE Connectivity 工业 RJ45 插头 IP20 的插头集合了更抗振动与冲击性能的的金属锁的结构和简单的装配工艺实现现场安装的可能性。传输速度可以覆盖一般的 5e 到高速的 Cat 6A。

另一个具有 IP 67 防水等级的系列,既有推挽式结构,又有圆形配合结构,可以在设备上提供更直接的连接端口,使以太网连接在设备机器之间。



### Heavy Duty Connector 重载连接器

TE's HDC product series is designed for data, signal and power connections in harsh environments. The modular connector design provides a high degree of flexibility so solutions can be customized for different applications such as machinery, robotics, railway, wind energy and conventional energy generation and distribution.

For robot application, it provides rich product series to meeting different requirements to connect from robot arm to control cabinet.

TE 的重载连接器产品是专为在恶劣环境中的数据、信号和电源连接。模块化连接器的设计提供了高度的灵活性,因此可以针对不同的应用,如机械,机器人,铁路,风能和常规能源的产生及分配定制解决方案。

对于机器人应用提供了丰富的产品系列,满足不同的要求,从机器人手臂到控制柜连接。



### Dynamic Multi Enclosure Series Dynamic 复合外壳系列

Human machine interfaces (HMI) can be found on a variety of machines. They allow people to interface with equipment to control, operate and program. The multiple enclosure connector was developed as a connector for I/O interfaces for HMI. They have superior operability, are very safe, easy to use and there are multiple varieties. Plus, they use Dynamic series contacts to give them very high reliability. There are two types in the line up, metal and plastic, used according to the environment. You can make a selection based on your application.

This series can be also adopted as the robot IO for both power and signal.

人机界面(HMI)被各种设备广泛 使用,通过 HMI 实现设备的控制, 操作及编程, 复合外壳连接器是 为 HMI 开发的 I/O 连接器。 优异的操作性,高度的安全性, 良好的使用性能及采取 Dynamic 系列的端子,实现高可靠性。 考虑到现场工作环境,配备金属 型和塑料型两种。可根据应用进 行选择。

这个系列也可以用于机器人的电源和信号的 IO 连接器。





#### Circular Plastic Connector 圆形塑料连接器

Circular Plastic Connectors are rugged, cost-effective connectors that can be used to provide power input and output to and from virtually any device. It's commonly used in Energy Management Systems, Power Generators, Material handling, Agriculture Equipment, Battery Management systems, Industrial machinery, Rolling Stock, Forklifts, Welding Equipment, Robotics, Construction equipment, Power Supplies, Industrial Scales and Weighting, etc. The use of Circular Plastic Connectors enables customers to reduce installation time, meet harsh and space saving requirements, design with high-performance materials, and speed up their go-to-market plans.

圆形塑料连接器是坚固耐用,成本效益高的连接器,可用于提供几乎任何设备的电源输入和输出。它通常用在能源管理系统、发电机、材料处理、农业设备、电池管理系统、工业机械、车辆、叉车、焊接设备、机器人、特种设备、电源、工业秤和称重等。 圆形塑料连接器的使用使客户减少安装时间,满足苛刻的空间节能的要求,设计高性能的材料,并加快其进入市场的计划。



#### RAYCHEM INSTALITE Molded Boots 瑞侃 INSTALITE 模塑靴型热缩套管

INSTALITE boots are a lighter weight alternative of our -25 heat-shrink boots. Utilizing our expertise in fluid-resistant, modified elastomers, we' ve created semi-rigid, abrasion-resistant boots that are up to 30% lighter than our standard -25 boots. INSTALITE boots offer the same balance of high-temperature fluid resistance and long-term heat resistance.

This product can best protect the termination area between cable and connectors.

INSTALITE 靴型热缩套管是重量更轻的替代我们 25 种热缩靴型套管。利用我们的流体阻力,改性弹性体的专业知识,我们已经创建了半刚性,耐磨的靴型热缩套管,比我们的标准型的 25 种靴型套管轻高达 30%。 INSTALITE 靴型热缩套管提供相同的高温流体阻力和长期耐热性的平衡。

这个产品可以最好的保护电缆和连接器之间的压接部位。



#### Intercontec Connector Intercontec 连接器

With TE's Intercontec connectors, you can now benefit from a large variety of solutions that make connecting easy. These connectors enable modular machine designs which make them highly compatible and usable in many different combinations. With their plug and play concept these connectors enable easy and quick installation, as well as easy replacement of defective parts – even for non-electricians. The connector assembly is possible without any tools and particularly easy due innovative concepts like the crown clamp: the shielding mesh can remain uncut. With their innovative 1/8 quick locking system, Intercontec connectors drastically reduce installation times and the risk of failures during installation on site. Thanks to their reliable performance, the connectors also reduce downtime, making your motor applications more productive.

使用TE的Intercontec 连接器,你现在可以从各种各样的解决方案,使连接容易受益。这些连接器使模块化的设计,使它们高度兼容,可采用许多不同的组合使用。连接器具有"即插即用"特点,即使并非专业电工也能轻松快速地完成安装和方便地更换残次部件。由于融合了冠状夹具等创新理念,连接器可以进行免工具组装且操作特别容易:屏蔽网可以保持未切状态。他们的创新 1/8 快速锁定系统使 Intercontec 连接器大大减少安装时间和现场安装过程中失败的风险。由于其可靠的性能,连接器也减少停机时间,使您的电机应用更具生产力。



#### Power Resistor HS Series 功率电阻 HS 系列

TE Connectivity are the leading supplier of standard and custom designed aluminum housed resistors for general-purpose use, power supplies, power generation and the traction industry. The HS is a range of extremely stable, high quality wire wound resistors capable of dissipating high power in a limited space with relatively low surface temperature. The power is rapidly dissipated as heat through the aluminum housing to a specified heatsink. The resistors are made from quality materials for optimum reliability and stability. TE can test resistors to conform to relevant international, MIL or customer specifications. TE are happy to advise on the use of resistors for pulse applications and to supply information for high voltage use and low-ohmic value, alternative mountings and termination type.

TE connectivity 是铝合金通用电阻产品的主要供应商。用于标准和定制电源,发电行业。HS 是一系列非常稳定的,高品质的线绕电阻器,能够在相对有限的空间内耗散高功率,同时保持表面低温。功率能迅速消散,热量通过铝壳传导到指定的散热片,以达到快速散热。电阻器由优质材料制成,以达到最佳的可靠性和稳定性。TE 可以提供电阻器测试以符合相关国际、MIL 或客户规格。TE 非常乐意对脉冲应用电阻的使用提供建议,并对采用高电压和低电阻可供选择的安装方式和接线类型值提供信



### | Corcom EMI/RFI Filter | Corcom 电磁干扰 / 射频干扰 滤波器

TE Connectivity offers over 300 solutions for EMI/RFI problems associated with susceptibility, as well as compliance with international emissions standards. Corcom filters are available in a wide range of single and 3-phase designs as well as IEC inlet and power entry modules which can combine several functions to reduce cost, space and labor. Solutions are also available for DC applications and applications requiring extremely high performance with feedthrough filters and capacitors for a wide range of applications.

TE Connectivity 提供超过 300 个解决方案,以解决与电磁兼容性有关的 EMI / RFI 问题,以及遵守国际排放标准。Corcom 滤波器可在很宽的范围内的单、三相设计以及 IEC 接口和电源输入模块,可以结合多种功能,降低成本,空间和劳动。解决方案也可用于直流的应用和需要非常高的性能与应用范围广馈通滤波器和电容器。



#### | PIDG Pre-Insulated Diamond Grip | PIDG 预绝缘端子

TE Connectivity's PIDG terminals are designed for uniform reliability in the most difficult circuit environments. They consist of a tin plated copper or tin plated phosphor bronze body for spring spades, plus a copper and colored insulation sleeve fitted over a terminal barrel. The many millions of AMP terminals that are still deployed twenty years after installation are a testament to the rigorous testing and research that went into their design and manufacturing. The specialized design of tool dies and the construction of the terminal allows for uniform insulation thickness under crimping pressure, transmitting this pressure evenly to the center of the crimping area. Many of the TE PIDG terminals meet or exceed the requirements of MIL-T-7928, Type II, Class 1 and 2.

TE Connectivity 的 PIDG 预绝缘端子是为在最难的电路环境下提高可靠性而设计的。该端子是由一个镀锡铜或镀锡磷青铜的弹簧导体,加上铜和彩色绝缘套安装组成。数以百万计的 AMP 端子在安装二十年后仍在使用,证明了这足以对其设计和制造经严格测试和研究后的可靠性。工具的专业设计和端子的结构允许在压接压力下保持均匀的绝缘厚度,将压力均匀地传递到压接区域的中心。许多的 TE PIDG 预绝缘端子达到或超过要求 MIL-T-7928,II 型,1和 2 级。



#### DIN Rail Terminal Block 导轨接线端子

In TE DIN Rail terminal Block, the conductive metal parts are adopted by the highest level of copper; the whole series of products housing are adopted by highest UL 94-V0 flame retardant materials. The Spring terminal is a universal spring wiring technology. Part of the spring is made of imported high strength steel from Europe. The series of products are of advanced structural design, and they have the characteristics of large fixing force, strong vibration resistance and good airtightness.

TE terminal Block can be widely used in automation control, new energy, machinery manufacturing, rail, petrochemical smelting and a series of high quality requirements for the wiring industry. Combined with TE's strict quality management and material advantages, as well as a full range of products through UL certification, making this series of products for our customers to bring better customer experience.

TE 的导轨系列端子,在所有端子种类中,承载电流的导电金属件部分采用最高级别的红铜;全系列产品的外壳均采用 UL 94-V0 阻燃等级原材料。

其中的弹片接线端子采用的是一种通用的弹片接线技术。弹片部分采用欧洲进口高强 度钢材。该系列产品结构设计先进,导线接入后具有压紧力大、抗震性强、气密性好 等特性

TE 接线端子可广泛应用于自动化控制、新能源、机械制造、轨道交通、石化冶炼等一系列对接线有高品质要求的行业。结合 TE 严格的品质管理和在材料学方面的优势,以及全系列产品通过 UL 认证,使得该系列产品可以为我们的客户带来更好的客户应用体验。



## Dynamic Connector (Dana-tap Series) Dynamic 连接器(分线模块系列)

A common feature in factory automation equipment or robot control cabinet is the separation of functional units into a device in the final process. A power supply or signal is distributed to each unit, usually using a printed circuit board or terminal block. Therefore, we have developed a distribution connector Dyna-Tap, which replaces the printed circuit boards and terminal blocke that occupy more space.

The Dyna-Tap Connectors D3000 series and the D5000 family provided products for power connector distribution (registration for designs)

工厂自动化设备或机器人控制柜中很常见的有将功能分离的单元在最终工序中结合成一个设备。原本向各单元供给电源或信号通常这在会采用印刷线路板分线和端子接线的方法。故敝司开发了具有分线功能的分线用连接器——Dyna-Tap,替代更占用空间的印刷线路板及端子。

Dyna-Tap Connectors 的 D3000 系列和 D5000 系列提供了电源连接器分线用的产品(已申请登记外观设计)





### AMPMODU 50/50 Grid Connector System AMPMODU 1.27X1.27mm 间距连接器系列

AMPMODU 50/50 Grid Connector are designed for both parallel board-to-board stacking and right angle mating in high density applications. It can also provide cable-to-board connection capabilities.

Available are double row, vertical shrouded headers and receptacles in sizes ranging from 10 through 100 positions (in 10 position increments). Parallel board-to-board stack heights of 6.35, 8.13 and 9.91mm are achievable by selection of the appropriate header. The receptacle is the same for all three stack height headers.

Cable connectors without a latch will mate with the vertical headers, while cable connectors with or without a latch can be used to mate with the right-angle headers.

AMPMODU 1.27X1.27mm 间距连接器的设计是用于平行板到板和互相垂直的板到板的高密度配对连接应用。它还可以提供电缆到板的连接能力。

此产品是双排设计,带护栏的垂直型公头和母座,尺寸从10到100位(10位的增量)。平行板到板的叠层高度是6.35,8.13和9.91mm三种。需要选择相应的垂直型公头,母座都是相同的。

没有锁的电缆连接器将与垂直型公头配合,而带或不带锁的电缆连接器可与弯角型公 头配合使用。





### AMPMODU 2mm Connector AMPMODU 2mm 间距连接器

AMPMODU 2mm connectors reliably and economically meet the packaging and inter-connection requirements of today's miniature sophisticated electronics. In today's marketplace, 2mm is expanding over many other industry segments due to space constraints. This versatile double row connector system is comprised of various straight and right-angle posted headers for thru-hole and surface mounting and several closed top-entry receptacle assemblies for vertical and horizontal mounting. Headers and receptacle assemblies are available in selected sizes ranging from 4 through 80 positions

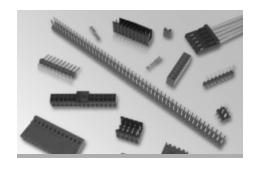
AMPMODU 2mm 间距连接器的可靠性和经济行满足了当今小型化趋势。在今天的市场,由于空间的限制 2mm 间距连接器将拓展更多的行业应用。本产品是双排型连接器,由多种垂直型和弯角型的公头和用于顶部插入的垂直型和弯角型母座组成。可供按穿孔焊接或表面贴片安装的选择。配对组合的位数可以从 4 位到 80 位。

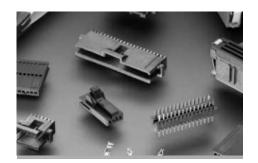


### AMPMODU 2.54mm Connector AMPMODU 2.54mm 间距连接器

A wide range of modular interconnects on the industry standard 2.54mm grid addressing applications across all industry sectors. Designed for board-to-board connection, including stacking, the AMPMODU 2.54mm interconnection system provides a comprehensive solution for this ever popular connection standard.

该连接器采用模块化互连设计,符合 2.54mm 间距的行业标准,可广泛应用于各行各业。板对板的连接的设计,包括堆叠的应用,AMPMODU2.54mm 间距连接器对于整个连接标准提供了全面的解决方案。





#### AMPMODU System 50 Connector AMPMODU 1.27mm 间距连接器

The AMPMODU System 50 connector family includes a wide variety of high density board-to-board (thru-hole and surface-mount) and cable-to-board connectors. It is composed of one- and two row receptacles and post headers on .050  $\times$  .100 spacing between contacts for extreme density and efficient use of printed circuit board area.

AMPMODU System connector can be categorized in three groups: board-mount headers, board-mount receptacles and cable-to-board receptacles.

The cable-to-board .050 center FFC receptacle connectors are part of the AMPMODU System 50 family for terminating flexible flat conductor cable and flexible etched circuitry.

The AMP-LATCH System 50 Ribbon Cable connector is a receptacle connector that will terminate ribbon cable on .025 centerlines. It is available in select sizes from 10 to 100 positions and will accommodate 30 AWG [0.05 mm2] solid or stranded and 32 AWG [0.03 mm2] stranded conductors, with PVC cable insulation.

AMPMODU 1.27mm 间距连接器包括各种各样的高密度板到板(通孔和表面贴装)和线到板连接器。它是由单排和双排母座和公头呈现 1.27mm X 2.54mm 间距的极端高密度针位排布,有效使用印刷电路板上的面积。

AMPMODU 1.27mm 间距连接器可分为三组:板装公头、板装母座和线到板用的母端连接器。

线到板 1.27mm 间距 FFC 母座连接器是 AMPMODU 1.27mm 间距连接器的一部分,用来连接柔性扁平电缆和柔性蚀刻电路。

AMP-LATCH 1.27 扁平电缆连接器是可压接 0.64mm 间距扁平电缆的母座连接器。可适用于 10 到 100 位的电缆,导体是 30AWG(0.05 平方 ) 和 32AWG(0.03 平方 ) 的单股或多股线,带 PVC 绝缘的电缆。



#### AMPMODU MTE Connector AMPMODU MTE 连接器

TE Connectivity AMPMODU MTE Connector is the good solution for wire to board and wire to wire connection. It's widely applicable in many electrical equipments including personal computer, copy machine, commercial printer, instruments, medical equipment and automobile control system. The product used IDC terminals to meet different customer's requirement. It's single row wire to board solution can cover from 2 to 25 pin selection in a narrow space with reliable locking system.

TE Connectivity 的 AMPMODU MTE 连接器适用于各种线对板和线对线应用,广泛用于众多类型的电子设备,包括 电脑、复印机、商业打印机、应用设备、医疗设备,以及汽车控制。产品采用绝缘刺破触点(IDC)或压接触点,以满 足客户的不同需求。它的单排线到板的解决方案可以提供 2 到 25 位的选择针数。这是一个在狭小空间内提供可靠锁定的一个不错的方案。



#### 0.8mm Free Height (FH) Connectors 自由高度 0.8mm 间距连接器

The popular 0.8mm FH connector system saves more than 50% board space compared to conventional 1.27mm centerline connectors. Its product portfolio includes board stacking heights ranging from 5mm through 20mm in increments of 1mm. It is also available in multiple size ranging from 40 to 200 positions. In addition, right angle plugs are available which mate to standard receptacles.

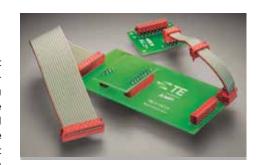
常用的 0.8mm 间距自由高度连接器系统可以节省超过 50% 的电路板空间,相比传统的 1.27mm 间距的连接器。它的产品组合包括板堆叠高度从 5mm 到 20mm,增量为 1mm。它也有多种尺寸,从 40 到 200 个位。此外,直角插头可与标准插座配套使用。



#### Micro MaTch Connector Micro MaTch 连接器

TE Connectivity Micro-MaTch connector family, with its contact spacing of 1.27mm, offers a variety of wire-to-board and board-to-board interconnections. The Micro-MaTch contact helps prevent fretting corrosion, the traditional failure mode in tin-plated connections. Relative movements caused by vibrations/thermal expansion between male and female contacts are absorbed by an additional positioning spring in the female part. By preventing movements on the contact spot, a gas tight connection can make the Micro-MaTch contact spring system fretting corrosion resistant

TE Connectivity 的 Micro-MaTch 连接器,其触点间距 1.27mm,提供各种各样的 线对板和板对板连接。Micro-MaTch 连接器有助于防止摩擦腐蚀,这是镀锡连接的 传统失效模式。由公端子和母端子接触部位产生的振动和热膨胀引起的相对运动会被 母端子结构上的附加定位弹簧吸收。通过防止接触部位上的运动,气密性连接可以使 Micro-MaTch 连接器抵抗摩擦腐蚀。



#### Micro Stack Connectors Micro Stack 连接器

These connectors are equipped with a floating mechanism that can absorb slippage of connector positioning between units of the separator mechanism of the receptacle. They can provide 30.3 mm float in the x and y directions at mating to provide reliable mating, easing the restraints of board design and mounting. These connectors also use a two-point contact mechanism for mutual contact of roll sides to increase contact reliability. This helps to increase quality of FA products used in harsh environments. We have now added tabs and headers that are 16 mm high to support a new stacking height of 26 mm.

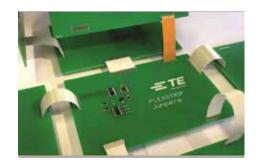
这种连接器配备了一个浮动机构,可以吸收在连接器的分离机构之间的定位滑移。它们可以在配对的 X 和 Y 方向提供 3 O.3 毫米的浮动,以提供可靠的配合,减轻板设计和安装的限制。这些连接器还采用两点接触的原理,使连接器在相互插入时,增加接触可靠性。这有助于提高在恶劣环境中工厂自动化产品的质量。我们现在添加了16 毫米高的新产品,能够支持的堆叠高度达 26 毫米。



#### | Flexstrip Jumpers | Flexstrip 柔性跳线

Flexstrip jumpers provide a secure and reliable multi-conductor board-to-board connection. As an alternative to conventional point-to-point wiring, TE's Flexstrip jumpers offer a flat conductor construction that provides unrivalled flexibility and resistance against vibration and high flexing cycles. Especially in applications that require a reliable high performance interconnect, the Flexstrip jumpers can be repeatedly flexed without failure. Available in a wide range of board-to-board jumpers to suit all standard PCBs, this solution does not require any crimping or cutting and so ensures an easy assembly and soldering process, as well as low installtion costs.

Flexstrip 柔性跳线提供安全可靠的多导体板对板连接。作为一种替代传统的点对点的布线,TE 的 Flexstrip 柔性跳线采用平板导体结构,提供了无与伦比的灵活性抗振动和高伸缩周期。特别是在需要高性能可靠的互连应用中,该 flexstrip 柔性跳线可反复弯曲并且无损坏。可广泛用户板对板跳线,适合所有标准的印刷电路板,该解决方案不需要任何卷曲或切割,并易于装配和焊接工艺,而且安装费用较符。



#### RITS Connector RITS 连接器

The e-CON standard was developed in Japan in 2001 by a group of Japanese manufacturers in order to standardize connections from sensors to terminals. This standard is not under control of any standard organizations. Without the standard, each manufacturer had specified different connectors for terminations of sensors to Prog rammable Logic Controllers (PLCs), and end users had to prepare many different connectors and different tools. In order to improve this situation and create a user-friendly environment, TE Connectivity has offered AMP RITS connectors as the standard interface connector for sensors. The 4-position RITS connector is approved as the industry standard connector.

e-CON 标准是在日本 2001 年中一组日本制造商为规范从传感器到终端设备的连接器而开发的。这个标准并没有受控于任何标准的组织体系。由于没有标准,每个制造商都指定了不同的连接器,用于传感器终端到可编程逻辑控制器(PLC),最终用户必须准备许多不同的连接器和不同的工具。为了改善这一状况,创建一个用户友好的环境,TE connectivity 提供了 AMP RITS 连接器作为传感器标准接口连接器。4-位 RITS 连接器被批准为行业标准的连接器。



### Dynamic x900 Spring Clamp Series Dynamic x900 弹片接线系列

DYNAMIC spring clamp version is a screw-less, crimp-less connector. Comparing it with traditional crimping types of Dynamic, the spring clamp brings the customer a quick on-site connection with no need for crimp tooling. This is necessary for some applications where the end user must do the wiring. It provides installers a quick and easy way to terminate wires in the field which saves both time and labor. Moreover, the DYNAMIC spring clamp version has all the similar features of the existing crimp type including keying, audible locking and vibration resistance. This series has D1900 for signal connector with 3.5mm pitch and D3950 for power connector with 7.5mm pitch.

DYNAMIC 弹片接线版本系列是兔螺丝,免压接的一种连接器。与传统的 Dynamic 压接方式相比,弹片接线版本使客户在现场快速连接,无需压接工具。这尤其适用于需要最终用户必须直接接线的应用。它提供了一个快速简便的方法,省时省力。此外,弹片接线版本具有所有现有的压接版本的特点,包括键控,声音锁定和抗振动的类似功能。本系列包括了 3.5mm 间距的信号连接器 D1900 系列和 7.5mm 间距的电源连接器 D3950 系列。





#### | Dynamic Connector D1000 Series | Dynamic 连接器 D1000 系列

D-1000 Series are the smallest connectors for signal lines among all the Dynamic connector series. The Dynamic 1000 Series consists of 3 different pitch sizes: 2.0mm standard type, 2.5mm high-voltage type and 3.5mm type.

D-1000 Series has gold plated contacts to maintain its high reliability and also tin plated contacts for economical market needs. Customers can choose their own contacts according to specifications, applications and cost.

它是 Dynamic 系列中,尺寸最小的系列。最适于用作工业设备配套的高可靠性信号 线田连接器。

连接器的间距,因所使用电流的大小、电压的差异等,有标准型 2.0mm 间距、高电压型 2.5mm 间距及分线型 3.5mm 间距等三种,今后仍将根据市场需求,不断扩充产品系列。

在保持高可靠性的同时,考虑到性价比,配备镀锡型。根据工作环境、条件进行采用, 有助于降低成本。



#### Dynamic Connector D2000 Series Dynamic 连接器 D2000 系列

The D-2000 series is a compact connector in the Dynamic series and has the specifications for industrial machinery. Its proprietary concept long contact wiping length provides the highreliability needed for industrial machinery. The line-up also includes the multi-position drawer type not found in any other series and the hybrid type that integrates signal and power lines in a single connector.

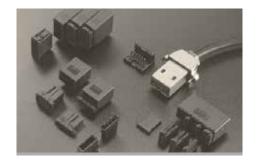
D-2000 系列在 Dynamic 系列中属紧凑型,满足工业设备配套规格。以具备有效配合长度的独有端子,满足工业 设备的高接触可靠性要求。 同时配备其他系列不含的多位抽屉型、信号线与电源线 汇集在同一连接器上的混合型。

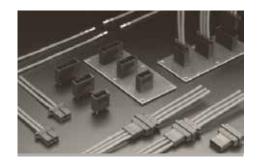


### Dynamic Connector D3000 Series Dynamic 连接器 D3000 系列

The 3000 series is the main Dynamic Series. They are widely used as industrial 'signal' and 'power' connectors. Pin layout comes in three types: standard 3.81mm pitch and high voltage 5.08mm pitch. The former one is used for signal circuits and the latter two are for high-voltage circuits. For power source usage, it meets recent demands for small size and high power due to the increasing miniaturisation of the machinery, and the newly developed copper alloy, which can carry a higher current of 15A per pole despite its small size. This concept is based on the development of the Dynamic Series to cover as wide a range of solutions for as many customers as possible. This concept makes the D-3000 series terminals fit all the housings, and the wide variety of which means that it is not necessary for a customer to look outside of this range for every requirement.

它是 Dynamic 系列的主要系列,被广泛用作工业设备的"信号用"和"电源用"连接器。针脚间距配备有标准 3.81mm 间距和高电压型的 5.08mm 间距两种,前者主要为信号电路和电源电路用的规格,后者为高压电源电路用的规格。特别是电源用规格,随着最近设备小型化,为满足小型高功率的要求,使用新开发的铜合金,每位能够承载 15A 的大电流。开发的基本概念是"对于客户各式使用用途,Dynamic 系 列都要支持。为此,要完善壳体和线路板安装式的多样化。"。正如其概念,D-3000 系列的端子能够适用于该系列的所有壳体,通过其壳体的丰富变化,Dynamic 系列可满足各种不同用途及设备用连接器的需求。D-3000 系列离初始开发已有十多年的销售业绩,在客户提出意见的过程中获得了发展。而且目前也在进一步继续发展延伸。

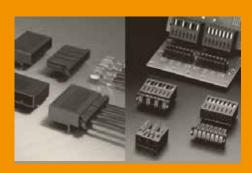




#### Dynamic Connector D4000 Series Dynamic 连接器 D4000 系列

These 20A power connectors are perfect for industrial machinery. They offer an optimal size for high current applications where space is an issue. Current capacity per unit volume is up 32% compared to the existing products.

最适于 20A 电源线的工业设备配套连接器。以最佳尺寸, 提供设备要求的小型、大电流化。 端子是具有 4 点接触的新设 计。 它与 Dynamic3000 系 列 相比,确保50%以上的电 流值,配合高度化增加到 14% 左右,实现小型化。每 极的电流容量,与现有产品 相比,提升 32% 左右。



### Dynamic Connector D5000 Series Dynamic 连接器 D5000 系列

The Dynamic 5000 series was developed for up to 45 amperes in response to the demand for improved reliability and productivity for the main power lines in equipment. They can be used for a variety of applications as replacements for terminal blocks, or round terminals. It is compact but with a high current capacity. In addition, it has a wide variety of housings to cover all applications from PCB to internal wiring distributions. The D-5000 series is right for high current power line applications where reliability cannot rest only on operator's skills

为满足设备对主电源线的高可靠性、效率要求,开发最大 45A 的 Dynamic5000 系列,取代接线端子或圆形端子,可用于各种用途。它沿袭 Dynamic 系列的端子设计,虽然紧凑,但具有高电流连接容量,且实现了操作性优异的低插拔力和高可靠性。同时,壳体变化也更为丰富,该系列可涵盖从印刷线路板到内部 布线的所有型号。D-5000系列设计在确保大电流的同时,无需更多的安装技巧便可确保连接的可靠性。



#### Industrial Mini I/O Connector 工业 Mini I/O 连接器

The Industrial Mini I/O connector system is a small, compact, latching, wire-to-board I/O interface that is now also available as a vertical version, enabling you to safely and reliably connect in all angles. TE's Industrial Mini I/O solution allows you to save up to 75 percent of space compared to conventional RJ45 plugs, giving you the flexibility to use your limited space on the PCB more efficiently.

Designed with two points of contact, this connector is built for the stringent demands of an industrial and high vibration environment, enabling increased productivity through a reliable connection. The compact latching feature provides a high retention force of up to 98 N which protects the plug from accidental pull and unmating, reducing downtime, unstable connections and unnecessary consequential losses. Available in 2 polarized versions to prevent mismating, the Industrial Mini I/O connector is easy to connect. It ismost commonly used as an RJ45 replacement, and the newly available vertical version allows for even more connection opportunities.

工业 Mini I/O 连接器系统是一种小型的、紧凑的、可锁紧的、以线到板为主的 I/O 接口,现在也可以作为垂直版本,使您能够安全可靠地连接各个角度。相比传统的 RJ45 插头 TE 的工业 Mini I/O 解决方案可为您节省多达 75% 的空间,其灵活性应用于有限空间在 PCB 上更有效。

此产品设计了两个接触点,是建立在工业和高振动环境的严格要求下,通过可靠的连接提高生产率。紧凑的闭锁功能提供了一个高保持力高达 98N 保护插头意外的拽拉分离,减少停机时间,连接不稳定和不必要的连接损失。可选择 2 个键位版本防止错配,工业 Mini I/O 连接器连接也很方便。这是更换最常用的 RJ45 的最好选择,新推出的垂直版也提供了更多的连接机会。



#### Industrial SCSI Connector 工业 SCSI 连接器

TE industrial SCSI connector is suitable for high density connectors for industrial IO applications, we provide various position configuration for different applications, 1.27mm centerline will help customers to reduce the size of equipment, industrial SCSI connector can provide PCB horizontal type and vertical type applications. In order to be more suitable for industrial applications, TE is now providing welding terminal and screw locks for industrial market, enabling our customers to install products in a more flexible method.

TE 工业 SCSI 连接器是适合工业 IO 应用的高密度连接器,我们为不同应用提供各种位置规格, 1.27mm 间距规格将帮助客户减小设备尺寸,工业 SCSI 连接器可提供 PCB 板直角型和垂直型两种应用。 为了更适合工业应用,TE 现正为工业市场提供焊接型和螺丝锁紧型,使我们的客户能够以更灵活 地方式安装产品。



#### RJ45 Modular Jack RJ45 网络端口

CTE Connectivity's comprehensive single port modular jack product portfolio has been designed to meet the diverse design requirements of the data communications market. The product portfolio, which includes both right-angle jacks and vertical jacks, specifically suits applications that require performance in voice, data, and high-speed networking. Available in a variety of styles and configurations, TE's single port modular jacks offer compact size, and meet FCC rules and regulations part 68 as supported by Telecommunications Industry Association (TIA-1096-A).

TE Connectivity 的全面网口插座产品组合设计用于满足数据通信和工业和自动化控制市场的各种设计需求。产品种类,包括侧口插座和直口插座,特别适用于对语音、数据和高速联网有性能需求的应用。TE 的网口插座具有紧凑规格,可用在各种形式和配置中,并满足电信行业协会(TIA-1096-A)的FCC 规则和规定的第 68 部分。





### Interconnects for the IEEE 1394 Standard IEEE1394 标准的 连接器

This product conforms to the IEEE 1394 Standard. With only one type of connector, you can connect several different pieces of digital peripheral equipment. The IEEE 1394 Standard connector series is capable of accommodating data rates up to 400 Mbps for serial transmission consisting of 6 position connectors, for connections of computers to peripherals, and the 4 position connectors for connections of digital AV equipment. For connections of computers to digital AV equipment, 4 position to 6 position transition type cable assemblies are used. In order to cope with a wide range of device designs, headers of 4 position connectors are suitable for DVD, STB, etc., and are provided with screw thread size of M1.6, and are available in DIP and SMT types. Cable assemblies are also available in 4 position to 4 position type for connection of AV equipment, 4 position to 6 position transition type for connections of PC and AV equipment, and 6 position to 6 position type for connections of PC and peripherals.

本产品符合 IEEE 1394 标准。只有一种类型的连接器,可以连接几个不同的数字外围设备。IEEE 1394 标准连接器系列能够容纳数据速率高达 400Mbps 的串行传输由 6 位连接器组成,用于计算机与外设的连接,以及用于数字 AV 设备连接的 4 位连接器。对于计算机数字视听设备的连接,会用到 4 位到 6 位的过渡型电缆组件。为了应对大范围的装置设计,4 位连接器头适用于 DVD、机顶盒等,并设有 M1.6 螺纹尺寸,并提供 DIP 和 SMT 类型。电缆组件也可在 4 位到 4 位类型的 AV 设备连接,4 位到 6 位过渡类型的 PC 和 AV 设备连接,和 6 位到 6 位类型的 PC 和外设连接。



#### Industrial RJ45 Jacks with Integrated Magnetics 集成变压器的工业 RJ45 网络端口

Industrial RJ45 jacks with integrated magnetics offer a highly integrated connectivity solution-from the cable to the physical layer-for Industrial Ethernet. Integrating the magnetics into the jack allows for a much improved EMI noise shielding, enabling more reliable connections. A standardized portfolio with 1x1 straight and R/A, 1x2, 2x1 form factors addresses many of the industrial applications, which allows customers to find the solution they are looking for. Specific industrial requirements such as high reliability through improved corrosion resistance, extended temperature range and long product lifetime are all addressed, including support of the latest reflow soldering production processes.

集成变压器的工业 RJ45 网络端口提供一个高度集成的连接解决方案,从电缆到物理层的工业以太网。集成了变压器的网络端口可以大大改善 EMI 屏蔽噪音,提供更可靠的连接。单口 1x1 的垂直型和弯角型, 双口 1x2 和 2x1 的端口组合方式解决了许多用户正在寻找的解决方案。具体的工业要求,如高可靠性,通过提高耐腐蚀性,拓展温度范围和延长产品寿命都可以得到解决,包括支持最新的回流焊接生产工艺。



#### Latching USB Connector 带锁扣的 USB 连接器

To support the increasingly wide-spread use of the USB standard in Industrial applications, TE Connectivity has added industrial ruggedized connectors to its USB connector family. The Latching USB connectors and cable assemblies add 40 N of retention force to a High Speed (USB 2.0) interconnection and permit attaching or detaching peripherals without power down or reboot.

为了支持工业应用 USB 标准的日益的广泛应用,TE connectivity 在 USB 连接器家族产品中增加了工业坚固耐用的连接器系列。带锁扣的 USB 连接器和电缆组件对于高速(USB 2.0)的连接增加了 40 的保持力,并允许在不关机或重启的情况下附加或分离外围设备。



#### Low Power PCB Relays 低功率 PCB 继电器

With one or two poles and maximum contact ratings from 3A to 16A, low power PC board relays meet a range of switching requirements within robotics application. The many different models within the TE product line allow users to select a model meeting their particular requirements for control circuits in elevators, lighting, HVAC, security and more. Various options are offered in contact rating, contact configuration, coil, enclosure and termination.

低功率的 PCB 继电器拥有一个或两个触点以及最大触点的额定电流从 3A 至 16A,可以满足大部分机器人的应用。TE 系列产品中的许多不同型号允许用户选择满足电梯、照明、暖通空调、安全等控制电路的特殊要求的模型。在触点额定电气参数、触点配置、线圈、外壳和端子等方面提供多种选择。



### Force Guided Relays 强制导向继电器

Force guided relays are key electromechanical switching components used within safety relay circuits. They enable the recognition of a contact's switching condition in a simple and safe manner. With the normally open and normally closed contacts of a force guided relay being insulated from each other, the load and monitoring circuit may have different voltage potentials. This simplifies monitoring, as the same relay can switch line voltage with one set of contacts and switch a DC signal to the microprocessor with another.

TE Relay Products currently offers the following two, four and six pole models: SR2M, SR4M and SR6. Small in size they are offered with PCE terminals: special types and modules are available.

Force guided relays are designed to switch outputs of safe PLC's (Programmable Logic Controllers) for automation and control, to monitor railway signals, to provide information related to the opening of an elevator door and to be used in monitoring of machines and processes. That's why force guided relays are absolutely essential for safety control applications – they help protecting people's life when danger needs to be switched off – safely.

强制导向继电器(俗称安全继电器)是安全继电器电路中使用的关键机电开关元件。它们能够以简单而安全的方式识别触点的开关状态。强制导向继电器的常开和常闭触点彼此绝缘,负载和监视电路可能具有不同的电压电势。这样可以简化监测,为同一继电器开关电压和一组触点和一个直流信号切换至另一个微处理器。

TE 继电器产品目前提供以下两,四和六极的型号:SR2M,SR4M 和 SR6。体积小,有 PCB 焊脚,可提供特殊类型和模块。

强制导向继电器的设计用于将安全 PLC(可编程逻辑控制器)的输出转换为自动化和控制,监控铁路信号,提供与电梯门打开有关的信息,并用于监控机器和过程。这就是为什么强制导向继电器对于安全控制应用是绝对必要的——它们有助于保护人们在危险需要关闭时的安全。



	RT1	RT2	RZ/RZH
	Wire to Board 线到板	Wire to Board 线到板	Wire to Board 线到板
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Contact Data 触点参数			
Contact arrangement 触点布局	1 form C, 1CO 1 form A, 1NO	2 form C, 2CO 2 form A, 2NO	1 form C, 1CO 1 form A, 1NO
Rated voltage 额定电压	250VAC	250VAC	250VAC
Rated current 额定电流	12/16A	8A	16A
Switching power 切换功率	3000/4000VA	2000VA	4000VA
Contact material 触点材料	AgNi90/10, AgNi90/10 gold plated	AgNi90/10 gold plated, AgSnO2	AgNi90/10, AgSnO
Min. recommended contact load 最小推荐触点负载			
Coil Data 线圈参数			
Magnetic system 磁性系统	DC, AC	DC, AC	DC
Rated coil voltage 额定线圈电压	5 ~ 110VDC/ 24 ~230VAC	5 ~ 110VDC/ 24 ~230VAC	5 ~ 48VDC
Rated coil power 额定线圈功率	403 ~ 420mW/ 0.74 ~ 0.76 VA	400mW/ 0.75VA	400mW
Insulation Data 绝缘参数			
Initial dielectric strength 初始介电强度			
between open contacts 常开触点之间	1000Vrms	1000Vrms	1000Vrms
between contact and coil 触点和线圈之间	5000Vrms	5000Vrms	5000Vrms
between adjacent contacts 相邻触点之间		2500Vrms	Accessories 附件
Clearance/creepage between contact and coil 间隙/触点与线圈间的爬电距离	10/10mm	10/10mm	10/10mm
Other Data 其他参数			
Ambient temperature (max.) 环境温度(最大)	85°C/ 75°C(AC type)	85°C/ 70°C(AC type/AgSnO2 Contacts)	85°C 105°C(Hot type高温型) 70°C(transparent cover type透明外壳)
Category of environmental protection IEC 61810 环境保护标准IEC 61810的等级	RTII, RTIII	RTII, RTIII	RTII
Terminal type 端子类型	THT, THR(DC and AC type)	THT, THR(DC and AC type)	ТНТ
Mounting 安装方式	PCB, plug-in/PCB (THR)	PCB, plug-in/PCB (THR)	PCB
Dimensions lwh 尺寸 长宽高	29x12.7x15.7mm	29x12.7x15.7mm(x16.2 THR)mm	29x12.7x15.7mm
Accessories 附件	PCB and DIN rail sockets PCB和DIN导轨底座	PCB and DIN rail sockets PCB和DIN导轨底座	

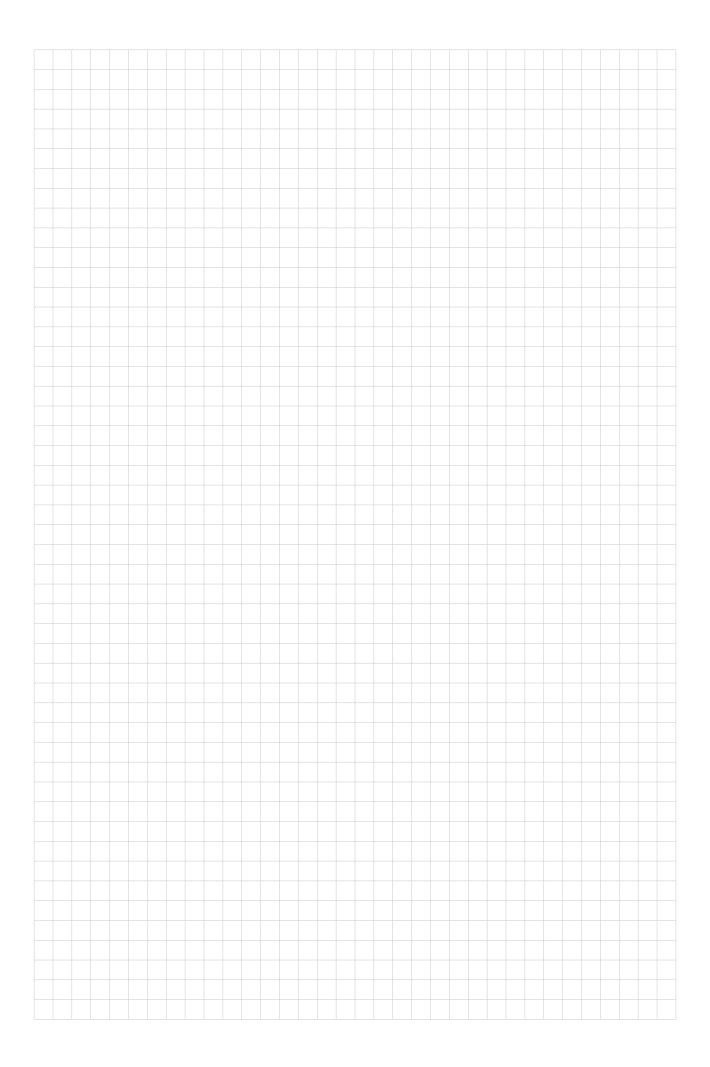


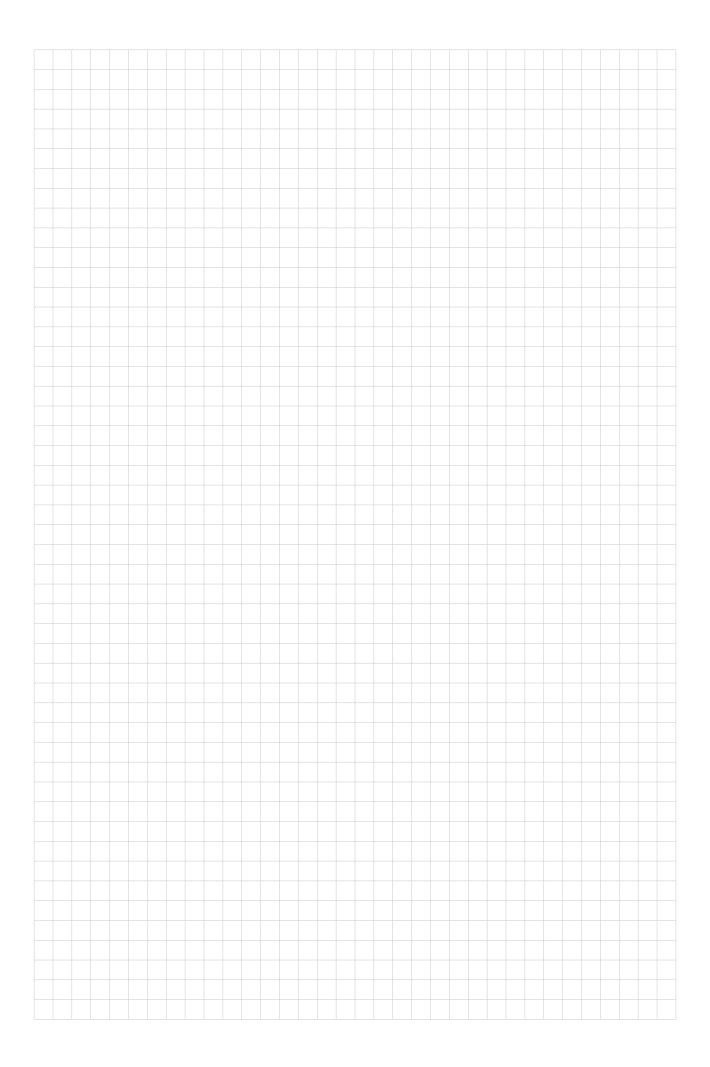
	PE/PE bistable 双稳态	RE/REL	PCN	SNR
	Power Relay 功率继电器	Power Relay 功率继电器	Power Relay 功率继电器	Power Relay 功率继电器
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Contact Data 触点参数				
Contact arrangement 触点布局	1 form C, 1CO	1 form A, 1NO	1 form A, 1NO	1 form C, 1CO 1 form A, 1NO
Rated voltage 额定电压	250VAC	250VAC	250VAC/30VDC	250VAC
Rated current 额定电流	5A	6/5A	3A/5A	6A
Switching power 切换功率	1250VA	1500/1250VA	750/1250VA	1500VA
Contact material 触点材料	AgNi90/10, AgSnO	AgNi, AgNi0.15, AgCdO	AgNi gold plated bifurcated contact	
Min. recommended contact load 最小推荐触点负载			1mA, 5DC	
Coil Data 线圈参数				
Magnetic system 磁性系统	DC, bistable双稳态	DC	DC	DC
Rated coil voltage 额定线圈电压	3 ~ 48VDC	5 ~ 48VDC	3 ~ 24VDC	5 ~ 48VDC
Rated coil power 额定线圈功率	200mW	200/360mW	120mW	170mW
Insulation Data 绝缘参数				
Initial dielectric strength 初始介电强度				
between open contacts 常开触点之间	1000Vrms	1000Vrms	750Vrms	1000Vrms
between contact and coil 触点和线圈之间	4000Vrms	4000/3000Vrms	3000Vrms	4000Vrms
between adjacent contacts 相邻触点之间				
Clearance/creepage between contact and coil 间隙/触点与线圈间的爬电距离	3.2/4mm	4/4mm	min. 3.5/3.5mm	6/8mm
Other Data 其他参数				
Ambient temperature (max.) 环境温度(最大)	85°C	85°C/ 70°C	70° (85°C under a specific condition, 在特別条件下)	85°C
Category of environmental protection IEC 61810 环境保护标准IEC 61810的等级	RTII	RTIII(RE), RTII(REL)	RTIII	RTIII
Terminal type 端子类型	ТНТ	ТНТ	тнт	ТНТ
Mounting 安装方式	PCB	PCB	PCB	PCB or on socket
Dimensions lwh 尺寸 长宽高	20x10x10mm	20x10x10.6mm/ 20.7x10.7x12mm	20x5x12.5mm	28x5x15mm
Accessories 附件				DIN rail sockets DIN导轨底座

	T9A/T9E/T90	MSR/T75	SR2M
	Power Relay 功率继电器	Power Relay 功率继电器	Force Guided Relay 强制导向继电器
	<b>Al</b> 🕸 🖫	20 20 <b>202</b> 20	c 🕦 us 📤 😊 💵
Contact Data 触点参数			
Contact arrangement 触点布局	1 form C, 1CO 1 form A, 1NO	1 form C, 1CO 1 form A, 1NO	1 form A + 1 form B, 1NO + 1NC 2 form C, 2CO
Rated voltage 额定电压	250VAC	250VAC	250VAC
Rated current 额定电流	30A	8/10A	6A
Switching power 切换功率	7500VA	2000VA	
Contact material 触点材料	AgCdO, AgSnInO	AgNi90/10, AgSnO	AgNi
Min. recommended contact load 最小推荐触点负载			5VDC/10mA
Coil Data 线圈参数			
Magnetic system 磁性系统	DC	DC	DC
Rated coil voltage 额定线圈电压	6 ~ 48VDC	3 ~ 60VDC	5 ~ 110VDC
Rated coil power 额定线圈功率	1W/900mW	220mW	700mW
Insulation Data 绝缘参数			
Initial dielectric strength 初始介电强度			
between open contacts 常开触点之间	1500Vrms	1000Vrms	1500Vrms
between contact and coil 触点和线圈之间	2500Vrms	4000Vrms	4000Vrms
between adjacent contacts 相邻触点之间			3000Vrms
Clearance/creepage between contact and coil 间隙/触点与线圈间的爬电距离	3.1/6.3mm	8/8mm	8/8mm
Other Data 其他参数			
Ambient temperature (max.) 环境温度 ( 最大 )	85°C	85°C	70°C
Category of environmental protection IEC 61810 环境保护标准IEC 61810的等级	RTO, RTI, RTII, RTIII	RTII, RTIII	RTIII
Terminal type 端子类型	THT, QC(Quick con- nect)	THT	THT
Mounting 安装方式	PCB, panel mount	РСВ	PCB, socket
Dimensions lwh 尺寸 长宽高	32.3x27.4x20.4mm	28.6x10x15mm	29x12.6x25.5mm
Accessories 附件			Sockets and relay clips 底座和继电器卡条



	SR4 D/M	SR6 D/M	SR6 A/B/C/V
	Force Guided Relay 强制导向继电器	Force Guided Relay 强制导向继电器	Force Guided Relay 强制导向继电器
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Contact Data 触点参数			
Contact arrangement 触点布局	3 form A + 1 form B, 3NO + 1NC 2 form A + 2 form B, 2NO + 2NC	3 form A + 1 form B, 3NO + 1NC 2 form A + 2 form B, 2NO + 2NC	3 form A + 3 form B, 3NO + 3NC 4 form A + 2 form B, 4NO + 2NC 5 form A + 1 form B, 5NO + 1NC
Rated voltage 额定电压	250VAC	250VAC	250VAC
Rated current 额定电流	8A	8A	8A
Switching power 切换功率			
Contact material 触点材料	AgSnO2	AgSnO2	AgSnO2, AgSnO2 + 0.2um Au
Min. recommended contact load 最小推荐触点负载	5VDC/10mA	5VDC/10mA	5VDC/10mA
Coil Data 线圈参数			
Magnetic system 磁性系统	DC	DC	DC
Rated coil voltage 额定线圈电压	5 ~ 110VDC	5 ~ 110VDC	5 ~ 110VDC
Rated coil power 额定线圈功率	800mW	1190 ~ 1200mW	1200/800mW
Insulation Data 绝缘参数			
Initial dielectric strength 初始介电强度			
between open contacts 常开触点之间	1500Vrms	1500Vrms	1500Vrms
between contact and coil 触点和线圈之间	4000Vrms	4000Vrms	4000Vrms
between adjacent contacts 相邻触点之间	2500Vrms	3000/4000Vrms	3000Vrms
Clearance/creepage between contact and coil 间隙/触点与线圈间的爬电距离	10/10mm	5.5/5.5mm	5.5/5.5mm
Other Data 其他参数			
Ambient temperature (max.) 环境温度(最大)	70°C	70°C	70°C
Category of environmental protection IEC 61810 环境保护标准IEC 61810的等级	RTIII	RTIII	RTIII
Terminal type 端子类型	ТНТ	ТНТ	тнт
Mounting 安装方式	PCB	PCB	PCB
Dimensions lwh 尺寸 长宽高	40x13x16.5mm	55x16.5x16.5mm	55x16.5x16.5mm
Accessories 附件			





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