

Quick Reference Guide

Motion & Drives

Connect every aspect of your Motion & Drives design with TE's customized and application-specific solutions. Our broad product portfolio enables highly developed modular systems driving power, signal and data connections you can count on.

TE's Motion & Drives solutions allow for professional electric automation connectivity within your production facility - making it easier to simplify or retrofit your machine architecture, all of which:

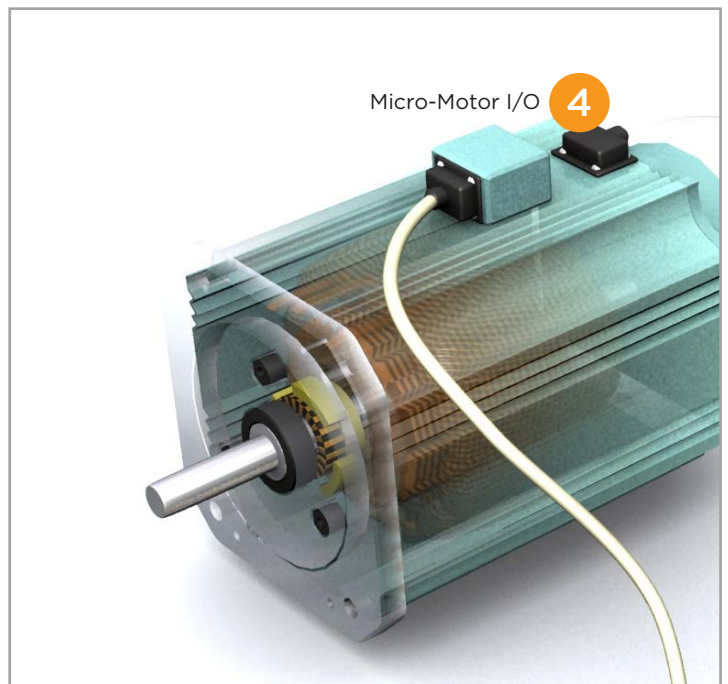
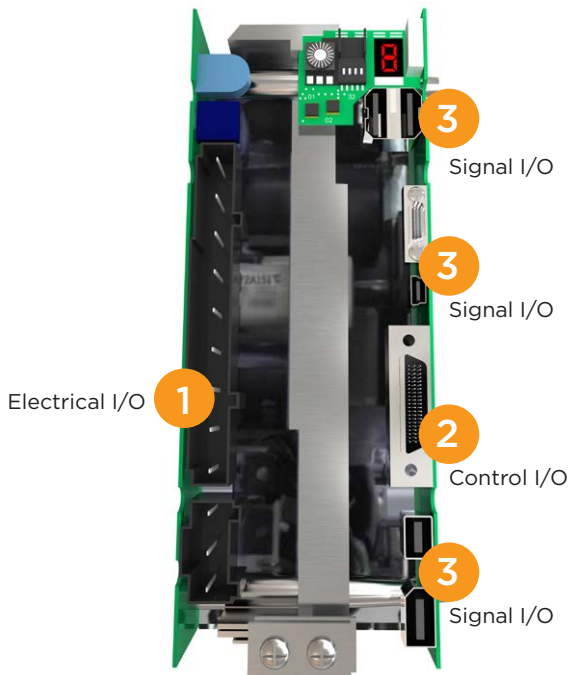
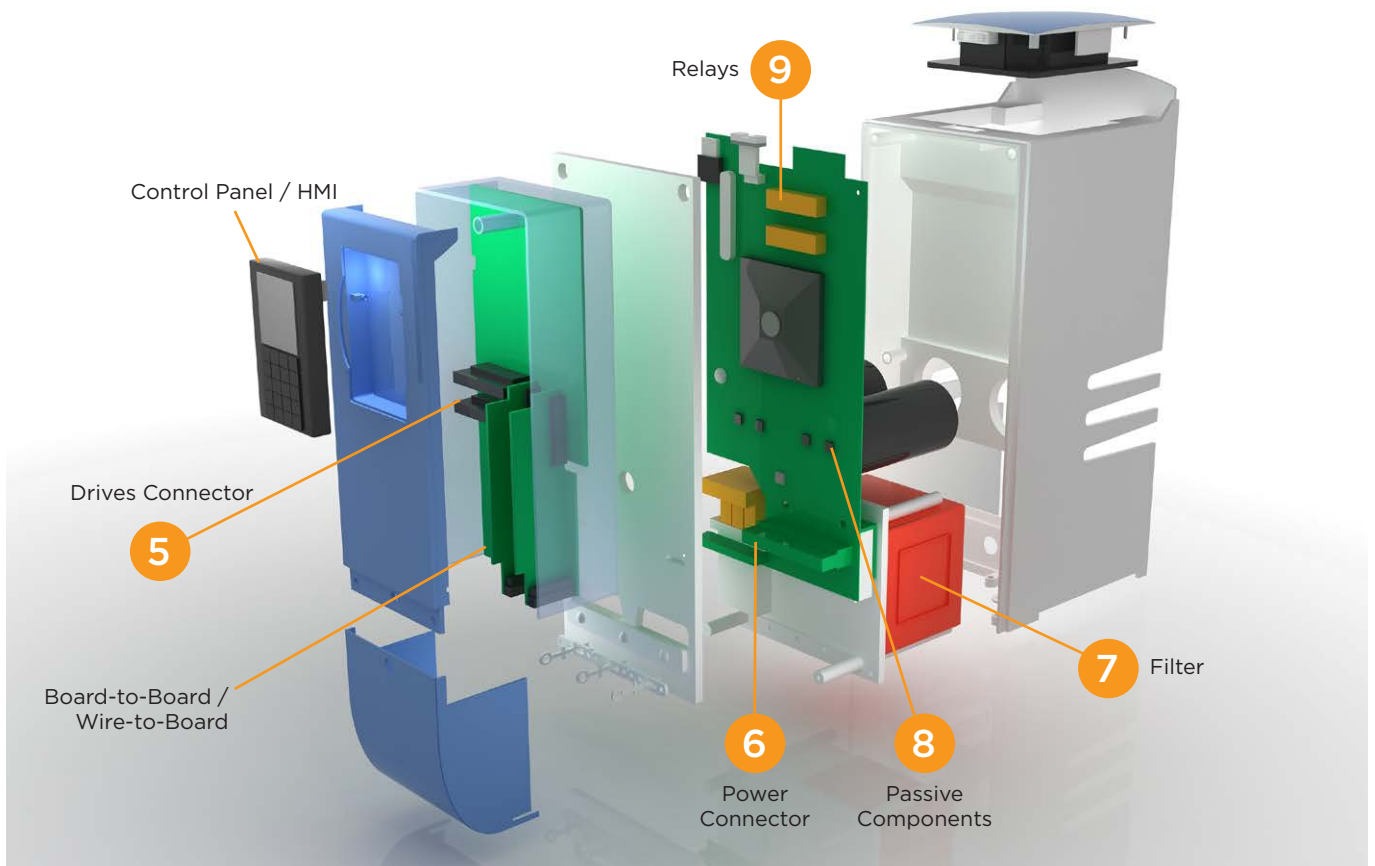
- Saves electricity,
- Improves your carbon footprint,
- Reduces total cost of ownership,
- Increases reliability and productivity

EVERY CONNECTION COUNTS



INDUSTRIAL

Motion & Drives



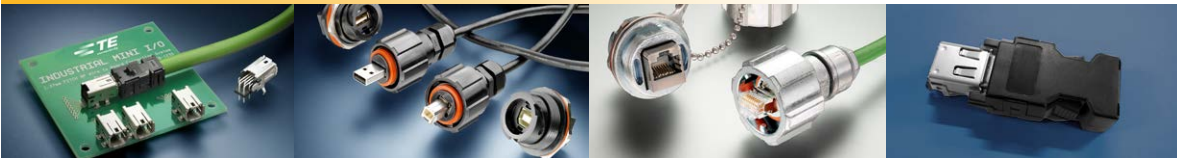
1 Electrical I/O: Dynamic D3900



2 Control I/O: CHAMP O50



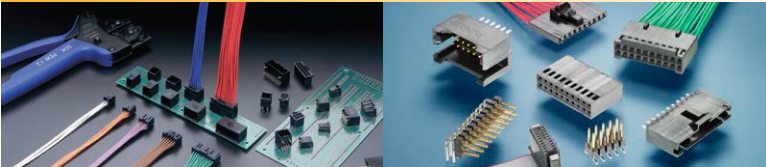
3 Signal I/O: Industrial MINI I/O, Industrial USB, Industrial RJ45 & IEEE 1394



4 Micro-Motor I/O: Dynamic Series



5 6 Drives & Power Connector: Dynamic Series & AMPMODU



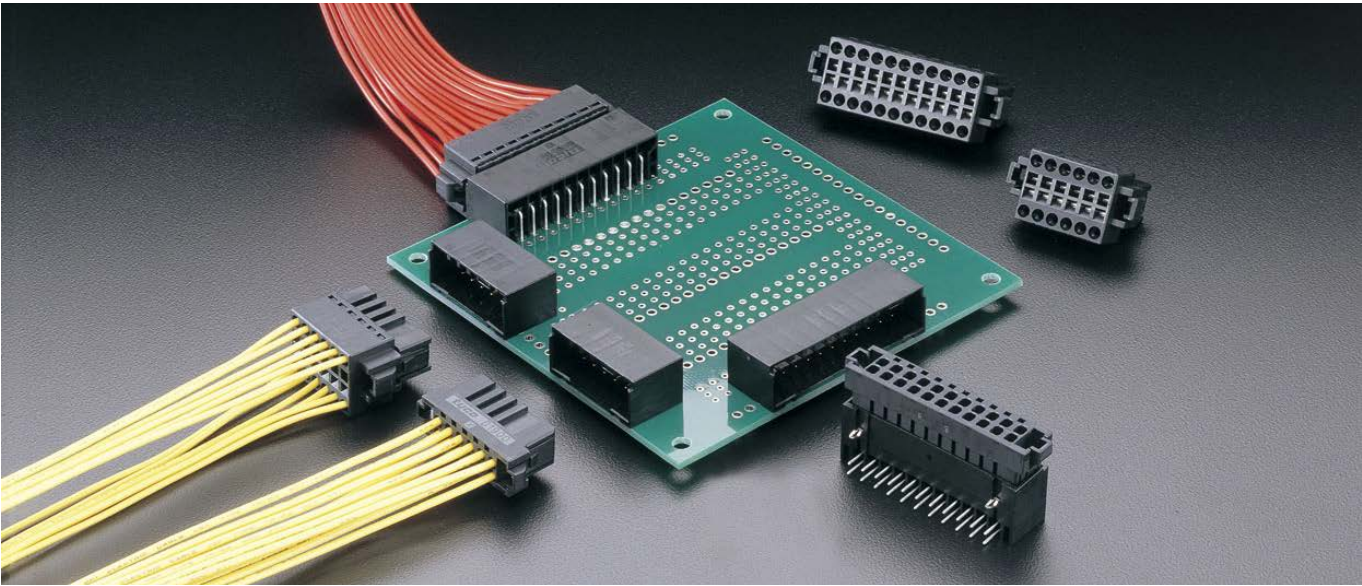
7 8 Filter & Passive Components



9 Relays



1 Electrical I/O: Dynamic D3900



Electrical I/O Connector Product Features:

1. Terminal interface provides increased reliability in high vibration environments
2. Technical specifications to suit standard power supply and connection to other applications
3. Polarized versions prevents mis-mating

D-3900		Pos	Receptacle	Plug Cable Connectors
Rated Voltage	600V AC/DC	3	1-2013519-3	1-2134249-3
Rated Current	7A-14.5A	10	1-2013519-0	1-2134249-0
Wire Range (AWG)	14-28			
Withstand Volage	2.2KV			
Pitch	7.5mm			

2 Control I/O Connector: CHAMP 050 Series Typical P/N



Product Features:

1. Champ 050 connector reduces risk of unreliable connections, maintenance time and labour costs
2. Equipped with metallic shield components for outstanding shielding
3. Die-cast connector for improved strength and reliability
4. Supports two different connection types; screw and plug fittings, compatible with different terminal connectors

CHAMP 050		Pos	Receptacle Vertical	Receptacle Right Angle
Insulation Material	PBT	14	5175887-1	5178238-1
Flammability	UL94-V0	20	5175887-2	5178238-2
Contact Material	Gold-Plated Phosphor Bronze	26	5175887-4	5178238-4
Solder Tail Plating	Tin-Plated Copper Alloy	36	5175887-5	5178238-5
Metal Shell Material	Nickel-Plated Carbon Steel	50	2-5175887-7	5178238-7
Rated Current	1A MAX	Pos	Cable Connectors + Shell	
Rated Voltage	250Vac	14	1-2232346-1	
Insulation Resistance	500MΩ	20	2-2232346-1	
Withstanding Voltage	500Vac, 1 Minute	26	3-2232346-1	
Operating Temperature	-55°C - 85°C	36	4-2232346-1	
Pitch	1.27mm	50	5-2232346-1	

3 Industrial Communications:

Industrial Mini I/O, Industrial USB, Industrial RJ45, IEEE 1394

Product Features:

1. Meet the needs of industrial applications for a reliable and longer life cycle than standard products
2. Industrial Mini I/O connector offers faster transmission speeds, a more compact, space-saving design, and is equipped with a reliable latching function;
3. Industrial RJ45 connector utilizes a "common core" design for enhanced flexibility and fast termination technology.
4. Industrial USB connector supports single and double-row connections and is ideal for any industrial USB application requiring a high locking force or a sealed design.

Document No.:

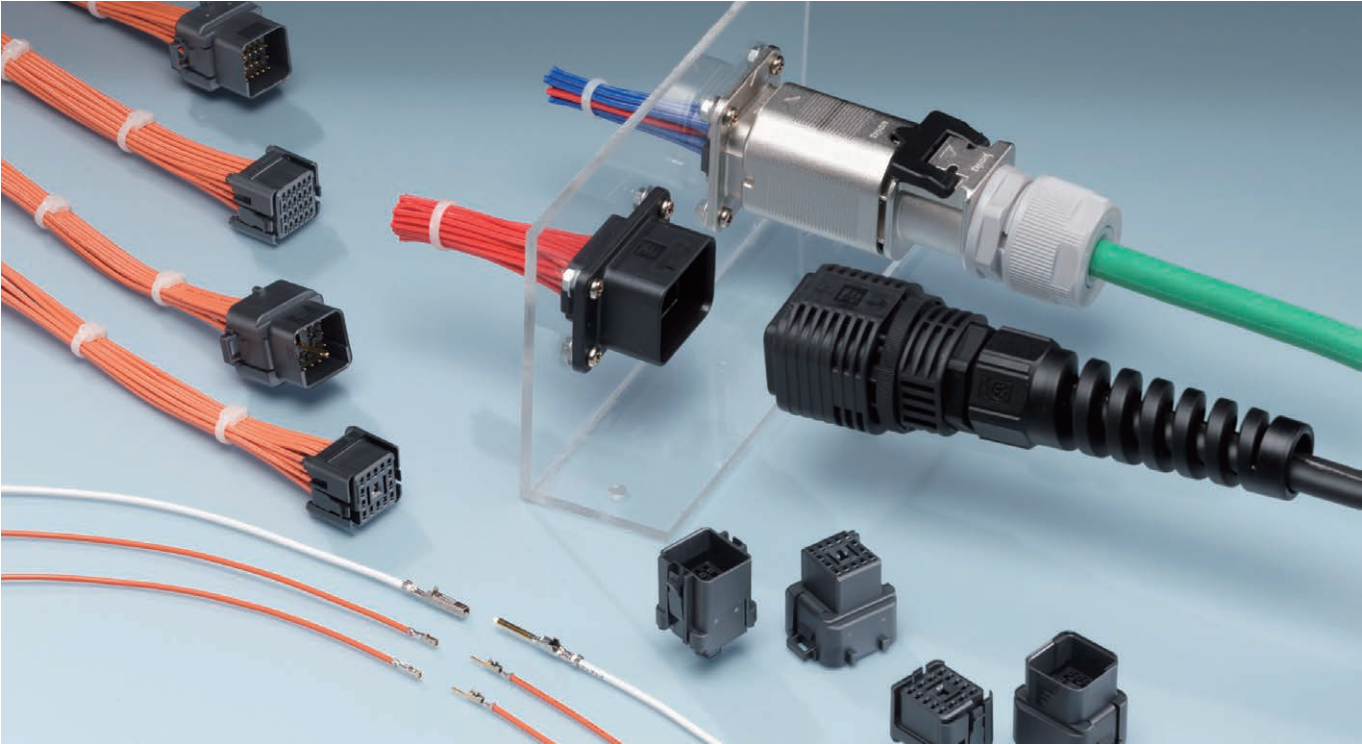
Industrial Mini I/O: 1-1773703-8

Industrial USB: 1-1773463-4

Industrial RJ45: 1654253-2

	Industrial Mini I/O			
	Pos	Receptacle	Plug Cable Connectors	
	8	2040537-1 (Type I)	2013595-1 (Type I)	
	8	1-2040537-1 (Type II)	2040008-1 (Type II)	
	Industrial USB			
	Pos	Receptacle	Plug Cable Connectors	
	4	1903814-1	2013798-1	
4*2 Row	1903815-1			
	Industrial RJ45			
	Pos	Receptacle	Plug Cable Connectors	
	4	1827585-1	1903526 (IP20)	
	4	1987674-1	1987004-1 (IP67)	
	8	1827585-1	1903527-1 (IP20)	
	8	1987674-1	19870042 (IP67)	
	IEEE 1394			
	Pos	Receptacle		Plug Cable Connectors
	6	Flag-shaped	Horizontal	2232347-1
2232261-1		2232260-1		

4 Micro-Motor I/O: Dynamic Series

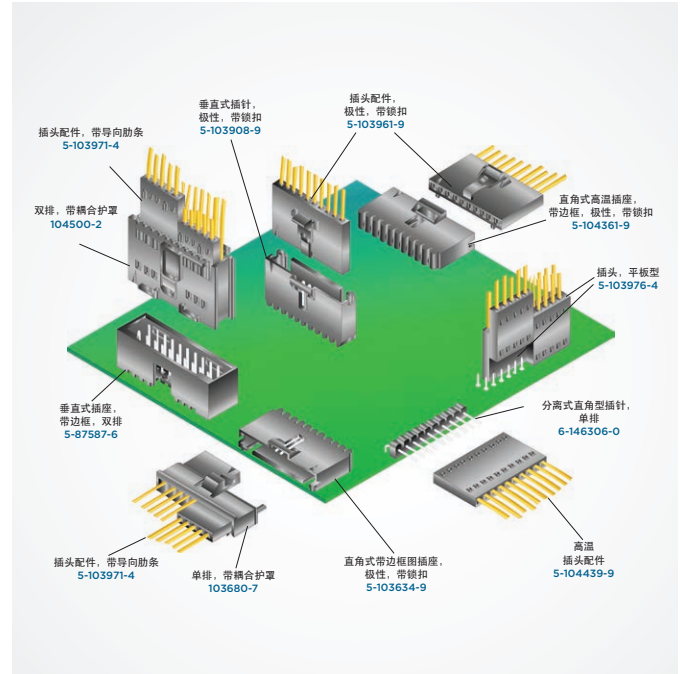
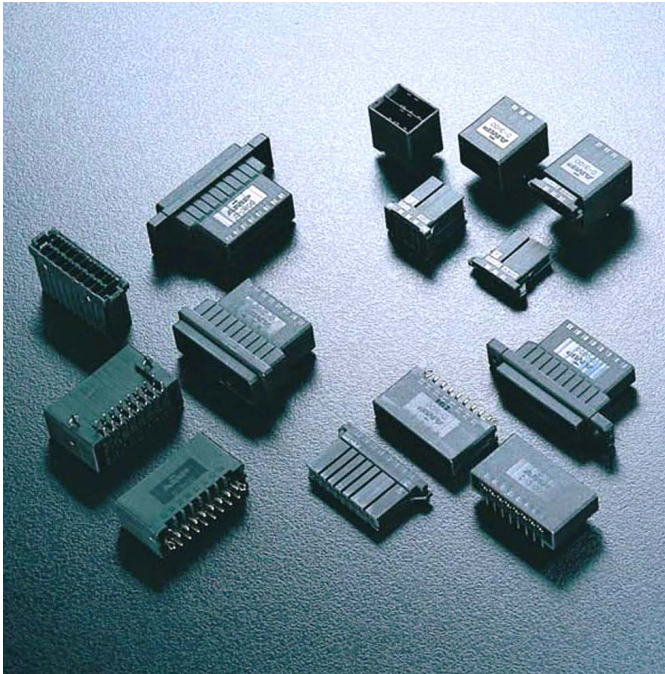


Micro-Motor I/O Connectors Product Features:

1. IP67
2. Oil proof, good resistance to vibration

Micro-Motor Connector Plugs		Product	P/N	QTY
Rated Voltage	10Vac	Encoder Cable I/O Kit Without Contact	2201825-1	1
Rated Current	1A	Cable Rec. Contact	2174065-4	8
Wire Range (AWG)	26-22	Encoder 9P Base Key	2108418-1	1
Position	8P (Signal) + 1P (ground)	Encoder 9P Base Entry HSG	2108422-1	1
		Post Contact 1.5VP Remodel	2069391-2	9

**5 6 Drives & Power Connectors (board-to-board, board-to-wire):
Dynamic Series & AMPMODU**



Dynamic Series Product Features:

1. Complete product series, wide range of sizes, single and double-row products;
2. Supports a variety of connections: board mounting, horizontal and vertical board mount;
3. Supports a range of power loads: 3A-30A
4. Equipped with anti-error mechanism and latching design;
5. Specially designed terminals provide a more reliable connection;
6. A range of plating to select from;
7. Supports integration of power and signal connection on the same type of connector to simplify assembly and increase productivity

Document No.: 1307819

AMPMODU: MTE Product Features:

1. 2.54mm spacing, single row, supports hanging, wire-to-wire and wire-to-board mount
2. IDC or crimp connector, position size from 2 to 25
3. THT, SMT receptacle, available in three platings (30u, 15u, Sn)
4. 22-26AWG, 26-30AWG
5. Displacement technology ensures maximum reliability
6. Wire anti-overstress protects the connector, preventing wire movement being transmitted to the crimp area
7. Built-in brake area prevents over-insertion
8. Latching design prevents mis-mating, increasing retention and stability

Document No.: 1242132

AMPMODU:0.8mm Micro Product Features:

1. Small spacing
2. Plug: 18AWG, "F" crimp terminal, rated 1A, voltage 30VDC Overstress protection, position size from 4-40
3. Receptacle: available in angled or straight SMT, outstanding prevention against mis-mating Low-height, dual-contact design
4. Environment: -40 - 85°C UL94V-0

7 8 Filter & Passive Components



As electronic equipment becomes more complex, the need for proper filtering is continually increasing. Filters are an integral part of the Electromagnetic Compatibility (EMC) of an application. They are used to attenuate conducted noise leaving the system and lower the equipment's susceptibility to incoming power line noise.

- Power line filters: key tool in controlling the transmission of EMI and RFI signals, single and 3-phase design, from 0.5A to 1200A, supports various termination methods. Recommended products: SK, EP, W, R, HQ, FC, EMC (single phase); AYA, BCF, FCD, AYC (3-phase)
- Power entry module: similar to the power line filter but with extra functions including power switch, voltage selector, fuse box, IEC connector and shielding. Recommended products: EF, SR, P, EBH, EEA, SRB

For more detailed information search catalog number: 1654001









As a leading manufacturer of passive components, TE offers a very extensive series of products with both standard and custom-designed solutions, core solutions include:

- Power resistors
A wide range of common power resistors (from 1W to >1KW), providing better heat dissipation and a lower surface temperature.
Recommended products: SM, HS, TE, CJT, BDS, and custom-designed products for high-efficiency solutions
- Precision resistors
SMD range of products is a market leader, accuracy to +/-0.01% and 5ppm
Current sensing resistors to 0.0005 Ohms, temperature coefficient and tolerance to 50ppm and 1%
Recommended products: RN73, UPW, TLR, RP73, RL73












For more detailed information search catalog number: 1773442-9

9 Relays

TE's relays solution include key electromechanical switching components used within safety relay circuits. They are designed to switch outputs of safe PLC's for Automation & Control or to monitor machines and processes. That's why force guided relays are essential for safety control applications: they help protect people's lives when danger needs to be switched off - safely. Whether the application is a basic pump control circuit, a complex interface with a programmable logic controller or a safety circuit, industrial machinery designers specify components from TE Relay Products.

Catalog number: 1308033-2						
	OJ/OJE	RT	RZ	RP1/RP2	OZ	T9A
						
CONTACT DATA						
Contact arrangement	1 form A,1 NO	1 form A,1 NO 1 form C,1 CO 2 form A,2 NO 2 form C,2 CO	1 form A,1 NO 1 form C,1 CO	1 form A,1 NO 1 form C,1 CO 2 form A,2 NO 2 form C,2 CO	1 form A,1 NO 1 form C,1 CO	1 form A,1 NO 1 form C,1 CO
Rate current	3/5/8/10A	8/12/16A	16A	8/12/16A	16A	30A
Rate voltage	250VAC/28VDC	250VAC	250VAC	250VAC	250VAC/24VDC	250VAC
Switching power	720 to 2500VA/90 to 240W	2000/4000VA	4000VA	2000/3000/4000VA	3840VA/380W	7500VA
COIL DATA						
Rate coil voltage	3 to 48VDC	5 to 110VDC/24 to 230VAC	5 to 48VDC	5 to 110VDC	5 to 48VDC	6 to 48VDC
Rate coil power	200/250/450mW	400mW/0.75VA	400mW	500mW	3840VA/380W	1W/900mW
OTHER DATA						
Ambient temp.	up to 85°C	85°C/75°C(AC type)	85°C/105°C(HOT type) 70°C(transparent cover type)	70°C	60°C(standard type) 70°C(sensitive type)	85°C
Protection IEC 61810	RTII,RTIII	RTII,RTIII	RTII	RTII,RTIII	RTII,RTIII	RTO,RTI,RTII,RTIII
Terminal type	THT	THT,THR (DC and AC type)	THT	THT	THT	THT
Mounting	PCB	PCB or on socket	PCB	PCB or on socket	PCB	PCB,panel mount
L*W*H	18.2*10.2*14.7mm	29*12.7*15.7mm	29*12.7*15.7mm	29*12.6*25.5mm	29.2*12.8*20.6mm	32.3*27.4*20.4mm
ACCESSORIES						
						

9 Relays

Catalog number: 1308033-2							
	T92	SNR	PT	XT	SR2M	SR4 D/M	SR6
							
CONTACT DATA							
Contact arrangement	2 form A,2 NO 2 form C,2 CO	1 form A,1 NO 1 form C,1 CO	2 form C,2 CO 3 form C,3 CO 4 form C,4 CO	1 form C,1 CO 2 form C,2 CO	1 form A+1 form B,1 NO+1 NC 2 form A+2 form B,2 NO+2 NC	3 form A+1 form B,3 NO+1 NC 2 form A+2 form B,2 NO+2 NC	4 form A+2 form B,4 NO+2 NC 5 form A+1 form B,5 NO+1 NC
Rate current	30A	6A	1/2/5/6/10/12A	8/16A	6A	8A	8A
Rate voltage	400VAC	250VAC	240VAC	240VAC	250VAC	250VAC	250VAC
Switching power	7500VA	1500VA	1500/2500/3000VA	2000/4000VA	--	--	--
COIL DATA							
Rate coil voltage	6 to 110VDC/12 to 277VAC	5 to 48VDC	6 to 220VDC/ 6 to 240VAC	12 to 110VDC/ 24 to 230VAC	5 to 110VDC	5 to 110VDC	5 to 110VDC
Rate coil power	1.7W/4.0VA	170mW	400mW	500mW	700W	800mW	800/1200mW
OTHER DATA							
Ambient temp.	65°C,85°C	85°C	70°C	70°C / 85°C	70°C	70°C	70°C
Protection IEC 61810	RTI,RTII,RTIII	RTIII	RTII	RTII	RTIII	RTIII	RTIII
Terminal type	THT	THT	THT,plug-in	plug-in	THT	THT	THT
Mounting	PCB,panel mount	PCB or on socket	PCB or on socket	socket	PCB	PCB	PCB
L*W*H	52.3*34.6*30.8mm	28*5*15mm	28*22.5*29mm	29*13*26.7mm	29*12.6*25.5mm	40*13*16.5mm	55*16.5*16.5mm
ACCESSORIES							
							

LET'S CONNECT

Our technical experts are always willing to provide you with the service you need.

Contacting them is easy; simply call your local technical support line, or communicate with our product experts at: www.te.com/industrial

FOR MORE INFORMATION

TE Connectivity Technical Support Center

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/South America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

For other country numbers, go to te.com/supportcenter

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