

Multimode Relay MT

- 2/3 pole 10A, 2 form C (CO) or 3 form C (CO) contacts
- DC and AC coils
- Mechanical indicator as standard
- Electrical indicator
- New test system with front operated finger protected push-to-test button and integral locking test tab
- White write on panel

Typical applications Mechanical engineering, plant control.

Approvals

VDE Cert. No. 40009096, UL E214025	
Technical data of approved types on request.	

Contact Data

Contact Data			
Contact arrangement	2 form (C (CO) or 3 forn	n C (CO)
Rated voltage		240VAC	
Max. switching voltage		400VAC	
Rated current	10A		10A
Limiting making current, max. 20m	s 20A		20A
Limiting breaking current	10A		10A
Switching power	2500VA		2500VA
Contact material	AgNi90/10		AgNi90/10
	-		gold plated
Contact style	single		single
	contact		contact
Min. recommended contact load	12V		20mV
	at 10mA		at 1mA
Initial voltage drop	30mV	at 100mA/6VA	C/1kHz
Frequency of operation, with/without	ut load	1200/6000h-1	
Operate time typ, DC coil		15ms	
Release time typ, DC coil		10ms	
Bounce time max., DC coil, form A	/form B	4/10ms	

Contact ratings

Contact ratin	90		
Туре	Contact	Load	Cycles
IEC 61810			
MT22 DC coil	C (CO)	10A, 250VAC, cosφ=1, 35°C	100x10 ³
MT22 AC coil	C (CO)	10A, 250VAC, cosφ=1, 35°C	20x103
MT32 DC coil	C (CO)	10A, 250VAC, cosφ=1, 35°C	100x10 ³
MT32 AC coil	C (CO)	10A, 250VAC, cosφ=1, 35°C	20x10 ³
UL 508			
MT3	A (NO)/B (NC)	B300, 40°C	6.000
MT2	C (CO)	10A, 250VAC, resistive, 40°	30x103
MT2	A (NO)/B (NC)	B300 40°C	6.000
MT3	C (CO)	10A, 250VAC, resistive, 40°C	100x10 ³



Electrical endurance (for DC coll)



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Contact Data (continued)

Mechanical endurance	
DC coil	20x10 ⁶ operations
AC coil	20x10 ⁶ operations

Coil Data

Coll voltage range	6 to 220VDC
	12 to 230VAC
Operative range, IEC 61810	2
Coil insulation system according UL	class 130 (B)

Coil versions, DC coil

000.00	, ,	20.001				
Coil c	ode	Rated	Operate	Release	Coil	Rated coil
STD		voltage	voltage	voltage	resistance	power
		VDC	VDC	VDC	$\Omega \pm 10\%^{(1)2)}$	W
006	0A6	6	4.5	0.6	30	1.1
012	0B2	12	9.0	1.2	115	1.3
024	0C4	24	18.0	2.4	475	1.2
048	0E8	48	36.0	4.8	1900	1.2
060	0G0	60	45.0	6.0	2950	1.3
110	1B0	110	82.5	11.5	9700 ¹⁾	1.2
220	2C0	220	165.0	22.0	387002)	1.2
	noiotonoo	100/ 0) Call	registeres 150	2/		

1) Coil resistance ±12%, 2) Coil resistance ±15%.

3) Protection diode PD; standard polarity: 2-pole relays: +2 / -7, 3-pole relays: +2 / -10. All figures are given for coil without pre-energization, at ambient temperature $+23^{\circ}$ C.

Coil versions, AC coil, 50/60Hz

Coll vers	sions, AC CC)II, 50/60 H Z				
Coil	Rated	Operate	Release	Coil	Rated coil	
code	voltage	voltage	voltage	resistance	power	
		50/60Hz	50/60Hz		50/60Hz	
	VAC	VAC	VAC	$\Omega \pm 10\%^{1)}$	VA	
012	12	9.6/10.2	3.6	24	2.19/1.86	
024	24	19.2/20.4	7.2	86	2.26/1.95	
048	48	38.4/40.8	14.4	345	2.28/1.97	
060	60	48.0/51.0	18.0	544	2.27/1.96	
115	115	92.0/97.8	34.5	2000	2.37/2.00	
230	230	184.0/195.5	69.0	8300 ¹⁾	2.32/1.96	
1) Coil resis	1) Coil resistance ±12%.					

All figures are given for coil without pre-energization, at ambient temperature +23°C.





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Multimode Relay MT (Continued)

Insulation Data

Initial dielectric strength	
between open contacts	1500Vrms
between contact and coil	2500Vrms
between adjacent contacts	2500Vrms
Clearance/creepage	
between contact and coil	≥2.8/4mm
between adjacent contacts	≥2.8/4mm
Material group of insulation parts	Illa

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content				
refer to the Product Compliance Support Center at				
www.te.com	n/customersupport/rohssupportcenter			
Ambient temperature				
DC coil	-40 to +60°C			
AC coil	-40 to +50°C			
Category of environmental protection				
IEC 61810) RTI - dust protected			
Vibration resistance (functional),				
form A (NO)/form B (NC)	5/2g			
Terminal type	plug-in			
Cover retention, pull/push force	100/100N			
Weight	80g			
Packaging unit	25 pcs.			

Accessories

 For details see datasheet
 Accessories Multimode Relay MT

 Note: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

Terminal assignment



Dimensions



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Other types on request

Product code	Contact Configuration	Contact material	Version	Coil	Part number
MT221012	2 form C	AgNi 90/10	DC	12VDC	4-1393090-9
MT221024	2 CO contacts		with test button	24VDC	5-1393090-0
MT221048	8-pin			48VDC	5-1393090-1
MT221060				60VDC	5-1393090-2
MT221110				110VDC	5-1393090-3
MT221220				220VDC	5-1393090-4
MT223024			DC+LED+test button	24VDC	5-1393090-7
MT226012			AC	12VAC	6-1393090-3
MT226024			test button	24VAC	6-1393090-4
MT226048				48VAC	6-1393090-5
MT226115				115VAC	6-1393090-7
MT226230				230VAC	6-1393090-8
MT228024			AC+LED	24VAC	6-1393090-9
MT228115			test button	115VAC	7-1393090-0
MT228230				230VAC	7-1393090-1
MT321012	3 form C	AgNi 90/10	DC	12VDC	6-1393091-8
MT321024	3 CO contacts	J. J	with test button	24VDC	7-1393091-0
MT321048	11-pin			48VDC	7-1393091-1
MT321060				60VDC	7-1393091-2
MT321110				110VDC	7-1393091-4
MT321220				220VDC	7-1393091-7
MT323024			DC+LED+test button	24VDC	8-1393091-4
MT3230C4			DC+LED+PD+TB	24VDC	7-1393091-9
MT326012			AC	12VAC	9-1393091-6
MT326024			test button	24VAC	9-1393091-7
MT326048				48VAC	9-1393091-8
MT326115				115VAC	1393092-1
MT326230				230VAC	1393092-2
MT328024			AC+LED	24VAC	1393092-4
MT328115			test button	115VAC	1393092-7
MT328230				230VAC	1393092-8
MT331024		AgNi 90/10	DC	24VDC	1-1393092-1
MT331110		gold plated	with test button	110VDC	1-1393092-3
MT331220				220VDC	1-1393092-5
MT333024			DC+LED+test button	24VDC	1-1393092-8
MT3330C4			DC+LED+PD+TB	24VDC	1-1393092-6
MT333110			DC+LED	110VDC	2-1393092-0
MT333220			test button	220VDC	2-1393092-2
MT336115			AC	115VAC	2-1393092-5
MT336230			test button	230VAC	2-1393092-6
MT338024			AC+LED	24VAC	2-1393092-7
MT338115			test button	115VAC	8-1415025-1
MT338230				230VAC	2-1393092-8

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