

## Low profile, PCB Relay T75 Series

- 1 pole 8A, 1 form C (CO) or 1 form A (NO) contact
- 4kV/8mm coil-contact
- Reinforced insulation (protection classII)
- Ambient temperature up to 85°C at 8A
- Plastic materials according to IEC60335-1 (domestic appliances)

Typical applications HVAC,security and industrial control, domestic appliances



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### Approvals

VDE REG.-Nr 3919, UL E214024 Technical data of approved types on request

Contact	Data

Contact Data	
Contact arrangement 1	form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A
Limiting making current, max 4s, df 10%	15A
Breaking capacity max.	2000VA
Contact material	AgCdO
Min. recommended contact load	100mA at 12VDC
Minimum switching voltage	5VDC
Initial contact resistance	100mΩ at 100mA, 12VDC
Frequency of operation, with/without loa	d 6/1200min <sup>-1</sup>
Operate/release time max.	10/5ms
Bounce time max., form A/form B	3/10ms

## **Electrical endurance**

Туре	Contact	Load	Cycles
T75		8Arms, 240VAC, resistive	100x10 <sup>3</sup>
T75	A (NO)	14Arms, 120VAC, resistive	50x10 <sup>3</sup>
T75	B (NC)	5Arms, 120VAC, resistive	50x10 <sup>3</sup>
T75		7.2 FLA / 45 LRA, 120 VAC	30x10 <sup>3</sup>
T75		5 FLA / 30 LRA, 240 VAC	10x10 <sup>3</sup>

#### **Contact ratings**

Туре	Contact	Load	Cycles
T75	A (NO)	TV4, Tungsten, 120VAC, 40°C	25x10 <sup>3</sup>
T75	C (CO)	10A, 240VAC, general purpose, 40°C	6x10 <sup>3</sup>
T75	C (CO)	8A, 24VDC, general purpose, 40°C	100x10 <sup>3</sup>
T75	C (CO)	1/3HP, 120VAC, 40°C	30x10 <sup>3</sup>
T75	C (CO)	1/2HP, 240VAC, 40°C	30x10 <sup>3</sup>

### Mechanical endurance, DC coil

10x10<sup>6</sup> operations



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## Coil Data

Coil voltage range	3 to 60VDC
Operative range, IEC 61810	2
Coil insulation system according UL	classA

#### Coil versions, DC coil

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	$\Omega \pm 10\%^{1)}$	mW
03	3	2.1	0.3	40	225
05	5	3.4	0.5	118	212
06	6	4.1	0.6	165	218
09	9	6.1	0.9	364	223
12	12	8.2	1.2	652	221
24	24	16.3	2.4	2270	254
48	48	32.6	4.8	8790	262
60	60	40.8	6.0	15265 <sup>1)</sup>	236

1) Coil resistance ±15%

All figures are given for coil without pre-energization, at ambient temperature +23°C Other coil voltages on request



## **Insulation Data**

Initial dielectric strength		
between open contacts	1000V <sub>rms</sub>	
between contact and coil	4000V <sub>rms</sub>	
Clearance/creepage		
between contact and coil	≥8/8mm	
Material group of insulation parts	Illa	

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <a href="http://relays.te.com/definitions">http://relays.te.com/definitions</a>

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 1



# Low profile, PCB Relay T75 Series (Continued)

## **Other Data**

Material compliance: EU RoHS/ELV, Ch	nina RoHS, REACH, Halogen content
refer to the Pr	oduct Compliance Support Center at
www.te.com	/customersupport/rohssupportcenter
Ambient temperature	- 40 to +85°C
Category of environmental protection	
IEC 61810	RTII - flux proof
	RTIII - wash tight
Vibration resistance (functional)	
form A (NO) / form B (NC)	10/4g
Vibration resistance (destructive)	
form A (NO) / form B (NC)	20/5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT
Weight	11g
Resistance to soldering heat THT	
IEC 60068-2-20	RTIII: 260°C/5s
Packaging/unit	tube/20 pcs., box/1000 pcs.

## PCB layout / terminal assignment

Bottom view on solder pins

1 form C, 1 CO contact, 3.2mm



### 1 form A, 1 NO contact, 5mm



#### Dimensions





#### 1 form A, 1 NO contact, 5mm



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## Low profile, PCB Relay T75 Series (Continued)

Product code structure	Typical product code <b>T7</b>	5 S	5	D	1	1	2	-12
Туре								
<b>T75</b> Low profile, printed circuit board relay T75	Series							
Enclosure								
S RTIII - wash tight								
Contact arrangement			-					
1 1 form A, 1 NO 5	1 form C, 1 CO							
Coil input								
D DC voltage								
Coil Configuration								
1 Single coil, monostable (non-latching)								
Mounting and terminals								
1 PCB terminals								
Contact materials							-	
2 AgCdO								
Coil voltage								
Coil code: please refer to coil versions table (e.g. 05	5=5VDC)							

Product code	Arrangement	Enclosure	Coil	Part Number
T75S1D112-05	1 form A, 1 NO	RTIII - wash-tight	5VDC	1393222-7
T75S1D112-06			6VDC	5-1393223-2
T75S1D112-12			12VDC	2-1393222-9
T75S1D112-24			24VDC	4-1393222-8
T75S5D112-05	1 form C, 1 CO		5VDC	7-1393222-6
T75S5D112-09			9VDC	9-1393222-0
T75S5D112-12			12VDC	1393223-3
T75S5D112-18			18VDC	1-1393223-6
T75S5D112-24			24VDC	2-1393223-8
T75S5D112-48			48VDC	4-1393223-1
T75S5D112-60			60VDC	1423089-1

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