

Miniature Power PCB Relay T7S

- 1pole 10 / 6 A, 1CO or 1NO contact
- Sensitive 360 mW coil
- Version T7S-WG with tracking resistance PTI 325 on relay base and cover
- WG version: Product in accordance to IEC60335-1
- RoHS compliant (Directive 2002/95/EC) as per product date code 0424



Applications

Domestic appliances, heating control, building control, measurement&control

Approvals

T7S / T7S-WG: B265 E82292
Technical data of approved types on request

Contact data	T7S**E	T7S**H
Contact configuration	1 CO or 1 NO	
Contact set	single contact	
Type of interruption	micro-disconn.	
Rated current	10 A	6 A
Rated voltage / max.switching voltage AC	240/400 VAC	
Maximum breaking capacity AC	2500 VA	
Contact material	AgZnO / AgNi 90/10	
Mechanical endurance	10x10 ⁶ cycles	
Rated frequency of operation with / without load	10/300 min ⁻¹	

Contact ratings

Type	Load	Cycles
T7SV5E	C/O (N/O tested): 10 A, 250VAC, 85°C, resistive, EN61810-1	50x10 ³
T7SV5H	C/O (N/O tested): 6 A, 250VAC, 105°C, resistive, EN61810-1	100x10 ³
T7SV5E	C/O (N/O tested): 10 A, 250VAC, 85°C, UL 508	50x10 ³
T7SV5H	C/O (N/O tested): 6 A, 250VAC, 105°C, UL 508	100x10 ³
T7SV5E4	C/O (N/O tested): 10.5 A, 250VAC, 70°C, resistive, EN61810-1	100x10 ³

Coil data

Rated coil voltage range DC coil	5...36 VDC
Coil power DC coil	typ. 360 mW
Operative range	2
Coil insulation system according UL1446	class F

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
05	5	3.5	0.5	70±10%	357
06	6	4.2	0.6	100±10%	360
09	9	6.3	0.9	225±10%	360
12	12	8.4	1.2	400±10%	360
18*	18	12.6	1.8	900±10%	360
24	24	16.8	2.4	1600±10%	360
36	36	25.2	3.6	3600±10%	360

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

* versions with 18V coils are not registered at VDE

Insulation

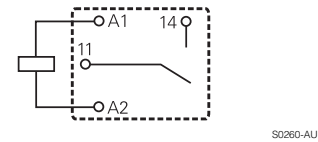
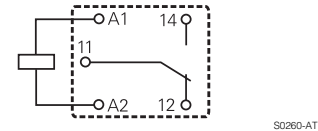
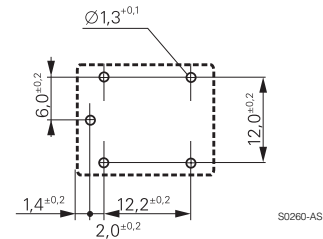
Dielectric strength coil-contact circuit	1500 V _{rms}
open contact circuit	750 V _{rms}
Clearance / creepage coil-contact circuit	≥ 2,5 / 2,5 mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 325
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	basic
open contact circuit	functional
Rated insulation voltage	250 V
Pollution degree	2
Rated voltage system	240 V
Overvoltage category	II

Other data

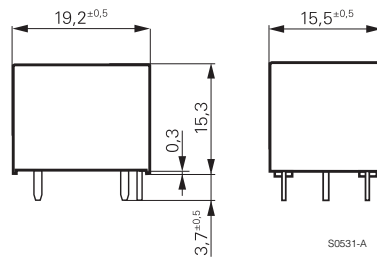
	T7**E	T7S**H
RoHS - Directive 2002/95/EC	compliant as per product date code 0424	
Flammability class according to UL94	V0	
For WG version: GWFI to IEC 60695-2-12	850°C	
GWIT to IEC 60695-2-13	775°C	
Ambient temperature range	-40...85°C	-40...105°C
Operate- / release time	typ. 10/5 ms	
Bounce time N/O / N/C contact	typ. 1 / 17 ms	
Vibration resistance (function) NO / NC contact	>14 / 8 g, 30...400 Hz	
Shock resistance (destruction)	100 g	
Category of protection	RTII - flux proof RTIII - wash tight	
Mounting	PCB	
Resistance to soldering heat flux-proof version	270°C / 10 s	
wash-tight version	260°C / 5 s	
Relay weight	11 g	
Packaging unit	25/1000 pcs	

PCB layout / terminal assignment

Bottom view on solder pins



Dimensions



Product key

Type	T	7	S								
Version	<table border="0"> <tr> <td>S wash tight</td> <td>V flux proof</td> </tr> </table>									S wash tight	V flux proof
S wash tight	V flux proof										
Contact configuration	<table border="0"> <tr> <td>1 1 NO contact</td> <td>5 1 CO contact</td> </tr> </table>									1 1 NO contact	5 1 CO contact
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Coil version	<table border="0"> <tr> <td>H DC coil 360 mW, 105°C</td> <td>E DC coil 360 mW, 85°C</td> </tr> </table>									H DC coil 360 mW, 105°C	E DC coil 360 mW, 85°C
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Contact material	<table border="0"> <tr> <td>4 AgNi 90/10</td> <td>6 AgZnO</td> </tr> </table>									4 AgNi 90/10	6 AgZnO
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Coil	Coil code: please refer to coil versions table										
Version	<table border="0"> <tr> <td>Blank T7S standard version</td> </tr> <tr> <td>WG product in accordance with IEC 60335-1</td> </tr> </table>									Blank T7S standard version	WG product in accordance with IEC 60335-1
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WG product in accordance with IEC 60335-1											
Other types on request											

Product key	Version	Cont. material	Cont.configuration	Coil	Part number
T7SV1E6-05	flux proof	AgZnO	1 NO contact	5 VDC	1721382-1
T7SV1E6-06				6 VDC	1721382-2
T7SV1E6-09				9 VDC	1721382-3
T7SV1E6-12				12 VDC	1721382-4
T7SV1E6-24				24 VDC	1721382-5
T7SV5E6-05			1 CO contact	5 VDC	1721381-1
T7SV5E6-06				6 VDC	1721381-2
T7SV5E6-09				9 VDC	1721381-3
T7SV5E6-12				12 VDC	1721381-4
T7SV5E6-24				24 VDC	1721381-5
T7SV1E6-05-WG	flux proof according IEC 60335-1		1 NO contact	5 VDC	2-1721382-5
T7SV1E6-06-WG				6 VDC	2-1721382-6
T7SV1E6-09-WG				9 VDC	2-1721382-7
T7SV1E6-12-WG				12 VDC	2-1721382-8
T7SV1E6-24-WG				24 VDC	2-1721382-9
T7SV5E6-05-WG			1 CO contact	5 VDC	2-1721381-5
T7SV5E6-06-WG				6 VDC	2-1721381-6
T7SV5E6-09-WG				9 VDC	2-1721381-7
T7SV5E6-12-WG				12 VDC	2-1721381-8
T7SV5E6-24-WG				24 VDC	2-1721381-9
T7SS1E6-05	wash tight		1 NO contact	5 VDC	1721382-7
T7SS1E6-06				6 VDC	1721382-8
T7SS1E6-09				9 VDC	1721382-9
T7SS1E6-12				12 VDC	1-1721382-0
T7SS1E6-24				24 VDC	1-1721382-1
T7SS5E6-05			1 CO contact	5 VDC	1721381-7
T7SS5E6-06				6 VDC	1721381-8
T7SS5E6-09				9 VDC	1721381-9
T7SS5E6-12				12 VDC	1-1721381-0
T7SS5E6-24				24 VDC	1-1721381-1
T7SS1E6-05-WG	wash tight according IEC 60335-1		1 NO contact	5 VDC	3-1721382-1
T7SS1E6-06-WG				6 VDC	3-1721382-2
T7SS1E6-09-WG				9 VDC	3-1721382-3
T7SS1E6-12-WG				12 VDC	3-1721382-4
T7SS1E6-24-WG				24 VDC	3-1721382-5
T7SS5E6-05-WG			1 CO contact	5 VDC	3-1721381-1
T7SS5E6-06-WG				6 VDC	3-1721381-2
T7SS5E6-09-WG				9 VDC	3-1721381-3
T7SS5E6-12-WG				12 VDC	3-1721381-4
T7SS5E6-24-WG				24 VDC	3-1721381-5
T7SV1E4-05	flux proof	AgNi 90/10	1 NO contact	5 VDC	1721735-1
T7SV1E4-06				6 VDC	1721735-2
T7SV1E4-09				9 VDC	1721735-3
T7SV1E4-12				12 VDC	1721733-4
T7SV1E4-24				24 VDC	1721735-5
T7SV5E4-05			1 CO contact	5 VDC	1721734-1
T7SV5E4-06				6 VDC	1721734-2
T7SV5E4-09				9 VDC	1721734-3
T7SV5E4-12				12 VDC	1721734-4
T7SV5E4-24				24 VDC	1721734-5
T7SV1E4-05-WG	flux proof according IEC 60335-1		1 NO contact	5 VDC	2-1721735-5
T7SV1E4-06-WG				6 VDC	2-1721735-6
T7SV1E4-09-WG				9 VDC	2-1721735-7
T7SV1E4-12-WG				12 VDC	2-1721735-8
T7SV1E4-24-WG				24 VDC	2-1721735-9
T7SV5E4-05-WG			1 CO contact	5 VDC	2-1721734-5
T7SV5E4-06-WG				6 VDC	2-1721734-6
T7SV5E4-09-WG				9 VDC	2-1721734-7
T7SV5E4-12-WG				12 VDC	2-1721734-8
T7SV5E4-24-WG				24 VDC	2-1721734-9