

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



F_T7S_B

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 disconnection	
Rated voltage / max. switching voltage AC	240 / 400 VAC	
Rated current	10 A	6 A
Maximum breaking capacity AC	2500 VA	
Contact material	AgNi 90/10 / AgZnO	
Rated frequency of operation with / without load	10/300 min ⁻¹	
Operate- / release time	max. 7 / 3 ms	
Bounce time NO / NC contact	max. 3 / 2 ms	

Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
T7SV5E	NO of CO	10 A, 250 VAC, cosφ=1	85°C	50x10 ³
T7SV5E4	NO of CO	10.5 A, 250 VAC, cosφ=1	70°C	100x10 ³
T7SV1E	NO	10 A, 250 VAC, cosφ=1	85°C	50x10 ³
T7SV1E4	NO	10.5 A, 250 VAC, cosφ=1	70°C	100x10 ³
T7SV5H	NO of CO	6 A, 250 VAC, cosφ=1	105°C	100x10 ³
T7SV1H	NO	6 A, 250 VAC, cosφ=1	105°C	100x10 ³
UL 508				
T7SV...E	NO	10 A, 250 VAC, resistive	85°C	50x10 ³
T7SV...H	NO	6 A, 250 VAC, resistive	105°C	100x10 ³

Coil data

Rated coil voltage range DC coil	5...36 VDC
Coil power DC coil	typ. 360 mW
Operative range to IEC 61810	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

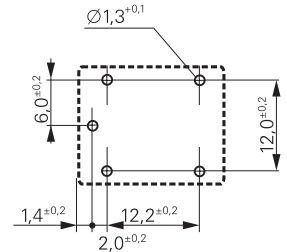
* versions with 18V coils are not registered at VDE

Miniature Power PCB Relay T7S (Continued)

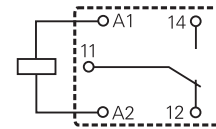
Insulation	
Dielectric strength coil-contact circuit	1500 V _{rms}
open contact circuit	750 V _{rms}
Clearance / creepage coil-contact circuit	≥ 2.5 / 2.5 mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 325
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	basic
open contact circuit	micro disconnection
Rated insulation voltage	250 V
Pollution degree	2
Rated voltage system	240 V
Overvoltage category	II

Other data	T7**E	T7S**H
Mechanical endurance	10x10 ⁶ cycles	
Material	RoHS - Directive 2002/95/EC compliant as per product date code 0424 Resistance to heat and fire, WG version according EN60335, par.30	
Environment	Ambient temperature range -40...85°C -40...105°C 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	
Processing	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 1400 / 1400 pcs	

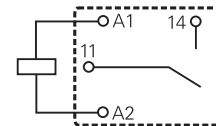
PCB layout / terminal assignment
Bottom view on solder pins



S0260-AS

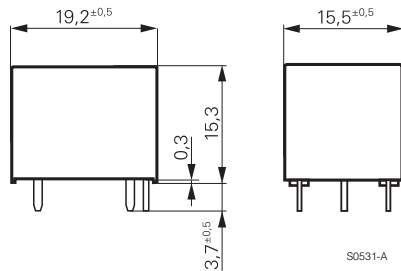


S0260-AT



S0260-AU

Dimensions



S0531-A

Product key	Typical product key					
Type	T7S	V	1	E	6	-06
T7S Miniature Power PCB Relay T7S						
Version	S wash tight	V flux proof				
Contact configuration	1 1 NO contact (1 form A)	5 1 CO contact (1 form C)				
Coil version	H DC coil 360 mW, 105°C	E DC coil 360 mW, 85°C				
Contact material	4 AgNi 90/10	6 AgZnO				
Coil	Coil code: please refer to coil versions table					
Version	Blank T7S standard version					
	WG product in accordance with IEC 60335-1					

Other types on request

Miniature Power PCB Relay T7S (Continued)

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	flux proof according IEC 60335-1		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			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		