

**Miniature Relay PT** (Continued)

**Coil Data** (continued)

**Coil versions, DC coil, standard**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%^{1)2)}$	Rated coil power mW
006	6	4.5	0.6	48	750
012	12	9.0	1.2	192	750
024	24	18.0	2.4	777	741
048	48	36.0	4.8	3072	750
060	60	45.0	6	4845 <sup>1)</sup>	743
110	110	82.5	11	16133 <sup>2)</sup>	750
220	220	165.0	22	64533 <sup>2)</sup>	750

**Coil versions, DC coil with bipolar LED or LED and protection diode**

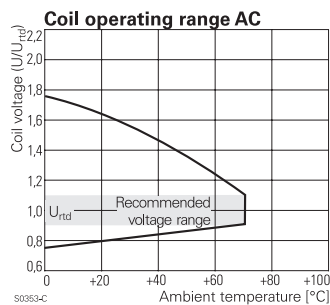
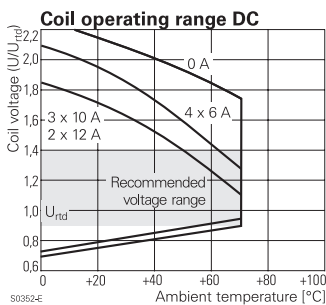
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%^{1)2)}$	Rated coil +LED pwr. mW
L06 LA6	6	4.5	0.6	48	750+3.5
L12 LB2	12	9.0	1.2	192	750+10
L24 LC4	24	18.0	2.4	777	741+18
L48 LE8	48	36.0	4.8	3072	750+38
L60 LG0	60	45.0	6.0	4845 <sup>1)</sup>	743+56
M10 MB0	110	82.5	11.0	16133 <sup>2)</sup>	750+96.5
N20 NC0	220	165.0	22.0	64533 <sup>2)</sup>	750+202.5

1) Coil resistance  $\pm 12\%$ , 2) Coil resistance  $\pm 15\%$ ,  
3) Protection diode PD; standard polarity: +A1/-A2  
All figures are given for coil without pre-energization, at ambient temperature +23°C

**Coil versions, AC coil, 50/60Hz**

Coil code	Rated voltage VAC	Operate voltage 50/60Hz VAC	Release voltage 50/60Hz VAC	Coil resistance $\Omega \pm 10\%^{1)2)}$	Rated coil power VA
506 R06	6	4.8/5.4	1.8	11	1.0/0.85
512 R12	12	9.6/10.8	3.6	48	1.0/0.85
524 R24	24	19.2/21.6	7.2	192	1.0/0.79
548 R48	48	38.4/43.2	14.4	777	1.0/0.87
560 R60	60	48.0/54.0	18.0	1306	1.0/0.87
615 S15	115	92.0/103.5	34.5	4845 <sup>1)</sup>	1.0/0.86
730 T30	230	184/207	69.0	19465 <sup>2)</sup>	1.0/0.90

1) Coil resistance  $\pm 12\%$ , 2) Coil resistance  $\pm 15\%$   
All figures are given for coil without pre-energization, at ambient temperature +23°C



**Insulation Data**

	PT2	PT3	PT5
Initial dielectric strength			
between open contacts	1200V <sub>rms</sub>	1200V <sub>rms</sub>	1200V <sub>rms</sub>
between contact and coil	2500V <sub>rms</sub>	2500V <sub>rms</sub>	2500V <sub>rms</sub>
between adjacent contacts	2500V <sub>rms</sub>	2500V <sub>rms</sub>	2000V <sub>rms</sub>
Initial surge withstand voltage			
between contact and coil	5000V (1.2/50µs)		
Clearance/creepage			
between contact and coil	≥3/4mm		
Material group of insulation parts	IIIa		
Pollution degree	2		

**Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/rohssupportcenter)

Ambient temperature	-40 to +70°C
Cold storage, IEC 60068-2-1	-40°C/16h
Dry heat, IEC 60068-2-2	70°C/16h
Category of environmental protection	
IEC 61810	RTII - flux proof
Vibration resistance (functional), form A (NO)/form B (NC)	7/4g
Shock resistance (functional), form A (NO)/form B (NC)	20/5g
Terminal type	PCB-THT, plug-in quick-connect
Cover retention, pull/push force	100/100N
Weight	30g
Mounting distance, for mounting on PCB	5mm
Resistance to soldering heat THT	
IEC 60068-2-20	270°C/10s
Packaging unit	10/250pcs.

**Accessories**

For details see datasheet [Accessories Miniature Relay PT](#)  
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.

**Product Sets**

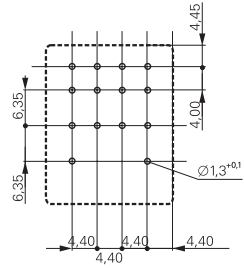
Complete sets consisting of a relay mounted on a socket see [Package PT](#)

**Miniature Relay PT** (Continued)

**PCB layout / terminal assignment**

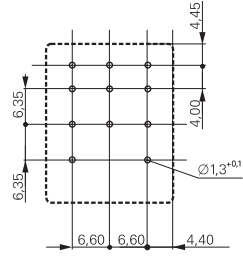
Bottom view on pins

4 pole



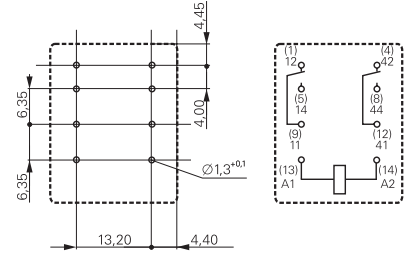
S0354-AA

3 pole



S0354-AB

2 pole



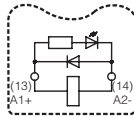
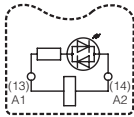
S0354-AC

S0354-AF

**Circuit**

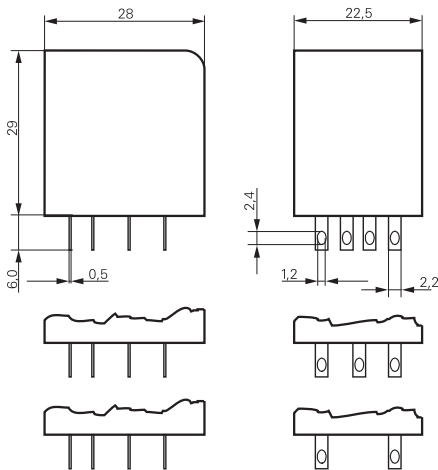
LED

protection diode+LED



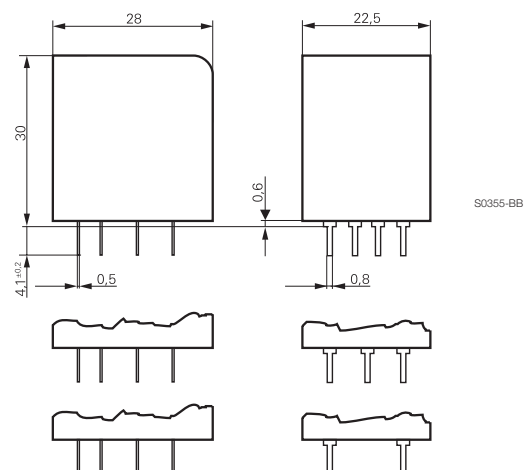
**Dimensions**

Solder- and plug-in terminals (standard version)



S0355-AA

PCB version



S0355-BB

**Miniature Relay PT** (Continued)

**Product code structure**

Typical product code **PT 5 7 0 730**

<b>Type</b>	PT Miniature Relay PT				
<b>Contact arrangement</b>	<b>2</b> 2 form C contacts (2 CO contacts) <b>3</b> 3 form C contacts (3 CO contacts) <b>5</b> 4 form C contacts (4 CO contacts)				
<b>Contact material</b>	<b>7</b> AgNi 90/10, with test button <b>8</b> AgNi 90/10 gold plated, with test button <b>2</b> AgNi 90/10, without test button <b>3</b> AgNi 90/10 gold plated, without test button				
<b>Version</b>	<b>0</b> Standard, 2.8mm quick connect term. <b>1</b> PCB terminals				
<b>Coil</b>	Coil code: please refer to coil versions table				

Other types on request

Product code	Cont. Config.	Cont. material	Version	Coil	Coil	Part number			
PT270024	2 form C 2 CO contacts	AgNi 90/10 test button	AMP 2.8 connectors	DC coil	24VDC	4-1419111-2			
PT270524				AC coil	24VAC	4-1419111-8			
PT270615							115VAC	5-1419111-0	
PT270730							230VAC	5-1419111-1	
PT270L24							DC coil+LED	24VDC	9-1415001-1
PT270R24							AC coil+LED	24VAC	1415002-1
PT270S15								115VAC	2-1415039-1
PT270T30								230VAC	3-1415002-1
PT271024						PCB terminals	DC coil	24VDC	5-1419111-3
PT271524							AC coil	24VAC	5-1419111-6
PT271615					115VAC	4-1419135-0			
PT271730					230VAC	5-1419111-8			
PT370024	3 form C 3 CO contacts	AgNi 90/10 test button	AMP 2.8 connectors	DC coil	24VDC	6-1419111-1			
PT370524				AC coil	24VAC	6-1419111-6			
PT370615							115VAC	6-1419111-8	
PT370730							230VAC	6-1419111-9	
PT370L24							DC coil+LED	24VDC	5-1415002-1
PT370R24							AC coil+LED	24VAC	7-1415002-1
PT370S15								115VAC	9-1415039-1
PT370T30								230VAC	9-1415002-1
PT371024						PCB terminals	DC coil	24VDC	7-1419111-1
PT371524							AC coil	24VAC	7-1419111-3
PT371615					115VAC	1393154-8			
PT371730					230VAC	7-1419111-5			
PT570024	4 form C 4 CO contacts	AgNi 90/10 test button	AMP 2.8 connectors	DC coil	24VDC	1-1393154-2			
PT570524				AC coil	24VAC	8-1419111-7			
PT570615							115VAC	9-1419111-0	
PT570730							230VAC	9-1419111-1	
PT570L24							DC coil+LED	24VDC	6-1415001-1
PT570LC4							DC coil+LED+PD		7-1415541-0
PT570R24							AC coil+LED	24VAC	7-1415001-1
PT570S15								115VAC	7-1415003-1
PT570T30								230VAC	8-1415001-1
PT571024						PCB terminals	DC coil	24VDC	9-1419111-3
PT571524				AC coil	24VAC	9-1419111-6			
PT571615					115VAC	1-1393154-5			
PT571730					230VAC	9-1419111-8			
PT580024		AgNi 90/10 gold plated test button	AMP 2.8 connectors	DC coil	24VDC	1-1393154-7			
PT580524				AC coil	24VAC	2-1393154-1			
PT580730							230VAC	2-1393154-2	
PT580L24							DC coil+LED	24VDC	5-1415026-1
PT580R24							AC coil+LED	24VAC	6-1415026-1
PT580T30								230VAC	7-1415026-1
PT581024						PCB terminals	DC coil	24VDC	7-1419135-2
PT581730							AC coil	230VAC	2-1393154-3