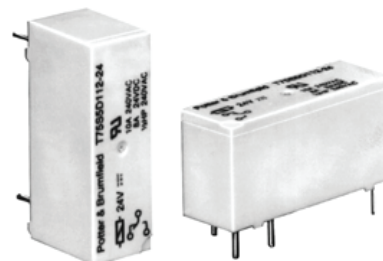


## Low profile, PCB Relay T75 Series

- 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.



### Approvals

VDE Cert. No. 3919, UL E214025

Technical data of approved types on request.

### 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 load | 6/1200min <sup>-1</sup>        |
| Operate/release time max.                 | 10/5ms                         |
| Bounce time max., form A/form B           | 3/10ms                         |

### Electrical endurance

| Type | 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

| Type | 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

### Coil Data

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

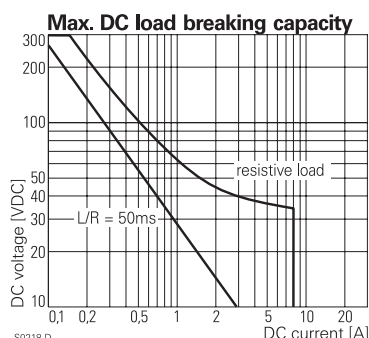
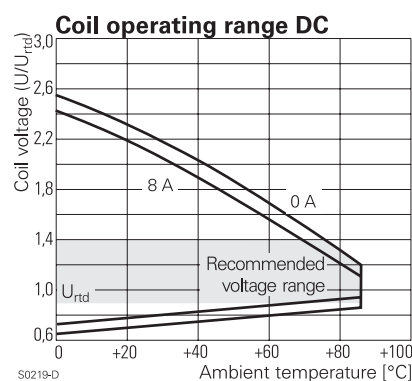
### Coil versions, DC coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% <sup>1)</sup> | Rated coil power 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>ms</sub> |
| between contact and coil           | 4000V <sub>ms</sub> |
| Clearance/creepage                 |                     |
| between contact and coil           | ≥8/8mm              |
| Material group of insulation parts | IIla                |

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

### Other Data

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

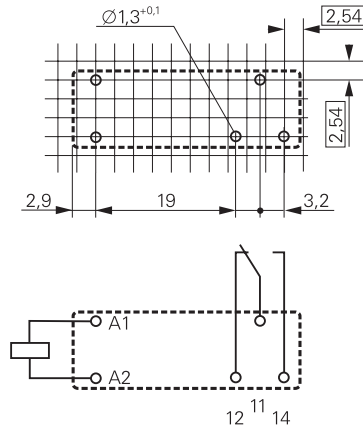
Resistance to soldering heat THT

IEC 60068-2-20 RTIII: 260°C/5s

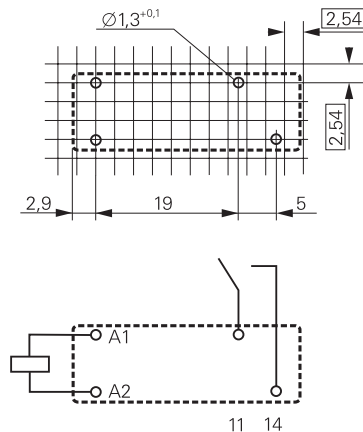
Packaging/unit tube/20 pcs., box/1000 pcs.

### PCB layout / terminal assignment

1 form C, 1 CO contact, 3.2mm

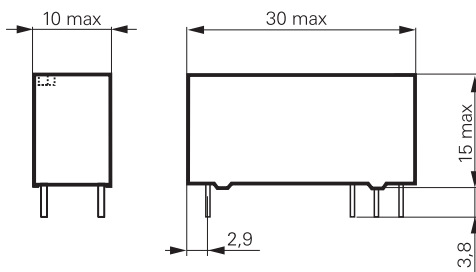


1 form A, 1 NO contact, 5mm

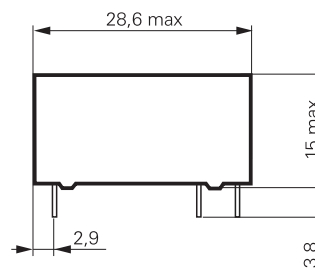


### Dimensions

1 form C, 1 CO contact, 3.2mm



1 form A, 1 NO contact, 5mm



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

| Product code structure                                        |                                                     | Typical product code |  | T75 | S | 5              | D | 1 | 1 | 2 | -12 |
|---------------------------------------------------------------|-----------------------------------------------------|----------------------|--|-----|---|----------------|---|---|---|---|-----|
| Type                                                          |                                                     |                      |  |     |   |                |   |   |   |   |     |
| T75                                                           | 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=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   |