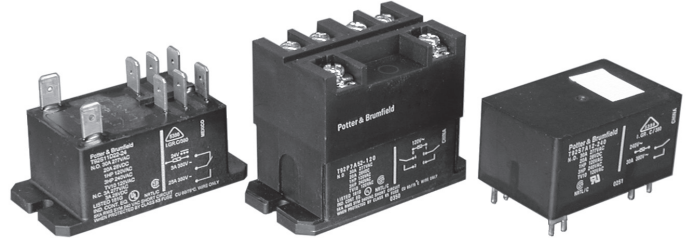


**T92 Series Two-pole 30A PCB or Panel Mount Relay**

- 40A, 2 form A (NO) and 2 form C (CO) switching capability
- Designed to control compressor loads to 3.5 tons, 110LRA / 25.3FLA
- Meets requirements of UL 508 and UL 873 spacings - 8mm through air, 9.5mm over surface
- Meets requirements of VDE 8mm spacing, 4kV dielectric coil-to-contact
- Meets requirements of UL Class F construction
- UL approved for 600VAC switching (1.5HP)
- New screw terminal version (consult factory for availability, ratings)

Typical applications  
HVAC, residential / commercial appliances, industrial controls.



**Approvals**

UL E58304 (Recognized and Listed); CSA LR48471; VDE 40019600  
Technical data of approved types on request.

**Contact Data**

|   |                               |
|---|-------------------------------|
| Contact arrangement                         | 2 form A (NO), 2 form C (CO)  |
| Rated voltage                               | 277VAC                        |
| Max. switching voltage                      | 600VAC                        |
| Rated current                               | 30A NO; 3A NC                 |
| Limiting continuous current                 | 40A NO; 3A NC                 |
| Limiting making current                     | 40A NO; 3A NC                 |
| Limiting breaking current                   | 40A NO; 3A NC                 |
| Contact material                            | AgSnInO, AgCdO                |
| Min. recommended contact load               | 500ma (NO)/ 100ma (NC), 12VAC |
| Frequency of operation, with load           | 360hr                         |
| Operate/release time max., including bounce | 25/25ms                       |

**Contact ratings <sup>1)</sup>**

| Type                       | Load  | Cycles              |
|----------------------------|---|---------------------|
| <b>UL508</b>               |   |                     |
| AgCdO                      |   |                     |
| NO                         | 40A, 277VAC, resistive                        | 6x10 <sup>3</sup>   |
| NO                         | 30A, 120/277VAC, resistive                    | 100x10 <sup>3</sup> |
| NO                         | 10A, 600VAC, general purpose                  | 100x10 <sup>3</sup> |
| NO                         | 1HP, 120VAC                                   | 100x10 <sup>3</sup> |
| NO                         | 3HP, 240VAC                                   | 1x10 <sup>3</sup>   |
| NO                         | 1.5HP, 480 or 600VAC                          | 100x10 <sup>3</sup> |
| NO                         | 110LRA/25.3FLA, 240VAC (DC coil only)         | 100x10 <sup>3</sup> |
| NO                         | 60LRA/14FLA, 240VAC (AC coil only)            | 100x10 <sup>3</sup> |
| NO                         | 3A, 240VAC, pilot duty                        | 100x10 <sup>3</sup> |
| NO                         | 20A, 28VDC, resistive                         | 100x10 <sup>3</sup> |
| NO                         | TV10, 120VAC                                  | 100x10 <sup>3</sup> |
| NC                         | 3A, 277VAC                                    | 100x10 <sup>3</sup> |
| NC                         | 2A, 480VAC                                    | 100x10 <sup>3</sup> |
| NC                         | 1A, 600VAC                                    | 100x10 <sup>3</sup> |
| AgSnInO                    |   |                     |
| NO                         | 30A, 120/277VAC, resistive (DC coil only)     | 200x10 <sup>3</sup> |
| NO                         | 30A, 120/277VAC, resistive (AC coil only)     | 100x10 <sup>3</sup> |
| NO                         | 20A, 480VAC, resistive                        | 100x10 <sup>3</sup> |
| NO                         | 1.5HP, 120VAC, 2 pole making/breaking (Fig.1) | 100x10 <sup>3</sup> |
| NO                         | 3HP, 240VAC, 3 phase (DC coil only)           | 100x10 <sup>3</sup> |
| NO                         | 3HP, 480VAC, 3 phase (DC coil only)           | 100x10 <sup>3</sup> |
| NO                         | 2HP, 600VAC, 3 phase (DC coil only)           | 100x10 <sup>3</sup> |
| <b>VDE</b>                 |   |                     |
| AgCdO, flange mount relays |   |                     |
| NO                         | 20A, 400VAC                                   | 100x10 <sup>3</sup> |
| NC                         | 3A, 400VAC                                    | 30x10 <sup>3</sup>  |
| CO                         | 20A NO / 3A NC, 400VAC                        | 30x10 <sup>3</sup>  |
| AgCdO, PC mount relays     |   |                     |
| NO                         | 30A, 400VAC                                   | 100x10 <sup>3</sup> |
| NC                         | 3A, 400VAC                                    | 30x10 <sup>3</sup>  |
| CO                         | 30A NO / 3A NC, 400VAC                        | 30x10 <sup>3</sup>  |

**Contact ratings <sup>1)</sup> (continued)**

ARI 780-86 Endurance Test (section 6.6):  
HVAC Definite Purpose Contactor Standard  
Normally Open Contacts  
Single Phase/Two Pole (Both poles together switching a single load)  
110 LRA, 25.3 FLA, 200K operations (DC Coil)

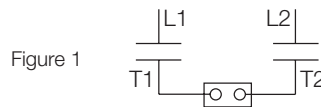


Figure 1

Single Phase Per Pole (Single load per pole)  
110 LRA, 18 FLA, 200K operations (DC Coil).  
60 LRA, 14 FLA, 200K operations (AC Coil).

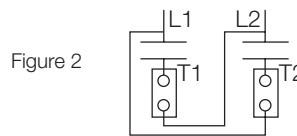


Figure 2

<sup>1)</sup> Contact ratings at 25°C (unless otherwise noted) with relay properly vented.  
FLA, LRA ratings are compatible with 3.5 ton compressor applications.

|                      |                         |
|----------------------|-------------------------|
| Mechanical endurance | 10x10 <sup>6</sup> ops. |
|----------------------|-------------------------|

**Coil Data**

|                                     |                           |
|-------------------------------------|---------------------------|
| Coil voltage range                  | 5 to 110VDC; 12 to 240VAC |
| Max. coil power                     | 1.7W; 4.0VA               |
| Max. coil temperature               | 155°C                     |
| Coil insulation system according UL | Class F                   |

**Coil versions, DC coil**

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | Rated coil power W |
|-----------|-------------------|---------------------|---------------------|-----------------------|--------------------|
| 6         | 6                 | 4.5                 | 0.6                 | 22                    | 1.7                |
| 9         | 9                 | 6.75                | 0.9                 | 48                    | 1.7                |
| 12        | 12                | 9                   | 1.2                 | 86                    | 1.7                |
| 18        | 18                | 13.5                | 1.8                 | 197                   | 1.7                |
| 24        | 24                | 18                  | 2.4                 | 350                   | 1.7                |
| 48        | 48                | 36                  | 4.8                 | 1390                  | 1.7                |
| 110       | 110               | 82.5                | 11                  | 7255                  | 1.7                |

**Coil versions, AC coil**

| Coil code | Rated voltage VAC | Frequency Hz | Operate voltage VAC, 60Hz | Release voltage VAC, 60Hz | Coil resistance Ω±10% | Rated coil power VA |
|-----------|-------------------|--------------|---------------------------|---------------------------|-----------------------|---------------------|
| 12        | 12                | 60           | 9.6                       | 1.2                       | 9.1                   | 4                   |
| 24        | 24                | 60           | 19.2                      | 2.4                       | 36.6                  | 4                   |
| 120       | 110/120           | 50/60        | 96                        | 12                        | 950                   | 4                   |
| 240       | 220/240           | 50/60        | 192                       | 24                        | 3800                  | 4                   |
| 277       | 250/277           | 50/60        | 222                       | 28                        | 5485                  | 4                   |

All figures are given for coil without preenergization, at ambient temperature +23°C.

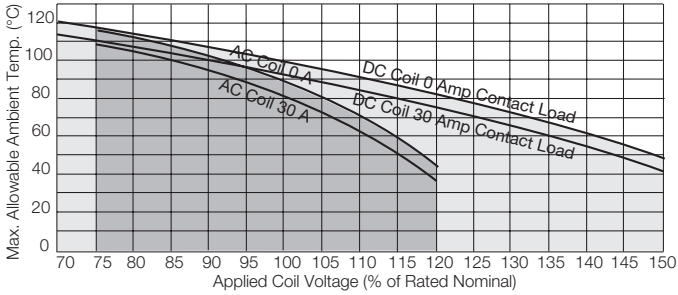
**T92 Series Two-pole 30A PCB or Panel Mount Relay (Continued)**

**Coil Data (continued)**

**Ambient temperature vs. coil voltage**

Assumptions:

1. Thermal resistance = 35°C per Watt (DC only.)
2. Still air.
3. Nominal coil resistance.
4. Max. mean coil temperature = 155°C (change of resistance method).
5. Coil temperature rise due to load = 6.3°C @ 30 amps.
6. Curves are based on 1.7W at 25°C (DC only.).



**Insulation Data**

|                                 |                              |
|---------------------------------|------------------------------|
| Initial dielectric strength     |                              |
| between open contacts           | 1500V <sub>rms</sub>         |
| between contact and coil        | 4000V <sub>rms</sub>         |
| between adjacent contact        | 2000V <sub>rms</sub>         |
| Initial surge withstand voltage |                              |
| between contact and coil        | 6kV                          |
| Initial insulation resistance   |                              |
| between insulated elements      | 1x10 <sup>9</sup> Ω          |
| Clearance/creepage              |                              |
| between contact and coil        | 8mm clearance/9.5mm creepage |

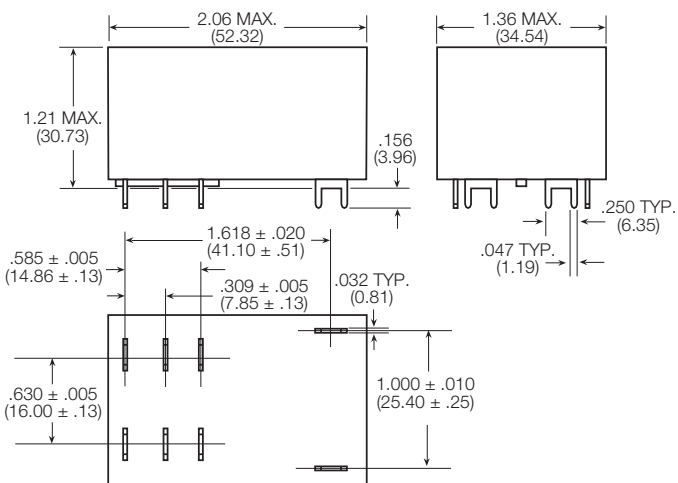
**Other Data**

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)

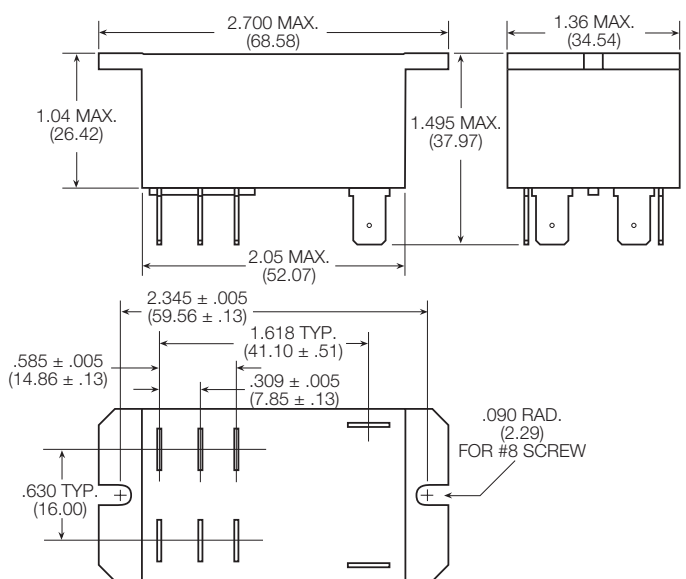
|                                      |  |
|--------------------------------------|--|
| Ambient temperature                  |  |
| DC coil                              | -55°C to 85°C  |
| AC coil                              | -55°C to 65°C  |
| Category of environmental protection | IEC 61810  |
|                                      | RTI - dust protected,<br>RTII - flux proof, RTIII - wash tight |
| Vibration resistance (functional)    | 1.65mm max excursions, 10-55 Hz                                |
| Shock resistance (functional)        | 10g for 11msec   |
| Shock resistance (destructive)       | 100g   |
| Terminal type                        | PCB-tht or quick connect                                       |
| Weight                               | 86g  |
| Resistance to soldering heat THT     |  |
| IEC 60068-2-20                       | 250°C  |
| Packaging/unit                       | tray/30 pcs., box/120 pcs.                                     |

**Dimensions**

T92 – Mounting and termination code 1



T92 – Mounting and termination code 2, 3 and 4





**T92 Series Two-pole 30A PCB or Panel Mount Relay** (Continued)

| Product Code  | Enclosure          | Contacts       | Coil | Mounting                      | Contact Material | Coil       | Part Number                 |             |                             |             |         |             |
|---------------|--------------------|----------------|------|-------------------------------|------------------|------------|-----------------------------|-------------|-----------------------------|-------------|---------|-------------|
| T92P7A22-24   | Plastic dust cover | 2 form A, 2 NO | AC   | Panel mount + quick connect   | AgCdO            | 24 VAC     | 6-1393211-0                 |             |                             |             |         |             |
| T92P7A22-120  |                    |                |      |                               |                  | 120 VAC    | 5-1393211-7                 |             |                             |             |         |             |
| T92P7A22-240  |                    |                |      |                               |                  | 240 VAC    | 6-1393211-2                 |             |                             |             |         |             |
| T92P7A22-277  |                    |                |      |                               |                  | 277 VAC    | 6-1393211-3                 |             |                             |             |         |             |
| T92P7A24-240  |                    |                |      | Panel mount + screw terminals | AgSnOInO         | 240 VAC    | 3-1423008-3                 |             |                             |             |         |             |
| T92P7A52-120  |                    |                |      |                               |                  | 120 VAC    | 1423008-8                   |             |                             |             |         |             |
| T92P7A52-240  |                    |                |      |                               |                  | 240 VAC    | 1-1423008-2                 |             |                             |             |         |             |
| T92P7D12-12   |                    |                |      |                               |                  | 12 VDC     | 6-1393211-5                 |             |                             |             |         |             |
| T92P7D12-24   |                    |                | DC   | PCB terminals                 |                  | 24 VDC     | 6-1393211-6                 |             |                             |             |         |             |
| T92P7D22-12   |                    |                |      |                               |                  | 12VDC      | 6-1393211-9                 |             |                             |             |         |             |
| T92P7D22-24   |                    |                |      |                               |                  | 24 VDC     | 7-1393211-1                 |             |                             |             |         |             |
| T92P7D22-48   |                    |                |      |                               |                  | 48 VDC     | 7-1393211-2                 |             |                             |             |         |             |
| T92P7D24-12   |                    |                |      |                               | AgSnOInO         | 12VDC      | 2-1423008-2                 |             |                             |             |         |             |
| T92P7D24-24   |                    |                |      |                               |                  | 24 VDC     | 1423008-9                   |             |                             |             |         |             |
| T92P7D42-24   |                    |                |      |                               |                  | AgCdO      | 7-1393211-5                 |             |                             |             |         |             |
| T92P7D52-12   |                    |                |      |                               |                  |            | 12 VDC                      | 1-1423008-0 |                             |             |         |             |
| T92P7D52-24   |                    | 2 form C, 2 CO | AC   | Panel mount + screw terminals |                  | 24 VDC     | 1423967-1                   |             |                             |             |         |             |
| T92P11A12-120 |                    |                |      |                               |                  | 120 VAC    | 3-1393211-8                 |             |                             |             |         |             |
| T92P11A22-12  |                    |                |      |                               |                  | 12 VAC     | 3-1393211-9                 |             |                             |             |         |             |
| T92P11A22-24  |                    |                |      |                               |                  | 24 VAC     | 4-1393211-3                 |             |                             |             |         |             |
| T92P11A22-120 |                    |                |      |                               |                  | 120 VAC    | 4-1393211-0                 |             |                             |             |         |             |
| T92P11A22-240 |                    |                |      |                               |                  | 240 VAC    | 4-1393211-4                 |             |                             |             |         |             |
| T92P11A22-277 |                    |                |      |                               |                  | 277 VAC    | 4-1393211-6                 |             |                             |             |         |             |
| T92P11A24-240 |                    |                |      |                               |                  | 240 VAC    | 3-1423008-7                 |             |                             |             |         |             |
| T92P11A42-120 |                    |                |      |                               | AgSnOInO         | 120VAC     | 4-1393211-8                 |             |                             |             |         |             |
| T92P11D12-12  |                    |                |      |                               |                  | DC         | PCB terminals               | 12 VDC      | 5-1393211-0                 |             |         |             |
| T92P11D22-12  |                    |                |      |                               |                  |            |                             |             | 5-1393211-3                 |             |         |             |
| T92P11D22-24  |                    |                |      |                               |                  |            |                             |             | Panel mount + quick connect | AgSnOInO    | 24 VDC  | 5-1393211-4 |
| T92P11D24-12  | 12 VDC             | 3-1423008-5    |      |                               |                  |            |                             |             |                             |             |         |             |
| T92P11D24-24  | 24 VDC             | 3-1423008-6    |      |                               |                  |            |                             |             |                             |             |         |             |
| T92S7A12-24   | Wash tight         | 2 form A, 2 NO | AC   | PCB terminals                 | AgCdO            |            |                             |             |                             |             | 24 VAC  | 9-1393211-8 |
| T92S7A12-120  |                    |                |      |                               |                  | 120 VAC    | 9-1393211-7                 |             |                             |             |         |             |
| T92S7A12-240  |                    |                |      |                               |                  | 240 VAC    | 9-1393211-9                 |             |                             |             |         |             |
| T92S7A22-24   | Top sealed         |                |      | Panel mount + quick connect   |                  | 24 VAC     | 1393212-4                   |             |                             |             |         |             |
| T92S7A22-120  |                    |                |      |                               |                  | 120 VAC    | 1393212-2                   |             |                             |             |         |             |
| T92S7A22-240  |                    |                |      |                               |                  | 240 VAC    | 1393212-5                   |             |                             |             |         |             |
| T92S7D12-12   | Wash tight         |                | DC   | PCB terminals                 |                  | 12 VDC     | 1393212-8                   |             |                             |             |         |             |
| T92S7D12-24   |                    |                |      |                               |                  | 24 VDC     | 1-1393212-0                 |             |                             |             |         |             |
| T92S7D12-48   |                    |                |      |                               |                  | 48 VDC     | 1-1393212-1                 |             |                             |             |         |             |
| T92S7D12-110  |                    |                |      |                               |                  | 110 VDC    | 1393212-7                   |             |                             |             |         |             |
| T92S7D14-24   |                    |                |      |                               | AgSnOInO         | 24 VDC     | 1-1423008-8                 |             |                             |             |         |             |
| T92S7D22-12   |                    |                |      |                               |                  | Top sealed | Panel mount + quick connect | AgCdO       | 12 VDC                      | 1-1393212-4 |         |             |
| T92S7D22-18   |                    |                |      |                               |                  |            |                             |             | 18 VDC                      | 1-1393212-5 |         |             |
| T92S7D22-24   |                    |                |      |                               |                  | 24 VDC     | 1-1393212-7                 |             |                             |             |         |             |
| T92S7D22-110  |                    |                |      |                               |                  | 110 VDC    | 1-1393212-3                 |             |                             |             |         |             |
| T92S11A12-24  |                    |                |      |                               |                  | Wash tight | 2 form C, 2 CO              | AC          | PCB terminals               |             | 24 VAC  | 8-1393211-1 |
| T92S11A12-120 |                    |                |      |                               |                  |            |                             |             |                             |             | 120 VAC | 8-1393211-0 |
| T92S11A12-240 |                    |                |      |                               |                  |            |                             |             |                             |             | 240 VAC | 8-1393211-2 |
| T92S11A22-12  | Top sealed         |                |      | Panel mount + quick connect   |                  | 12 VAC     | 8-1393211-3                 |             |                             |             |         |             |
| T92S11A22-24  |                    |                |      |                               |                  | 24 VAC     | 8-1393211-6                 |             |                             |             |         |             |
| T92S11A22-120 |                    |                |      |                               |                  | 120 VAC    | 8-1393211-4                 |             |                             |             |         |             |
| T92S11A22-240 |                    |                |      |                               |                  | 240 VAC    | 8-1393211-7                 |             |                             |             |         |             |
| T92S11D12-12  | Wash tight         |                | DC   | PCB terminals                 |                  | 12 VDC     | 8-1393211-9                 |             |                             |             |         |             |
| T92S11D12-24  |                    |                |      |                               |                  | 24 VDC     | 9-1393211-0                 |             |                             |             |         |             |
| T92S11D12-48  |                    |                |      |                               |                  | 48 VDC     | 9-1393211-1                 |             |                             |             |         |             |
| T92S11D12-110 |                    |                |      |                               |                  | 110 VDC    | 8-1393211-8                 |             |                             |             |         |             |
| T92S11D22-12  | Top sealed         |                |      | Panel mount + quick connect   |                  | 12 VDC     | 9-1393211-3                 |             |                             |             |         |             |
| T92S11D22-24  |                    |                |      |                               |                  | 24 VDC     | 9-1393211-4                 |             |                             |             |         |             |