

## Interface Power Relay RT

- 1 pole 12 / 16 A, 2 pole 8 A, 1 CO contact or 2 CO contacts
- DC- or AC coil
- Sensitive coil 400 mW
- Reinforced insulation, protection class II (VDE 0700)
- 5 kV / 10 mm coil-contact
- 1pole 12 A with 3.5 or 5 mm pinning
- Recycleable packaging
- RoHS compliant (Directive 2002/95/EC)  
as per product date code 0413



F0269-A

### Applications

Panel boards, mechanical engineering

### Approvals

VDE REG.-Nr. 6106, **CE** us E214025  
Technical data of approved types on request

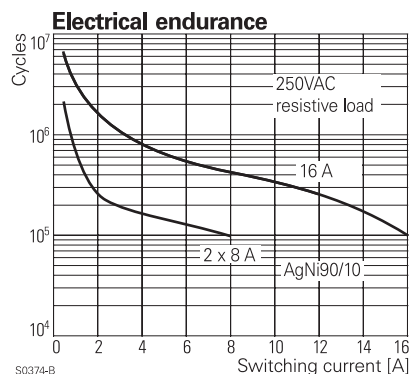
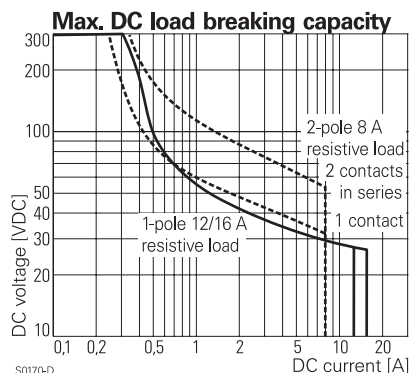
| Contact data                                     | 1-pole                     | 2-pole                |
|--|----------------------------|-----------------------|
| Contact configuration                            | 1 CO                       | 2 CO                  |
| Contact set                                      | single contact             |                       |
| Type of interruption                             | micro disconnection        |                       |
| Rated current                                    | 12 / 16 A                  | 8 A                   |
| Rated voltage / max.switching voltage AC         | 240/400 VAC                |                       |
| Maximum breaking capacity AC                     | 3000 / 4000 VA             | 2000 VA               |
| Limiting making capacity,max 4 s, df 10%         | 25 / 30 A                  | 15 A                  |
| Contact material                                 | AgNi 90/10                 |                       |
| Mechanical endurance DC coil                     | > 30 x 10 <sup>6</sup>     | >30 x 10 <sup>6</sup> |
| AC coil  | > 10 x 10 <sup>6</sup>     | >5 x 10 <sup>6</sup>  |
| Rated frequency of operation with / without load | 6 / 1200 min <sup>-1</sup> |                       |

### Contact ratings

| Type  | Load  | Cycles               |
|-------|---|----------------------|
| RT314 | 16 A, 250 VAC, NO contact, 85°C, DF 10%, UL508                            | 50x10 <sup>3</sup>   |
| RT314 | 16 A, 250 VAC, NC contact, 70°C, 30min <sup>-1</sup>                      | 53x10 <sup>3</sup>   |
| RT314 | 16 A, 250 VAC, CO contact, VDE 0435                                       | 30 x 10 <sup>3</sup> |
| RT314 | 1000 W incandescent lamp, 250 VAC   | 1.2x10 <sup>3</sup>  |
| RT314 | 10 A, 250 VAC, cosφ=0.6, CO contact, 70°C                                 | 200x10 <sup>3</sup>  |
| RT314 | 5 A / 2 A, 250 VAC, cosφ=1, motor, NO contact, 10min <sup>-1</sup> , 70°C | 1.1x10 <sup>6</sup>  |
| RT314 | Pilot duty A300 (NO contact), B300 (CO/NC contact), UL508                 |                      |
| RT314 | 1hp @ 240 VAC, 1/2hp @ 120 VAC, NO contact, UL508                         |                      |
| RT314 | AC15, 6 A, 250 VAC, NO and NC contact, 85°C, EN60947-5-1                  |                      |
| RT314 | DC13, 2 A / 24 VDC, 0.2 A / 250 VDC, NO and NC contact, 85°C, EN60947-5-1 |                      |
| RT424 | 8 A, 250 VAC, NO contact, 70°C, EN61810-1                                 | 100x10 <sup>3</sup>  |
| RT424 | 6(2) A, 250 VAC, NO/NC contact, 85°C; EN60730-1                           | 100x10 <sup>3</sup>  |
| RT424 | 1/2hp @ 240 VAC, 1/4hp @ 120 VAC, UL508                                   |                      |
| RT424 | Pilot duty B300, UL508  |                      |
| RT424 | 8 A, 30 VDC, General Purpose, UL508                                       |                      |

### Coil data

|   |              |
|---|--------------|
| Rated coil voltage range DC coil        | 5...110 VDC  |
| AC coil                                 | 24...230 VAC |
| Coil power DC coil                      | typ 400 mW   |
| AC coil                                 | typ 0.75 VA  |
| Operative range                         | 2            |
| Coil insulation system according UL1446 | class F      |



**Interface Power Relay RT (Continued)**

**Coil versions, DC-coil**

| Coil code  | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ohm | Rated coil power mW |
|------------|-------------------|---------------------|---------------------|---------------------|---------------------|
| 006        | 6                 | 4.2                 | 0.6                 | 90 ± 10%            | 400                 |
| 012        | 12                | 8.4                 | 1.2                 | 360 ± 10%           | 400                 |
| <b>024</b> | <b>24</b>         | <b>16.8</b>         | <b>2.4</b>          | <b>1440 ± 10%</b>   | <b>400</b>          |
| 048        | 48                | 33.6                | 4.8                 | 5520 ± 10%          | 417                 |
| 060        | 60                | 42.0                | 6.0                 | 8570 ± 12%          | 420                 |
| 110        | 110               | 77.0                | 11.0                | 28800 ± 12%         | 420                 |

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

**Coil versions, AC-coil 50Hz**

| Coil code  | Rated voltage VAC | Operate voltage 50 Hz VAC | Release voltage VAC | Coil resistance Ohm | Rated coil power 50 Hz VA |
|------------|-------------------|---------------------------|---------------------|---------------------|---------------------------|
| <b>524</b> | <b>24</b>         | <b>18.0</b>               | <b>3.6</b>          | <b>350 ± 10%</b>    | <b>0.76</b>               |
| 615        | 115               | 86.3                      | 17.3                | 8100 ± 15%          | 0.76                      |
| <b>730</b> | <b>230</b>        | <b>172.5</b>              | <b>34.5</b>         | <b>32500 ± 15%</b>  | <b>0.74</b>               |

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

**Insulation**

|   |                       |
|---|-----------------------|
| Dielectric strength coil-contact circuit  | 5000 V <sub>rms</sub> |
| open contact circuit                      | 1000 V <sub>rms</sub> |
| adjacent contact circuits                 | 2500 V <sub>rms</sub> |
| Clearance / creepage coil-contact circuit | ≥ 10 / 10 mm          |
| Material group of insulation parts        | ≥ IIIa                |
| Tracking index of relay base              | PTI 250 V             |
| Insulation to IEC 60664-1                 |                       |
| Type of insulation coil-contact circuit   | reinforced            |
| open contact circuit                      | functional            |
| adjacent contact circuits                 | basic                 |
| Rated insulation voltage                  | 250 V                 |
| Pollution degree                          | 3                     |
| Rated voltage system                      | 240/400 V             |
| Overvoltage category                      | III                   |

**Other data**

|  | 1-pole                                  | 2-pole       |
|--|---|--------------|
| RoHS - Directive 2002/95/EC                      | compliant as per product date code 0413 |              |
| Flammability class according to UL94             | V-0                                     |              |
| Ambient temperature range DC coil                | -40...+85°C                             |              |
| AC coil  | -40...+70°C                             |              |
| Operate- / release time DC coil                  | typ 7 / 3 ms                            | typ 7 / 2 ms |
| Bounce time DC coil, NO / NC contact             | typ 1 / 3 ms                            | typ 1 / 3 ms |
| Vibration resistance (function), NO / NC contact | 20 / 5 g, 30 ... 500 Hz                 |              |
| Shock resistance (destruction)                   | 100 g                                   |              |
| Category of protection                           | RTII                                    |              |
| Mounting distance                                | 0 mm, dense packing                     |              |
| Relay weight                                     | 14 g                                    |              |
| Packaging unit                                   | 20 / 500 pcs                            |              |

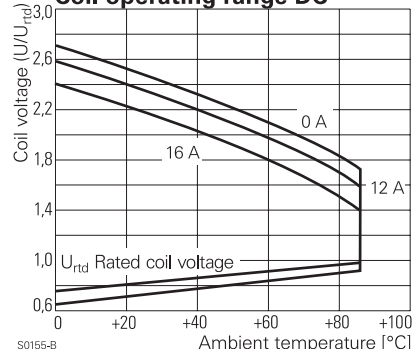
**Accessories**

For Details see datasheet Accessories Interface Power Relay RT

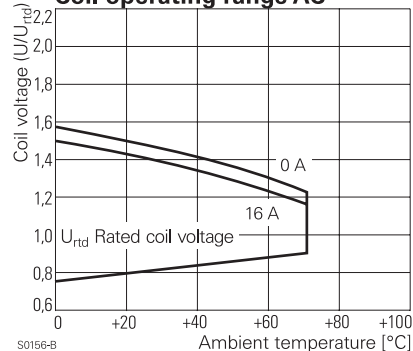
**Relay Packages**

Complete packages consisting of a relay mounted on a socket see Package RT

**Coil operating range DC**



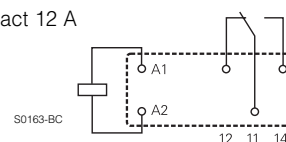
**Coil operating range AC**



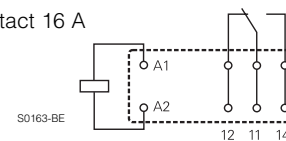
**Terminal assignment**

Bottom view on pins

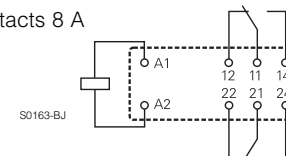
1 CO contact 12 A



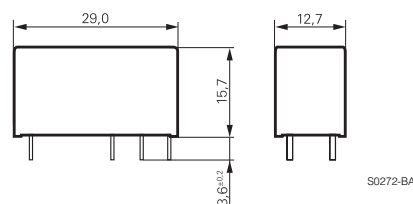
1 CO contact 16 A



2 CO contacts 8 A



**Dimensions**



**Interface Power Relay RT (Continued)**

**Product key**

|   |                              |          |                            |  |  |          |  |  |  |
|---|------------------------------|----------|----------------------------|--|--|----------|--|--|--|
|   |                              | <b>R</b> | <b>T</b>                   |  |  | <b>4</b> |  |  |  |
| Type  |                              |          |                            |  |  |          |  |  |  |
| Version   |                              |          |                            |  |  |          |  |  |  |
| <b>1</b>  | 1-pole, 12 A, pinning 3.5 mm | <b>3</b> | 1-pole, 16 A, pinning 5 mm |  |  |          |  |  |  |
| <b>2</b>  | 1-pole, 12 A, pinning 5 mm   | <b>4</b> | 2-pole, 8 A, pinning 5 mm  |  |  |          |  |  |  |
| Contact configuration   |                              |          |                            |  |  |          |  |  |  |
| <b>1</b>  | 1 CO contact                 | <b>2</b> | 2 CO contacts              |  |  |          |  |  |  |
| Contact material  |                              |          |                            |  |  |          |  |  |  |
| <b>4</b>  | AgNi 90/10                   |          |                            |  |  |          |  |  |  |
| Coil  |                              |          |                            |  |  |          |  |  |  |
| Coil code: please refer to coil versions table, preferred types in bold print |                              |          |                            |  |  |          |  |  |  |
| Wash tight version on request   |                              |          |                            |  |  |          |  |  |  |

| Product key | Version        | Contacts      | Cont. material | Coil    | Coil    | Part number |
|-------------|----------------|---------------|----------------|---------|---------|-------------|
| RT114024    | 1-pole, 12 A   | 1 CO contact  | AgNi 90/10     | DC-coil | 24 VDC  | 1-1393239-3 |
| RT114524    | pinning 3.5 mm |               |                | AC-coil | 24 VAC  | 1-1393239-7 |
| RT114615    |                |               |                |         | 115 VAC | 1-1393239-8 |
| RT114730    |                |               |                |         | 230 VAC | 1-1393239-9 |
| RT214024    | 1-pole, 12 A   |               |                | DC-coil | 24 VDC  | 5-1393239-5 |
| RT214524    | pinning 5 mm   |               |                | AC-coil | 24 VAC  | 5-1393239-9 |
| RT214615    |                |               |                |         | 115 VAC | 6-1393239-0 |
| RT214730    |                |               |                |         | 230 VAC | 0-1419108-6 |
| RT314024    | 1-pole, 16 A   |               |                | DC-coil | 24 VDC  | 9-1393239-8 |
| RT314524    | pinning 5 mm   |               |                | AC-coil | 24 VAC  | 0-1393240-4 |
| RT314615    |                |               |                |         | 115 VAC | 0-1393240-6 |
| RT314730    |                |               |                |         | 230 VAC | 0-1393240-7 |
| RT424024    | 2-pole, 8 A    | 2 CO contacts |                | DC-coil | 24 VDC  | 6-1393243-8 |
| RT424524    | pinning 5 mm   |               |                | AC-coil | 24 VAC  | 7-1393243-6 |
| RT424615    |                |               |                |         | 115 VAC | 7-1393243-8 |
| RT424730    |                |               |                |         | 230 VAC | 7-1393243-9 |

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