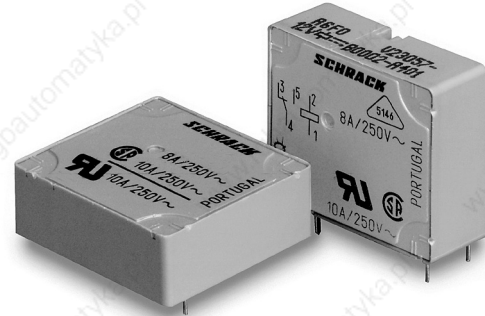


**Power PCB Relay Card E**

- 1 pole 8A, 1 form C (CO) or 1 form A (NO) contact
- 4kV coil-contact
- Vertical and horizontal version
- Version with bifurcated contacts
- Wash tight
- RoHS compliant (Directive 2002/95/EC)

Typical applications  
I/O modules, heating control, timers



F0151-B



**Approvals**

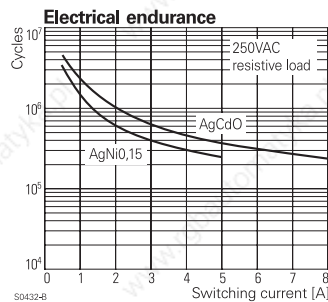
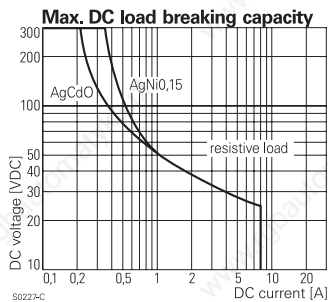
VDE REG.-Nr. 5146, UL E214025  
Technical data of approved types on request

| Contact Data   | 8A                             | 5A                | bifurcated            |
|--|--------------------------------|-------------------|-----------------------|
| Contact arrangement                                  | 1 form C (CO) or 1 form A (NO) |                   |                       |
| Rated voltage  | 250VAC                         |                   |                       |
| Max. switching voltage                               | 400VAC                         |                   |                       |
| Rated current  | 8A                             | 5A                | 5A                    |
| Limiting making current,<br>max 4 s, duty factor 10% | 15A                            | -                 | -                     |
| Breaking capacity max.                               | 2000VA                         | 1250VA            | 1250VA                |
| Contact material                                     | AgCdO,<br>AgNi20               | AgNi0.15          | AgNi0.15              |
| Contact style  | single<br>contact              | single<br>contact | bifurcated<br>contact |
| Frequency of operation, with/without load            | 360/72000h <sup>-1</sup>       |                   |                       |
| Operate/release time typ.                            | 7/3ms                          |                   |                       |
| Bounce time typ., form A/form B                      | 0.5/3ms                        |                   |                       |

**Contact ratings**

| Type            | Contact | Load                        | Cycles             |
|-----------------|---------|-----------------------------|--------------------|
| <b>IEC61810</b> |         |                             |                    |
| AgCdO           | C (CO)  | 8A, 250VAC, resistive, 70°C | 20x10 <sup>3</sup> |
| AgNi20          | C (CO)  | 8A, 250VAC, resistive 70°C  | 20x10 <sup>3</sup> |
| AgCdO           | A (NO)  | 8A, 250VAC, resistive, 70°C | 20x10 <sup>3</sup> |
| AgNi20          | A (NO)  | 8A, 250VAC, resistive, 70°C | 30x10 <sup>3</sup> |
| AgNi0.15        | A (NO)  | 5A, 250VAC, resistive, 70°C | 20x10 <sup>3</sup> |

Mechanical endurance >20x10<sup>6</sup> operations



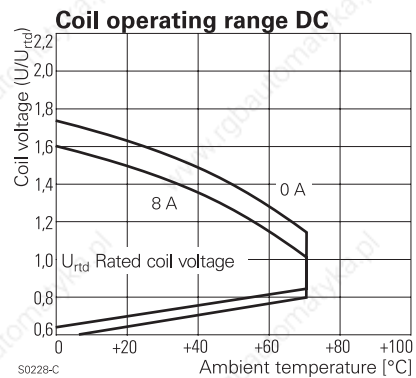
**Coil Data**

Coil voltage range 6 to 60VDC

**Coil versions, DC coil**

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±15% <sup>1)</sup> | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-------------------------------------|---------------------|
| 001       | 6                 | 4.0                 | 0.6                 | 80 <sup>1)</sup>                    | 450                 |
| 002       | 12                | 8.0                 | 1.2                 | 330 <sup>1)</sup>                   | 436                 |
| 006       | 24                | 16.0                | 2.4                 | 1200                                | 480                 |
| 013       | 48                | 32.0                | 4.8                 | 4700                                | 490                 |
| 023       | 60                | 40.0                | 6.0                 | 7200                                | 500                 |

1) Coil resistance ±10%.  
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>rms</sub> |
| between contact and coil           | 4000V <sub>rms</sub> |
| Clearance/creepage                 |                      |
| between contact and coil           | ≥4/4mm               |
| Material group of insulation parts | IIIa                 |
| Tracking index of relay base       | PTI225V              |

**Power PCB Relay Card E (Continued)**

**Other Data**

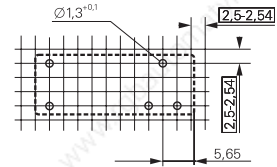
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customersupport/rohssupportcenter](http://www.te.com/customersupport/rohssupportcenter)

|                                      |                            |
|--------------------------------------|----------------------------|
| Ambient temperature                  | -40 to +70°C               |
| Category of environmental protection | RTIII - wash tight         |
| IEC 61810                            |                            |
| Terminal type                        | PCB-THT                    |
| Mounting distance                    | 5mm                        |
| Weight                               | 14g                        |
| Resistance to soldering heat THT     |                            |
| IEC 60068-2-20                       | 260°C/5s                   |
| Packaging/unit                       | tube/20 pcs., box/400 pcs. |

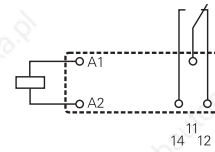
**PCB layout / terminal assignment**

Bottom view on solder pins

Vertical version

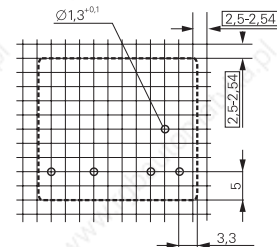


S0257-AH

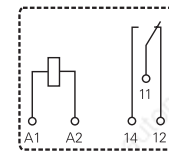


S0257-AB

Horizontal version



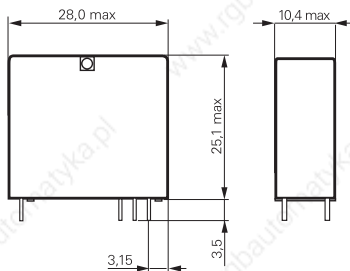
S0257-AI



S0257-AE

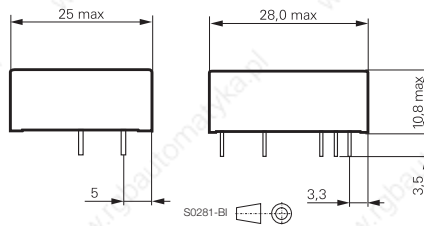
**Dimensions**

Vertical version



S0280-AH

Horizontal version



S0281-BI

**Power PCB Relay Card E** (Continued)

|                               |  |               |  |          |            |           |          |           |
|-------------------------------|--|---------------|--|----------|------------|-----------|----------|-----------|
| <b>Product code structure</b> | Typical product code                           | <b>V23057</b> | <b>-A</b>  | <b>0</b> | <b>006</b> | <b>-A</b> | <b>1</b> | <b>01</b> |
| <b>Type</b>                   | <b>V23057</b> Power PCB Relay Card E           |               |  |          |            |           |          |           |
| <b>Version</b>                | <b>A</b> Horizontal                            |               | <b>B</b> Vertical                                    |          |            |           |          |           |
| <b>Version</b>                | <b>0</b> Standard                              |               |  |          |            |           |          |           |
| <b>Coil</b>                   | Coil code: please refer to coil versions table |               |  |          |            |           |          |           |
| <b>Contact set</b>            | <b>A</b> Single contact                        |               | <b>B</b> Bifurcated contact (form C/CO version only) |          |            |           |          |           |
| <b>Contact material</b>       | <b>1</b> AgNi 0.15                             |               | <b>4</b> AgCdO                                       |          |            |           |          |           |
|                               | <b>2</b> AgNi 20                               |               |  |          |            |           |          |           |
| <b>Contact configuration</b>  | <b>01</b> 1 form C contact (1 CO)              |               | <b>02</b> 1 form A contact (1 NO)                    |          |            |           |          |           |

| Product code      | Version    | Contact arrangement   | Contact material      | Coil                  | Part number |             |
|-------------------|------------|-----------------------|-----------------------|-----------------------|-------------|-------------|
| V23057-A0002-A101 | Horizontal | 1 form C (CO) contact | AgNi0.15              | 12VDC                 | 1393215-4   |             |
| V23057-A0002-A401 |            |                       | AgCdO                 |                       | 1393215-9   |             |
| V23057-A0006-A101 |            |                       | AgNi0.15              | 24VDC                 | 2-1393215-1 |             |
| V23057-A0006-A201 |            |                       | AgNi 20               |                       | 2-1393215-3 |             |
| V23057-A0006-A401 | Vertical   | 1 form C (CO) contact | AgCdO                 | 6VDC                  | 2-1393215-5 |             |
| V23057-B0001-A101 |            |                       | AgNi0.15              |                       | 6-1393215-6 |             |
| V23057-B0002-A101 |            |                       | 12VDC                 | 6-1393215-7           |             |             |
| V23057-B0002-A201 |            |                       |                       | AgNi 20               | 6-1393215-9 |             |
| V23057-B0002-A401 |            |                       | AgCdO                 | 7-1393215-1           |             |             |
| V23057-B0006-A101 |            |                       | 24VDC                 | AgNi0.15              | 7-1393215-5 |             |
| V23057-B0006-A102 |            |                       |                       | 1 form A (NO) contact | 7-1393215-9 |             |
| V23057-B0006-A201 |            |                       | 1 form C (CO) contact | AgNi 20               | 8-1393215-1 |             |
| V23057-B0006-A401 |            |                       |                       | AgCdO                 | 8-1393215-5 |             |
| V23057-B0006-A402 |            |                       | 1 form A (NO) contact | 8-1393215-6           |             |             |
| V23057-B3006-A101 |            |                       | 1 form C (CO) contact | AgNi0.15              | 60VDC       | 2-1393216-6 |
| V23057-B3023-A101 |            |                       |                       |                       |             | 2-1393216-8 |

This list represents the most common types and does not show all variants covered by this datasheet.  
Other types on request