

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)



F0151-B



Typical applications
I/O modules, heating control, timers

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, max 4 s, duty factor 10% | 15A | - | - |
| Breaking capacity max. | 2000VA | 1250VA | 1250VA |
| Contact material | AgCdO, AgNi20 | AgNi0.15 | AgNi0.15 |
| Contact style | single contact | single contact | bifurcated contact |
| Frequency of operation, with/without load | 360/72000h ⁻¹ | | |
| Operate/release time typ. | 7/3ms | | |
| Bounce time typ., form A/form B | 0.5/3ms | | |

Contact ratings

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

Mechanical endurance >20x10⁶ operations

Coil Data

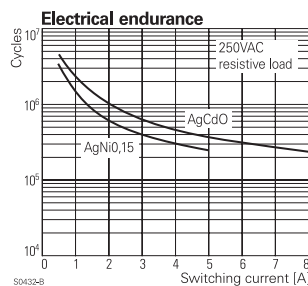
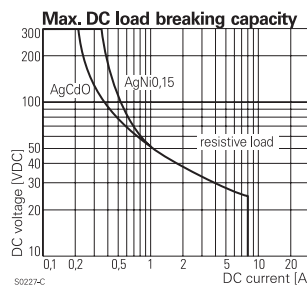
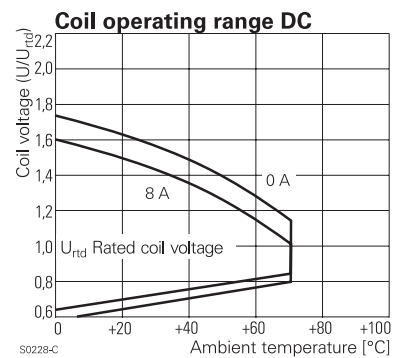
Coil voltage range 6 to 60VDC

Coil versions, DC coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±15% ¹⁾ | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-------------------------------------|---------------------|
| 001 | 6 | 4.0 | 0.6 | 80 ¹⁾ | 450 |
| 002 | 12 | 8.0 | 1.2 | 330 ¹⁾ | 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 _{rms} |
| between contact and coil | 4000V _{rms} |
| 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

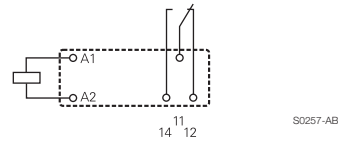
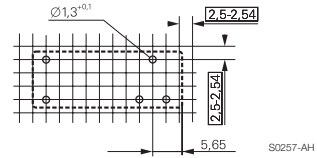
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

| | |
|--------------------------------------|----------------------------|
| 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. |

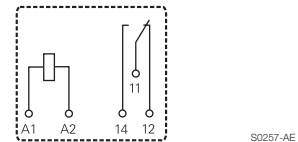
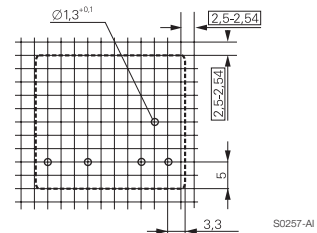
PCB layout / terminal assignment

Bottom view on solder pins

Vertical version

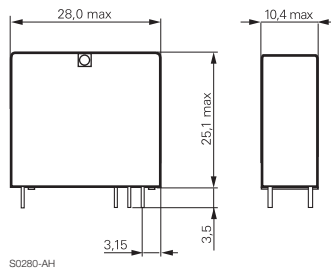


Horizontal version

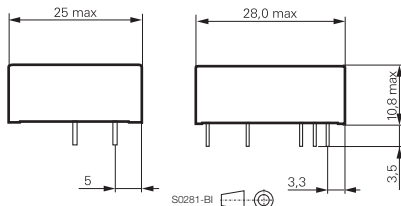


Dimensions

Vertical version



Horizontal version



Power PCB Relay Card E (Continued)

Product code structure

Typical product code **V23057 -A 0 006 -A 1 01**

| | | |
|------------------------------|--|--|
| Type | V23057 Power PCB Relay Card E | |
| Version | A Horizontal | B Vertical |
| Version | 0 Standard | |
| Coil | Coil code: please refer to coil versions table | |
| Contact set | A Single contact | B Bifurcated contact (form C/CO version only) |
| Contact material | 1 AgNi 0.15 | 4 AgCdO |
| | 2 AgNi 20 | |
| Contact configuration | 01 1 form C contact (1 CO) | 02 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 | Vertical | 1 form A (NO) contact | AgNi0.15 | 24VDC | 2-1393215-1 |
| V23057-A0006-A201 | | | AgNi 20 | | 2-1393215-3 |
| V23057-A0006-A401 | | | AgCdO | 2-1393215-5 | |
| V23057-B0001-A101 | | | AgNi0.15 | 6VDC | 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 | | | AgNi0.15 | 24VDC | 7-1393215-5 |
| V23057-B0006-A102 | | | 1 form A (NO) contact | 7-1393215-9 | |
| V23057-B0006-A201 | | | 1 form C (CO) contact | 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 | 2-1393216-6 | | |
| V23057-B3023-A101 | | | 60VDC | 2-1393216-8 | |

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