

**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
- Wash tight
- RoHS compliant (Directive 2011/65/EC)



Typical applications  
I/O modules, heating control, timers



**Approvals**  
VDE Cert. No. 5146 (not for AgSnO version), UL E214025  
Technical data of approved types on request

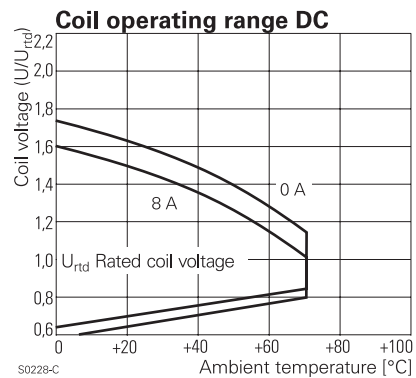
Contact Data	8A	5A	bifurcated
Contact arrangement	1 form C (CO) or 1 form A (NO)		
Rated voltage	250VAC		
Max. switching voltage	400VAC		
Rated current	8A	5A	5A
Limiting making current, max 4 s, duty factor 10%	15A	-	-
Breaking capacity max.	2000VA	1250VA	1250VA
Contact material	AgSnO, AgNi20	AgNi0.15	AgNi0.15
Contact style	single contact	single contact	bifurcated 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>
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>
<b>UL508</b>				
Series A101:	C (CO)	8A, 250VAC, general purpose, 70°C		6x10 <sup>3</sup>
Series A201:	C (CO)	8A, 250VAC, general purpose, 70°C		6x10 <sup>3</sup>
Series A901:	C (CO)	10A, 250VAC, general purpose, 70°C		6x10 <sup>3</sup>
Mechanical endurance	>20x10 <sup>6</sup> operations			

**Coil Data**  
Coil voltage range 6 to 110VDC

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±15% <sup>1)</sup>	Rated coil power mW
008	5	3.5	0.5	46 <sup>1)</sup>	543
001	6	4.2	0.6	80 <sup>1)</sup>	450
002	12	8.3	1.2	330 <sup>1)</sup>	436
006	24	16.8	2.4	1200	480
013	48	33.6	4.8	4700	490
023	60	42.0	6.0	7200	500
028	110	77.0	11.0	23400	517

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	IIla
Tracking index of relay base	PTI225V

**Other Data**

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

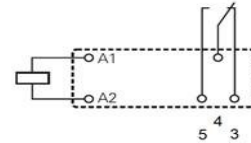
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customersupport/rohssupportcenter](http://www.te.com/customersupport/rohssupportcenter)

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

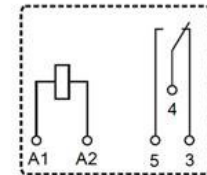
**PCB layout / terminal assignment**

Bottom view on solder pins

Vertical version

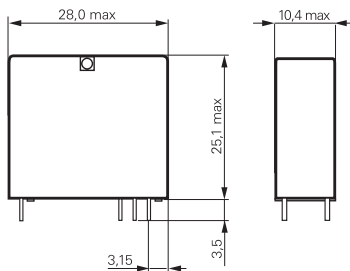


Horizontal version

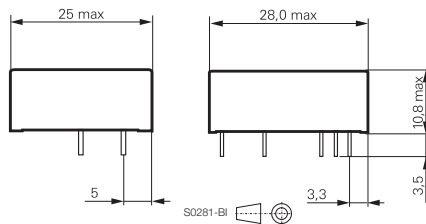


**Dimensions**

Vertical version



Horizontal version



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

<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>								
V23057 Power PCB Relay Card E								
<b>Version</b>								
A Horizontal								
B Vertical								
<b>Version</b>								
0 Standard (nature white) 3 nature white (formerly orange <sup>3)</sup> )								
<b>Coil</b>								
Coil code: please refer to coil versions table								
<b>Contact set</b>								
A Single contact B Bifurcated contact								
<b>Contact material</b>								
1 AgNi 0.15								
2 AgNi 20								
4 AgCdO <sup>2)</sup>								
9 AgSnO								
<b>Contact configuration</b>								
01 1 form C contact (1 CO)								
02 1 form A contact (1 NO)								

2) AgCdO contacts are discontinued (see PCN E-17-015248)

3) Relay color changed from orange to nature white (see PCN P-13-009534)

Product code	Version	Contact arrangement	Contact material	Coil	Approval	Part Number
V23057-A0002-B101	Horizontal	form C (CO) bif. contact	AgNi 0.15	12VDC	VDE, UL	1-1393215-1
V23057-A0006-B101		form C (CO) bif. contact	AgNi 0.15	24VDC	VDE, UL	3-1393215-0
V23057-A0001-A101		1 form C (CO) contact	AgNi 0.15	6VDC	VDE, UL	1393215-1
V23057-A0002-A101		1 form C (CO) contact	AgNi 0.15	12VDC	VDE, UL	1393215-4
V23057-A0002-A102		1 form A (NO) contact	AgNi 0.15	12VDC	VDE	1393215-5
V23057-A0006-A101		1 form C (CO) contact	AgNi 0.15	24VDC	VDE, UL	2-1393215-1
V23057-A0006-A102		1 form A (NO) contact	AgNi 0.15	24VDC	VDE	1415546-6
V23057-A0008-A101		1 form C (CO) contact	AgNi 0.15	5VDC	VDE, UL	3-1393215-4
V23057-A0013-A101		1 form C (CO) contact	AgNi 0.15	48VDC	VDE, UL	3-1393215-8
V23057-A0023-A101		1 form C (CO) contact	AgNi 0.15	60VDC	VDE, UL	5-1393215-5
V23057-A0028-A101		1 form C (CO) contact	AgNi 0.15	110VDC	VDE, UL	5-1393215-9
V23057-B0001-A101	Vertical	1 form C (CO) contact	AgNi 0.15	6VDC	VDE, UL	6-1393215-6
V23057-B0002-A101		1 form C (CO) contact	AgNi 0.15	12VDC	VDE, UL	6-1393215-7
V23057-B0002-A102		1 form A (NO) contact	AgNi 0.15	12VDC	VDE	1415546-8
V23057-B0006-A101		1 form C (CO) contact	AgNi 0.15	24VDC	VDE, UL	7-1393215-5
V23057-B0006-A102		1 form A (NO) contact	AgNi 0.15	24VDC	VDE	7-1393215-9
V23057-B0013-A101		1 form C (CO) contact	AgNi 0.15	48VDC	VDE, UL	9-1393215-4
V23057-B0023-A101		1 form C (CO) contact	AgNi 0.15	60VDC	VDE, UL	1415546-5
V23057-A0002-A201	Horizontal	1 form C (CO) contact	AgNi20	12VDC	VDE, UL	1393215-6
V23057-A0006-A201		1 form C (CO) contact	AgNi20	24VDC	VDE, UL	2-1393215-3
V23057-B0002-A201	Vertical	1 form C (CO) contact	AgNi20	12VDC	VDE, UL	6-1393215-9
V23057-B0006-A201		1 form C (CO) contact	AgNi20	24VDC	VDE, UL	8-1393215-1
V23057-B0006-A202		1 form A (NO) contact	AgNi20	24VDC	VDE	8-1393215-3
V23057-B0023-A201		1 form C (CO) contact	AgNi20	60VDC	VDE, UL	2-1415543-8
V23057-B0028-A201		1 form C (CO) contact	AgNi20	110VDC	VDE, UL	2-1415543-9
V23057-A0001-A901	Horizontal	1 form C (CO) contact	AgSnO	6VDC	UL	2-1415372-1
V23057-A0002-A901		1 form C (CO) contact	AgSnO	12VDC	UL	1-1393215-0
V23057-A0006-A901		1 form C (CO) contact	AgSnO	24VDC	UL	2-1393215-8
V23057-A0013-A901		1 form C (CO) contact	AgSnO	48VDC	UL	4-1393215-2
V23057-B0006-A901	Vertical	1 form C (CO) contact	AgSnO	24VDC	UL	8-1393215-8
V23057-B0023-A901		1 form C (CO) contact	AgSnO	60VDC	UL	1415538-4
V23057-B0028-A901		1 form C (CO) contact	AgSnO	110VDC	UL	1415538-6

This list represents the most common types and does not show all variants covered by this data sheet.

Other types on request