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

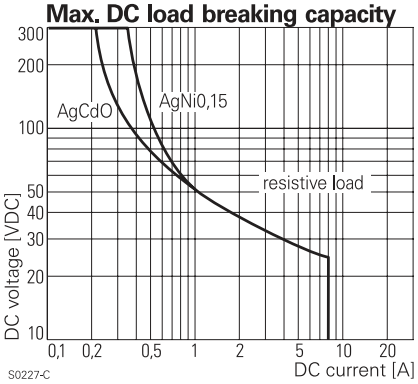
Contact Data	8A	5A	bifurcated
Contact arrangement	1 form C (CO) or 1 form A (NO)		
Rated voltage		250VAC	
Max. switching voltage		400VAC	
Rated current	8A	5A	5A
Limiting making current, max 4 s, duty factor 10%	15A	-	-
Breaking capacity max.	2000VA	1250VA	1250VA
Contact material	AgCdO, AgNi20	AgNi0.15	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 >20x10^6 operations

Max. DC load breaking capacity



Coil Data

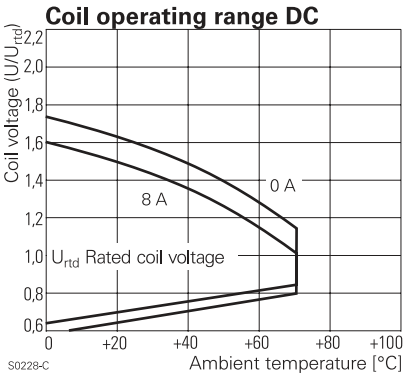
Coil voltage range 6 to 60VDC

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.

Coil operating range DC



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

11-2013, Rev. 1113
www.te.com
© 2013 Tyco Electronics Corporation,
a TE Connectivity Ltd. company

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.

Power PCB Relay Card E (Continued)

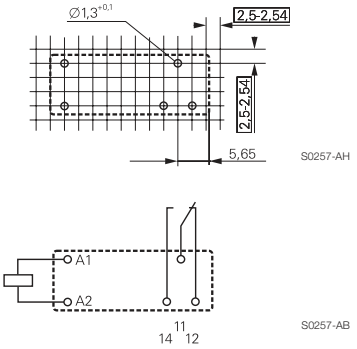
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-40 to +70°C
Category of environmental protection IEC 61810	RTIII - wash tight
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.

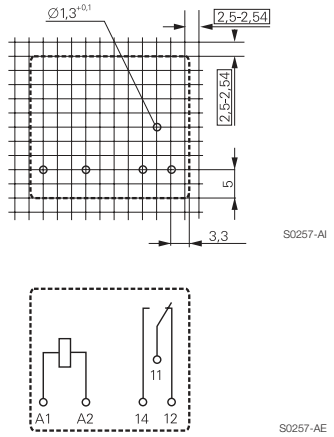
PCB layout / terminal assignment

Bottom view on solder pins

Vertical version

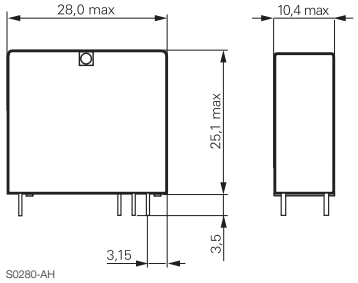


Horizontal version

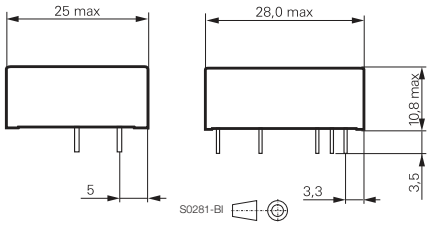


Dimensions

Vertical version



Horizontal version



11-2013, Rev. 1113
www.te.com
© 2013 Tyco Electronics Corporation,
a TE Connectivity Ltd. company

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.

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

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			AgNi0.15	24VDC	2-1393215-1
V23057-A0006-A201			AgNi 20		2-1393215-3
V23057-A0006-A401			AgCdO		2-1393215-5
V23057-B0001-A101	Vertical		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	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		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

11-2013, Rev. 1113
www.te.com
© 2013 Tyco Electronics Corporation,
a TE Connectivity Ltd. company

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.