

Power PCB Relay U/UB

- 1 pole 7A, mono or bistable
- 1 form C (CO) or 1 form A (NO) or 1 form B (NC) contact
- Bistable and DC version
- Wash tight version
- Version for 10A on request



Typical applications
Heating control, installation, battery powered equipment

F0153-C



Approvals

UL E214024

Technical data of approved types on request

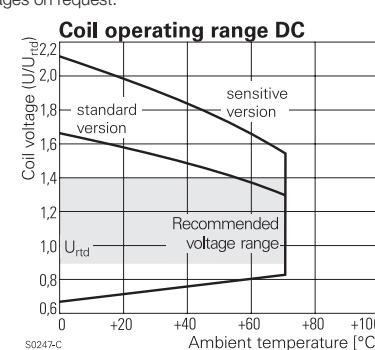
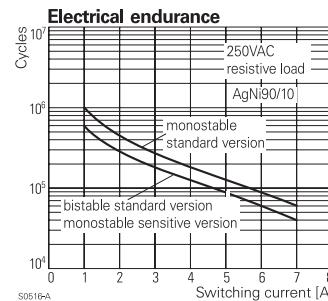
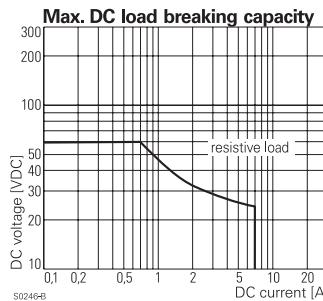
Contact Data	Standard	Bistable	Sensitive
Contact arrangement	1 form C (CO) or 1 form A (NO) or 1 form B (NC)		
Rated voltage	250VAC		
Max. switching voltage	400VAC		
Rated current	7A	7A	5A
Limiting making current, max 4 s, duty factor 10%	12A	12A	12A
Breaking capacity max.	1750VA	1750VA	1250VA
Contact material	AgNi 90/10	AgNi 90/10	AgNi 90/10
Frequency of operation, with/without load		600/18000h ⁻¹	
Operate/release time typ.	5/ 3 ms	-	7/3 ms
Set/reset time typ.	-	5/ 3 ms	-
Bounce time typ., form A/form B	2/10ms	2/10ms	2/10ms

Contact ratings

Type	Contact	Load	Cycles
UL 508			

U/UB C/A/B
(CO/NO/NC) 7A, 250VAC, general purpose, 40°C 6.000

Mechanical endurance, DC coil >20x10⁶ operations



Coil versions, bistable 1 coil

Coil code	Rated voltage VDC	Set voltage VDC	Reset voltage VDC	Coil resistance Ω±10%	Rated coil power mW
003	6	4.7	1.5	33	1091
005	12	9.4	3.0	119	1210
007	24	18.7	6.0	475	1213
008	48	37.4	12.0	1750	1317

Power PCB Relay U/UB (Continued)

Insulation Data

	2kV_{rms}	4kV_{rms}
Version	Version	Version
V23148-*0***	V23148-*1***	
Initial dielectric strength between open contacts	1000V _{rms}	1000V _{rms}
between contact and coil	2000V _{rms}	4000V _{rms}
Clearance/creepage between contact and coil	$\geq 2.5/2.5\text{mm}$	$\geq 3.5/3.5\text{mm}$
Material group of insulation parts	$\geq \text{IIIa}$	$\geq \text{IIIa}$

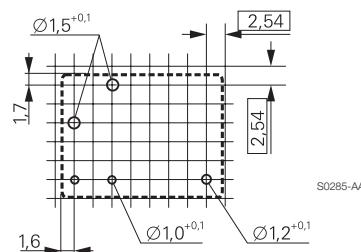
Other Data

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 -25 to +70°C
Category of environmental protection IEC 61810
Vibration resistance (functional), form A/form B 10/10g
Shock resistance (functional), form A/form B 10/10g
Terminal type PCB-THT
Weight 9.5 g
Resistance to soldering heat THT IEC 60068-2-20, wash tight version 260°C/5 s
Packaging unit 25 pcs.

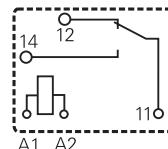
PCB layout / terminal assignment

Bottom view on solder pins

Monostable and bistable 1 coil

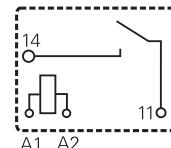


Form C contact (CO)



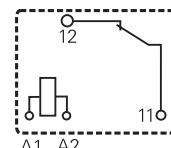
S0285-AB

Form A contact (NO)

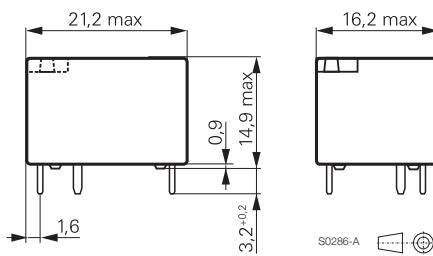


S0285-AC

Form B contact (NC)



S0285-AD

Dimensions


S0286-A

Power PCB Relay U/UB (Continued)

Product code structure

 Typical product code **V23148** -A 0 0 07 -A 101

Type

V23148 Power PCB Relay U/UB

Version

- A** Monostable (Miniature power relay U)
- B** Bistable (Miniature power relay UB, remanence version)

Dielectric strength coil-contact

- 0** 2kV_{rms}
- 1** 4kV_{rms}

Version

Monostable	Bistable
0 Standard	0 Standard
1 Sensitive	

Coil

03 6VDC	07 24VDC
05 12VDC	08 48VDC

Contact configuration

A 1 form C contact (1 CO)	C 1 form B contact (1 NC)
B 1 form A contact (1 NO)	

Contact material

- 101** AgNi10

Other types on request

Product code	Version	Dielectric	Version	Arrangement	Part number
V23148-A0003-A101	Monostable	2000 V _{rms}	Standard	1 form C (CO)	1393203-4
V23148-A0003-B101	relay 'U'	contact-coil		1 form A (NO)	1393203-5
V23148-A0005-A101	AgNi10			1 form C (CO)	1393203-8
V23148-A0005-B101				1 form A (NO)	1393203-9
V23148-A0007-A101				1 form C (CO)	1-1393203-1
V23148-A0007-B101				1 form A (NO)	1-1393203-2
V23148-A0008-A101				1 form C (CO)	1-1393203-4
V23148-A0105-A101					2-1393203-1
V23148-A0107-A101					2-1393203-4
V23148-A1005-A101		4000 V _{rms}	Standard		2-1393203-7
V23148-A1007-A101		contact-coil			2-1393203-8
V23148-A1105-A101					2-1393203-9
V23148-A1107-A101					3-1393203-1
V23148-B0003-A101	Bistable	2000 V _{rms}	Standard		1393204-4
V23148-B0005-A101	relay 'UB'	contact-coil			1393204-7
V23148-B0007-A101	AgNi10				1-1393204-0
V23148-B0008-A101					1-1393204-3

Mouser Electronics

Authorized Distributor

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[2-1393203-9](#)