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## **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



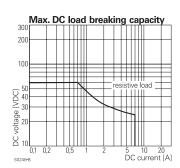
Approvals	
UL E214024	
Technical data of approved types on request	

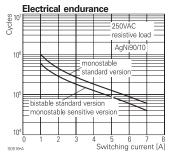
Contact Data	Standard	Bistable	Sensitive
Contact arrangement	1	form C (CO)	or
	1	form A (NO)	or
		1 form B (NC)	)
Rated voltage		250VAC	
Max. switching voltage		400VAC	
Rated current	7A	7A	5A
Limiting making current,			
max 4 s, duty factor 10%	12A	12A	12A
Breaking capacity max.	1750VA	1750VA	1250VA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

Contac	ct ratings		
Type	Contact	Load	Cycles
<b>UL 508</b>	3		
U/UR	C/A/B		

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

Mechanical endurance, DC coil >20x10<sup>6</sup> operations



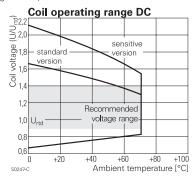


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Coil Data	Standard	Bistable	Sensitive
Coil voltage range	6 to 48 VDC	6 to 48 VDC	6 to 48 VDC
Operative range IEC 61810	2	2	2
Reset voltage min.,			
% of rated coil voltage	-	25%	-
Reset voltage max.,			
% of rated coil voltage	-	45%	-
Rated operate power	- 900 1	to 1300 mW/2	20ms -

sions. DC co	il			
Rated	Operate	Release	Coil	Rated coil
voltage	voltage	voltage	resistance	power
VDC	VDC	VDC	Ω±10%	mW
d coil				
6	4.2	0.6	80	450
12	8.4	1.2	320	450
24	16.8	2.4	1280	450
48	33.6	4.8	3800	606
e coil				
6	4.4	0.6	110	327
12	8.8	1.2	440	327
24	17.5	2.4	1780	324
48	35.0	4.8	4000	576
	Rated voltage VDC d coil 6 12 24 48 e coil 6 12 24	voltage voltage vDC vDC d coil 6 4.2 12 8.4 24 16.8 48 33.6 e coil 6 4.4 12 8.8 24 17.5	Rated Operate voltage voltage voltage VDC VDC VDC VDC d coil  6 4.2 0.6 12 8.4 1.2 24 16.8 2.4 48 33.6 4.8 e coil 6 4.4 0.6 12 8.8 1.2 24 17.5 2.4	Rated voltage voltage voltage         Release voltage voltage resistance         Coil resistance           4 coil         6         4.2         0.6         80           12         8.4         1.2         320           24         16.8         2.4         1280           48         33.6         4.8         3800           e coil         6         4.4         0.6         110           12         8.8         1.2         440           24         17.5         2.4         1780

All figures are given for coil without pre-energization, at ambient temperature  $+23^{\circ}$ C. Other coil voltages on request.



Coil vers	sions, bistab	le 1 coil			
Coil	Rated	Set	Reset	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	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
800	48	37.4	12.0	1750	1317
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All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.



# Power PCB Relay U/UB (Continued)

Insulation Data	2kV <sub>rms</sub>	4kV <sub>rms</sub>
	Version	Version
	V23148-*0***	V23148-*1***
Initial dielectric strength		
between open contacts	1000V <sub>rms</sub>	$1000V_{rms}$
between contact and coil	2000V <sub>rms</sub>	4000V <sub>rms</sub>
Clearance/creepage		
between contact and coil	≥2.5/2.5mm	≥3.5/3.5mm
Material group of insulation parts	≥IIIa	≥Illa

### **Other Data**

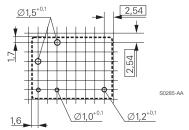
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

***************************************	211101000pporteoritor
Ambient temperature	-25 to +70°C
Category of environmental protection	
IEC 61810	RTIII - wash tight
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.

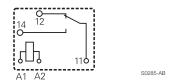
#### PCB layout / terminal assignment

Bottom view on solder pins

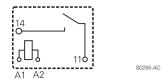
Monostable and bistable 1 coil



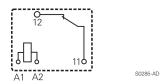
### Form C contact (CO)



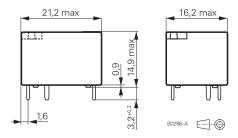
#### Form A contact (NO)



### Form B contact (NC)

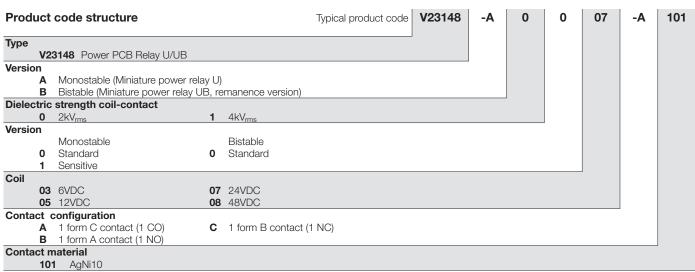


### Dimensions





## Power PCB Relay U/UB (Continued)



Other types on request

Product code	Version	Dielectric	Version	Arrangement	Part number
V23148-A0003-A101	Monostable	2000 V <sub>rms</sub>	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			Sensitive		2-1393203-1
V23148-A0107-A101					2-1393203-4
V23148-A1005-A101		4000 V <sub>rms</sub>	Standard		2-1393203-7
V23148-A1007-A101		contact-coil			2-1393203-8
V23148-A1105-A101			Sensitive		2-1393203-9
V23148-A1107-A101					3-1393203-1
V23148-B0003-A101	Bistable	2000 V <sub>rms</sub>	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

http://relays.te.com/definitions