

**General Purpose Relays PCB Relays** 

## **Power PCB Relay U/UB**

**Coil Data** 

Coil

code

003

005

007

- 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

## Approvals

UL E214024

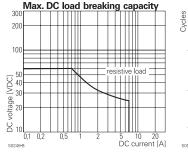
Technical data of approved types on request

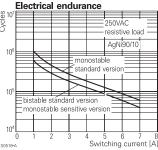
•			• • •		•			
Contac	ct Data		Standard		Sensitive			
Contact	arrangement		1	form C (CO)	or			
			1	form A (NO)	or			
				1 form B (NC	)			
Rated vo	oltage			250VAC				
Max. sw	itching voltage			400VAC				
Rated cu	urrent		7A	7A	5A			
Limiting	making current,							
max 4	s, duty factor 10	%	12A	12A	12A			
Breaking	capacity max.		1750VA	1750VA	1250VA			
Contact	material		AgNi 90/10	AgNi 90/10	AgNi 90/10			
Frequen	cy of operation,							
with/v	vithout load		600/18000h <sup>-1</sup>					
Operate/	release time typ.		5/ 3 ms	-	7/3 ms			
Set/rese	t time typ.		-	5/ 3 ms	-			
Bounce	time typ., form A/t	form B	2/10ms	2/10ms	2/10ms			
Contact ratings								
Туре	Contact	Load			Cycles			
111 500								

UL 508			
U/UB	C/A/B		
	(CO/NO/NC)	7A, 250VAC,general purpose, 40°C	6.000

Mechanical endurance, DC coil

>20x10<sup>6</sup> operations





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., 25% % of rated coil voltage Reset voltage max., % of rated coil voltage 45% Rated operate power 900 to 1300 mW/20ms -Coil versions, DC coil Rated Operate Release Coil Rated coil voltage voltage voltage resistance power VDC VDC VDC Ω±10% mW Standard coil 6 4.2 0.6 80 450 8.4 1.2 320 450 12 24 16.8 2.4 1280 450

800	48	33.6	4.8	3800	606
Sensitive	e coil				
103	6	4.4	0.6	110	327
105	12	8.8	1.2	440	327
107	24	17.5	2.4	1780	324
108	48	35.0	4.8	4000	576

All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.

opera	ating	rang	je D	C		
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			sion I			
-	_					_
_						
	- voli	age ra	ange-			
	_					
+20						+100
	ndard	ndard sion Reco +20 +40	ndard ver sion Recommer voltage re	ndard sensitive version sion Recommended voltage range- +20 +40 +60	Recommended voltage range +20 +40 +60 +8	ndard sensitive version sion Recommended voltage range

### Coil versions, bistable 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
008	48	37.4	12.0	1750	1317

All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.

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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.

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Standard Bistable Sensitive

E0153-C



# Power PCB Relay U/UB (Continued)

2kV <sub>rms</sub>	4kV <sub>rms</sub>
Version	Version
V23148-*0***	V23148-*1***
1000V <sub>rms</sub>	1000V <sub>rms</sub>
2000V <sub>rms</sub>	4000V <sub>rms</sub>
≥2.5/2.5mm	≥3.5/3.5mm
≥Illa	≥Illa
	Version V23148-*0*** 1000V <sub>ms</sub> 2000V <sub>ms</sub> ≥2.5/2.5mm

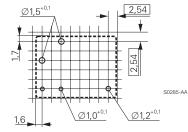
## Other Data

Material compliance: EU RoHS/ELV, China Ro	HS, REACH, Halogen content				
refer to the Product Compliance Support Cente					
www.te.com/custor	mersupport/rohssupportcenter				
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

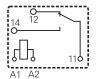
Bottom view on solder pins

Monostable and bistable 1 coil



Form C contact (CO)

Form A contact (NO)



S0285-AB



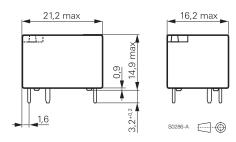
S0285-AC

Form B contact (NC)



S0285-AD

#### Dimensions



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# Power PCB Relay U/UB (Continued)

Produ	uct	code structure			Typical product code	V23148	-A	0	0	07	-A	101
Туре						1						
	V2;	3148 Power PCB Relay U/UB										
Versio	n											
	Α	Monostable (Miniature power rela	yU)									
	В	Bistable (Miniature power relay U	, B, re	emanence version)								
Dielec	tric	strength coil-contact		· · · · · · · · · · · · · · · · · · ·				_				
	0	2kV <sub>rms</sub>	1	4kV <sub>rms</sub>								
Versio	n								1			
		Monostable		Bistable								
	0	Standard	0	Standard								
	1	Sensitive										
Coil										_		
	03	6VDC	07	24VDC								
	05	12VDC	08	48VDC								
Conta	ct d	configuration										
		1 form C contact (1 CO)	С	1 form B contact (1	NC)							
	В	1 form A contact (1 NO)			,							
Conta	ct n	naterial										,
	10	AqNi10										
Other ty		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

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