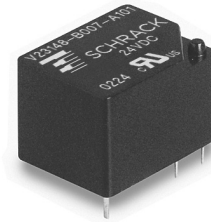


**Power PCB Relay U/UB (V23148)**

- 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

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.	5/3ms	-	7/3 ms
Set/reset time typ.	-	5/3 ms	-
Bounce time typ., form A/form B	2/10 ms	2/10 ms	2/10 ms
Mechanical endurance		>20x10 <sup>6</sup> operations	

**Contact ratings**

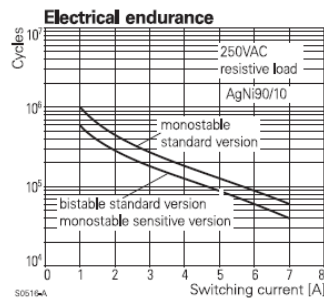
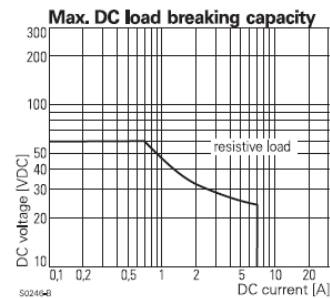
Type	Contact	Load	Cycles
<b>UL508</b>			
U/UB C/A/B	(CO/NO/NC) 7A, 250VAC, general purpose, 40°C		6.000

Coil Data	Standard	Bistable	Sensitive
Coil voltage range	5 to 48 VDC	3 to 48 VDC	5 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 to 1300mW/20ms	-	-

**Coil versions, DC coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
<b>Standard coil</b>					
002	5	3.5	0.5	56	446
003	6	4.2	0.6	80	450
005	12	8.4	1.2	320	450
007	24	16.8	2.4	1280	450
008	48	33.6	4.8	3800	606
<b>Sensitive coil</b>					
102	5	3.7	0.5	80	313
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.



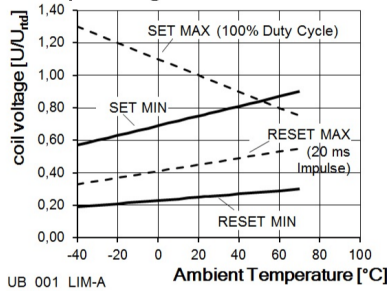
**Power PCB Relay U/UB (V23148) (Continued)**

**Coil versions, bistable 1 coil**

Coil code	Rated voltage VDC	Set voltage VDC	Reset voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
001	3	2.3	0.75	8	1125
002	5	3.9	1.25	22	1136
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.

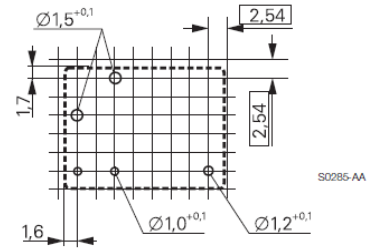
**Coil operating bistable**



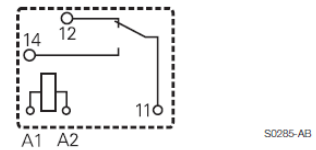
**PCB layout / terminal assignment**

Bottom view on solder pins

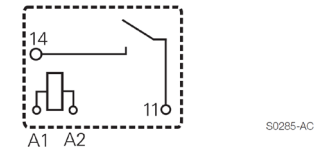
Monostable and bistable 1 coil



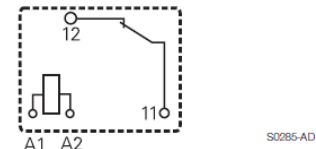
Form C contact (CO)



Form A contact (NO)



Form B contact (NC)



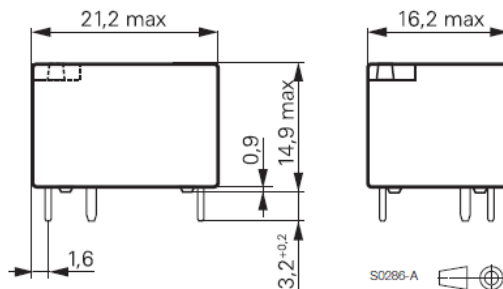
Insulation Data	2kV <sub>rms</sub>	4kV <sub>rms</sub>
	Version	Version
	V23148-*0***	V23148-*1***
Initial dielectric strength		
between open contacts	1000V <sub>rms</sub>	1000V <sub>rms</sub>
between contact and coil	2000V <sub>rms</sub>	4000V <sub>rms</sub>
Clearance/creepage		
between contact and coil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

**Other Data**

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

Ambient temperature	-25 to +70°C
Category of environmental protection	
IEC 61810	RTIII - wash tight
Terminal type	PCB-THT
Weight	8.7g
Vibration resistance (functional), form A/form B	10/10g
Shock resistance (functional), form A/form B	10/10g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C/5s
Packaging/unit	25 pcs.

**Dimensions**



**Power PCB Relay U/UB (V23148)** (Continued)

<b>Product code structure</b>	Typical product code	<b>V23148</b>	<b>-A</b>	<b>0</b>	<b>0</b>	<b>07</b>	<b>-A</b>	<b>101</b>
<b>Type</b>		<b>V23148</b> Power PCB Relay U/UB						
<b>Version</b>		<b>A</b> Monostable (Miniature power relay U) <b>B</b> Bistable (Miniature power relay UB, remanence version)						
<b>Dielectric strength coil-contact</b>		<b>0</b> 2kV <sub>rms</sub> <b>1</b> 4kV <sub>rms</sub>						
<b>Version</b>		<b>0</b> Monostable <b>0</b> Bistable <b>1</b> Standard <b>0</b> Standard <b>1</b> Sensitive						
<b>Coil</b>		Coil code: please refer to coil versions table						
<b>Contact configuration</b>		<b>A</b> 1 form C contact (1 CO) <b>C</b> 1 form B contact (1NC) <b>B</b> 1 form A contact (1 NO)						
<b>Contact configuration</b>		<b>101</b> AGNI10						

Other types on request

Product code	Version	Dielectric	Version	Arrangement	Part Number
V23148-A0005-C101	Monostable relay ,U	2000 Vrms contact-coil	Standard	1 form B (NC)	1-1393203-0
V23148-A0007-A101				1 form C (CO)	1-1393203-1
V23148-A0007-B101				1 form A (NO)	1-1393203-2
V23148-A0007-C101				1 form B (NC)	1-1393203-3
V23148-A0008-A101				1 form C (CO)	1-1393203-4
V23148-A0002-A101				1 form C (CO)	1393203-1
V23148-A0002-B101				1 form A (NO)	1393203-2
V23148-A0002-C101				1 form B (NC)	1393203-3
V23148-A0003-A101				1 form C (CO)	1393203-4
V23148-A0003-B101				1 form A (NO)	1393203-5
V23148-A0004-A101				1 form C (CO)	1393203-7
V23148-A0005-A101				1 form C (CO)	1393203-8
V23148-A0005-B101				1 form A (NO)	1393203-9
V23148-A0102-A101			Sensitive	1 form C (CO)	1-1393203-5
V23148-A0102-B101				1 form A (NO)	1-1393203-6
V23148-A0102-C101				1 form B (NC)	1-1393203-7
V23148-A0103-A101				1 form C (CO)	1-1393203-8
V23148-A0103-B101				1 form A (NO)	1-1393203-9
V23148-A0103-C101				1 form B (NC)	2-1393203-0
V23148-A0105-A101				1 form C (CO)	2-1393203-1
V23148-A0105-B101				1 form A (NO)	2-1393203-2
V23148-A0105-C101				1 form B (NC)	2-1393203-3
V23148-A0107-A101				1 form C (CO)	2-1393203-4
V23148-A0107-B101				1 form A (NO)	2-1393203-5
V23148-A0107-C101				1 form B (NC)	2-1393203-6
V23148-A1005-A101		4000 Vrms contact-coil	Standard	1 form C (CO)	2-1393203-7
V23148-A1007-A101				1 form C (CO)	2-1393203-8
V23148-A1105-A101				1 form C (CO)	2-1393203-9
V23148-A1105-B101				1 form A (NO)	3-1393203-0
V23148-A1107-A101				1 form C (CO)	3-1393203-1
V23148-B0007-A101	Bistable relay ,UB	2000 Vrms contact-coil		1 form C (CO)	1-1393204-0
V23148-B0007-B101				1 form A (NO)	1-1393204-1
V23148-B0007-C101				1 form B (NC)	1-1393204-2
V23148-B0008-A101				1 form C (CO)	1-1393204-3
V23148-B1001-A101				1 form C (CO)	1-1393204-5
V23148-B0001-A101				1 form C (CO)	1393204-1
V23148-B0002-A101				1 form C (CO)	1393204-2
V23148-B0002-B101				1 form A (NO)	1393204-3
V23148-B0003-B101				1 form A (NO)	1393204-5
V23148-B0003-C101				1 form B (NC)	1393204-6
V23148-B0005-A101				1 form C (CO)	1393204-7
V23148-B0005-B101				1 form A (NO)	1393204-8
V23148-B0005-C101				1 form B (NC)	1393204-9

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

Other types on request



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.