

## Miniature Power PCB Relay MSR V23061

- 1 pole 8/10A, 1form C (CO) or 1 form A (NO) contact
- High inrush currents with AgSnO<sub>2</sub> contacts (TV4 0 65A)
- 4kV/8mm coil-contact
- Reinforced insulation (protection class II)
- Ambient temperature up to 85°C at 8A

domestic appliances, Hi-Fi products, timers.

Plastic materials according to IEC 60335-1 (domestic appliances)

HVAC, interface technology. PLC's, power supplies, TV-/monitor control,



## Approvals

Typical applications

VDE Cert. No. 40017849, UL E214025 Technical data of approved types on request.

## **Contact Data**

Contact arrangement 1	form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	
versions A,B	8A
versions C, D	10A
Limiting making current, max 4s, df 10%	15A
version A302, max 20ms	65A
Breaking capacity max.	2000VA
Contact material	AgSnO <sub>2</sub> , AgNi90/10
Frequency of operation, with/without load	l 6/1200min-1
Operate/release time max.	10/5ms
Bounce time max., form A/form B	3/10ms

#### **Contact ratings**

Туре	Contact	Load	Cycles
IEC 61810			
V23061-A1***-A302	A (NO)	8A, 250VAC, cosφ=1, 85°C	100x10 <sup>3</sup>
V23061-C2***-A802	A (NO)	10A, 250VAC, cosφ=1, 85°C	100x10 <sup>3</sup>
V23061-C2***-A802	A (NO)	5A, 250VAC, cosφ=1, 105°C	100x10 <sup>3</sup>
UL 508			
V23061-A1***-A302	A (NO)	TV4, Tungsten, 120VAC, 40°C	25x10 <sup>3</sup>
V23061-A1***-A302	A (NO)	Pilot duty, A300, 40°C	6x10 <sup>3</sup>
V23061-C2***-A802	A (NO)	10A, 240VAC,	
		general purpose ,40°C	30x103
EN60730-1			
V23061-A1***-A302	A (NO)	2(2)A, 250VAC, 85°C	100x10 <sup>3</sup>
V23061-C2***-A802	A (NO)	4(4)A, 250VAC, 85°C	100x10 <sup>3</sup>

## Mechanical endurance, DC coil

## 10x10<sup>6</sup> operations





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Coil volta	ge range		3 to 60VDC			
Operative	Operative range, IEC 61810			2		
Coil insula	Coil insulation system according UL			classA or classF		
Coil versions, DC coil						
Coil	Rated	Operate	Release	Coil	Rated coil	
code	voltage	voltage	voltage	resistance	power	
	VDC	VDC	VDC	$\Omega \pm 10\%^{1)}$	mW	
001	3	2.1	0.3	40	225	
002	5	3.4	0.5	118	212	

001	3	2.1	0.3	40	225
002	5	3.4	0.5	118	212
003	6	4.1	0.6	165	218
004	9	6.1	0.9	364	223
005	12	8.2	1.2	652	221
007	24	16.3	2.4	2270	254
009	48	32.6	4.8	8790	262
010	60	40.8	6.0	15265 <sup>1)</sup>	236

1) Coil resistance ±15%

**Coil Data** 

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



## **Insulation Data**

moulation Data	
Initial dielectric strength	
between open contacts	1000V
between contact and coil	4000V_ms
Clearance/creepage	mo
between contact and coil	≥8/8mm
Material group of insulation parts	Illa

Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <a href="http://relays.te.com/definitions">http://relays.te.com/definitions</a>

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

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## Miniature Power PCB Relay MSR V23061 (Continued)

## Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content						
refer to the Product Compliance Support Center at						
www.te.com	www.te.com/customersupport/rohssupportcente					
Ambient temperature	- 40 to +85°C					
Category of environmental protection						
IEC 61810	RTII - flux proof,					
	RTIII - wash tight					
Vibration resistance (functional)						
form A (NO) / form B (NC)	10/4g					
Vibration resistance (destructive)						
form A (NO) / form B (NC)	20/5g					
Shock resistance (destructive)	100g					
Terminal type	PCB-THT					
Weight	11g					
Resistance to soldering heat THT						
IEC 60068-2-20	RTII: 270°C/10s					
	RTIII: 260°C/5s					
Packaging/unit	tube/20 pcs., box/500 pcs.					

## PCB layout / terminal assignment

1 form C, 1 CO contact, 3.2mm



## 1 form A, 1 NO contact, 5mm



#### Dimensions

1 form C, 1 CO contact, 3.2mm



1 form A, 1 NO contact, 5mm



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# General Purpose Low Power PCB Relays

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# Miniature Power PCB Relay MSR V23061 (Continued)

Product code structure	Typical product code	V23061	-A	1	007	-A	3	02
Type     V23061   Miniature Power PCB Relay MSR		,						
Version   A 1 form A contact (1 NO), UL-class A   B 1 form C contact (1 CO), UL-class A   C 1 form A contact (1 NO), UL-class F   D 1 form C contact (1 CO), UL-class F								
Version 1 Wash tight 2 Flux proof				-				
Coil Coil-code: please refer to coil versions table								
Contact system A Standard								
Contact material 3 AgSnO <sub>2</sub> 8 AgNi 90/10								
Contact information011 form C (CO) contact021 form A (NO) contact								
Other types on request								

Product code	Version	Contacts	Contact material	Coil	Part Number
V23061-A1002-A302	Wash tight	1 form A	AgSnO <sub>2</sub>	5VDC	1393222-4
V23061-A1003-A302		1 NO contact		6VDC	1393222-9
V23061-A1005-A302				12VDC	2-1393222-0
V23061-A1007-A302				24VDC	3-1393222-9
V23061-A1009-A302				48VDC	1-1416200-0
V23061-B1002-A301		1 form C		5VDC	7-1393222-2
V23061-B1005-A301		1 CO contact		12VDC	9-1393222-1
V23061-B1007-A301				24VDC	1-1393223-7
V23061-B1009-A301				48VDC	3-1393223-7
V23061-C2001-A802	Flux proof	1 form A	AgNi 90/10	3VDC	5-1416200-3
V23061-C2002-A802		1 NO contact		5VDC	5-1416200-4
V23061-C2003-A802				6VDC	5-1416200-5
V23061-C2004-A802				9VDC	5-1416200-6
V23061-C2005-A802				12VDC	5-1416200-0
V23061-C2007-A802				24VDC	5-1416200-8
V23061-C2009-A802				48VDC	6-1416200-0
V23061-C2010-A802				60VDC	6-1416200-1
V23061-D2001-A801		1 form C		3VDC	6-1416200-2
V23061-D2002-A801		1 CO contact		5VDC	6-1416200-3
V23061-D2003-A801				6VDC	6-1416200-4
V23061-D2004-A801				9VDC	6-1416200-5
V23061-D2005-A801				12VDC	6-1416200-6
V23061-D2007-A801				24VDC	6-1416200-7
V23061-D2009-A801				48VDC	6-1416200-9
V23061-D2010-A801				60VDC	7-1416200-0

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