

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





#### Typical applications

HVAC, interface technology. PLC's, power supplies, TV-/monitor control, domestic appliances, Hi-Fi products, timers.

#### **Approvals**

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	6/1200min-1
Operate/release time max.	10/5ms
Bounce time max., form A/form B	3/10ms

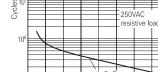
Contact	ratings
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Type	Contact	Load	Cycles
IEC 61810			
V23061-A1***-A302	A (NO)	8A, 250VAC, cosφ=1, 85°C	100x10 <sup>3</sup>
V23061-C2***-A802	A (NO)	10A, 250VAC, cosφ=1, 85°C	100x10 <sup>3</sup>
V23061-C2***-A802	A (NO)	5A, 250VAC, cosφ=1, 105°C	100x10 <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	30x10 <sup>3</sup>
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

Max. DC load breaking capacity

DC current [A]



10x10<sup>6</sup> operations

**Electrical endurance** 

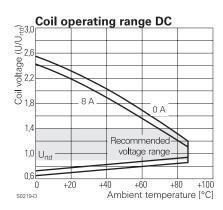
Cycles Cycles								
Š						250\ resis	/AC stive lo	ad =
10 <sup>6</sup>	$\overline{\lambda}$							
		$\setminus$						
				$\nearrow$				
10 <sup>5</sup>				_	\gSnC	2		
10 <sup>4</sup>								
10.	0	1 :	2 :	3 4		5	6 .	7 8
S0478-0					Swit	ching	curre	ent [A]

Coil Data		
Coil voltage range	3 to 60VDC	
Operative range, IEC 61810	2	
Coil insulation system according LII	classA or classF	

Coil vers	sions, DC co	il			
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
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%.

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



Insulation Data		
Initial dielectric strength		
between open contacts	1000V <sub>ms</sub>	
between contact and coil	4000V_ms	
Clearance/creepage	***************************************	
between contact and coil	≥8/8mm	
Material group of insulation parts	IIIa	



# Miniature Power PCB Relay MSR V23061 (Continued)

#### **Other Data**

Packaging/unit

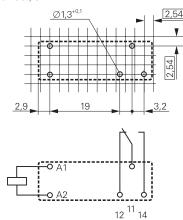
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

www.te.com/customersupport/rohssupportcenter 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) 20/5g form A (NO) / form B (NC) Shock resistance (destructive) 100g Terminal type PCB-THT Weight 11g Resistance to soldering heat THT RTII: 270°C/10s IEC 60068-2-20 RTIII: 260°C/5s

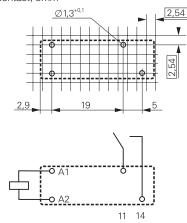
tube/20 pcs., box/1000 pcs

#### PCB layout / terminal assignment

#### 1 form C, 1 CO contact, 3.2mm

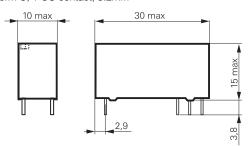


#### 1 form A, 1 NO contact, 5mm

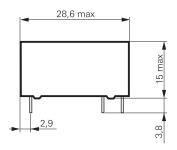


#### **Dimensions**

### 1 form C, 1 CO contact, 3.2mm

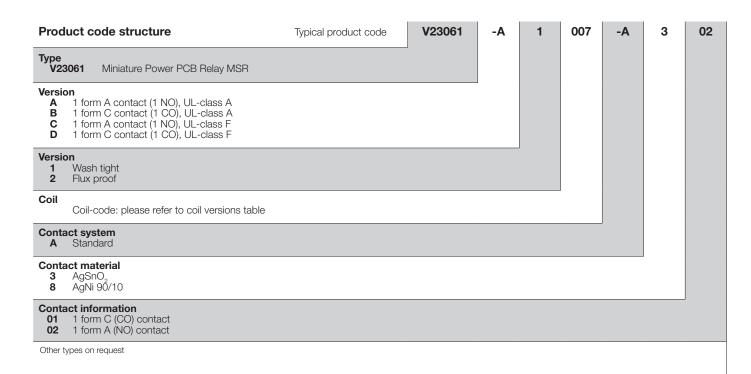


1 form A, 1 NO contact, 5mm





## Miniature Power PCB Relay MSR V23061 (Continued)



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-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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**Authorized Distributor** 

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TE Connectivity: V23061A1005A302