Miniature Power PCB Relay MSR V23061

- **1 pole 8/10A, 1form C (CO) or 1 form A (NO) contact**
- **High inrush currents with $AgSnO_2$ 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

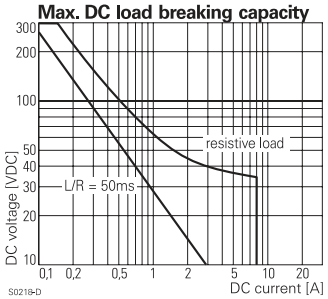
Contact arrangement	1 form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	
versions A,B	8A
versions C, D	10A
Limiting making current, max 4s, df 10%	15A
version A302, max 20ms	65A
Breaking capacity max.	2000VA
Contact material	$AgSnO_2$, AgNi90/10
Frequency of operation, with/without load	6/1200min-1
Operate/release time max.	10/5ms
Bounce time max., form A/form B	3/10ms

Contact ratings

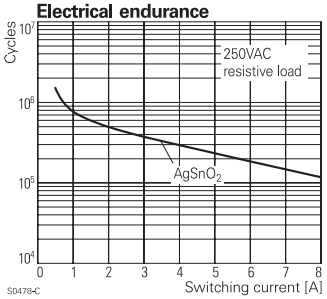
Type	Contact	Load	Cycles
IEC 61810			
V23061-A1***-A302	A (NO)	8A, 250VAC, cosφ=1, 85°C	$100x10^3$
V23061-C2***-A802	A (NO)	10A, 250VAC, cosφ=1, 85°C	$100x10^3$
V23061-C2***-A802	A (NO)	5A, 250VAC, cosφ=1, 105°C	$100x10^3$
UL61810-1 (UL 508)			
V23061-A1***-A302	A (NO)	TV4, Tungsten, 120VAC, 40°C	$25x10^3$
V23061-A1***-A302	A (NO)	Pilot duty, A300, 40°C	$6x10^3$
V23061-C2***-A802	A (NO)	10A, 240VAC, general purpose ,40°C	$30x10^3$
EN60730-1			
V23061-A1***-A302	A (NO)	2(2)A, 250VAC, 85°C	$100x10^3$
V23061-C2***-A802	A (NO)	4(4)A, 250VAC, 85°C	$100x10^3$

Mechanical endurance, DC coil 10x10⁶ operations

Max. DC load breaking capacity



Electrical endurance



Coil Data

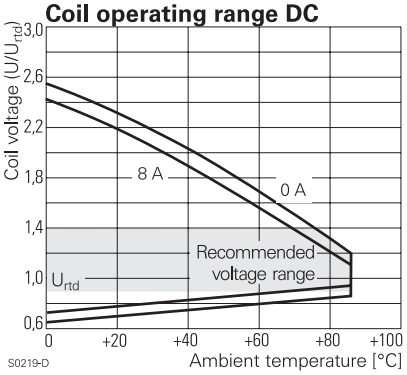
Coil voltage range	3 to 60VDC
Operative range, IEC 61810	2
Coil insulation system according UL	classA or classF

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%[1]	Rated coil power 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[1]	236

1) Coil resistance ±15%.
All figures are given for coil without pre-energization, at ambient temperature +23°C.
Other coil voltages on request.

Coil operating range DC



Insulation Data

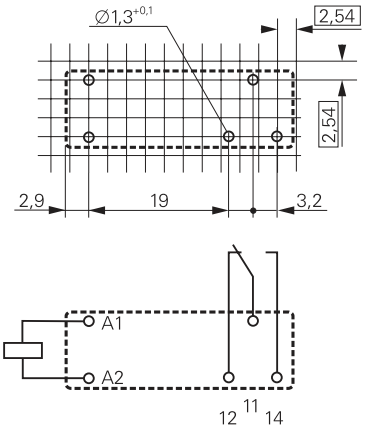
Initial dielectric strength	
between open contacts	$1000V_{rms}$
between contact and coil	$4000V_{rms}$
Clearance/creepage	
between contact and coil	≥8/8mm
Material group of insulation parts	IIIa

Miniature Power PCB Relay MSR V23061 (Continued)

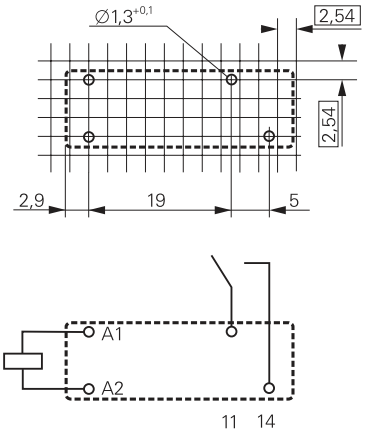
Other Data	
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	- 40 to +85°C
Category of environmental protection IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional) form A (NO) / form B (NC)	10/4g
Vibration resistance (destructive) 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

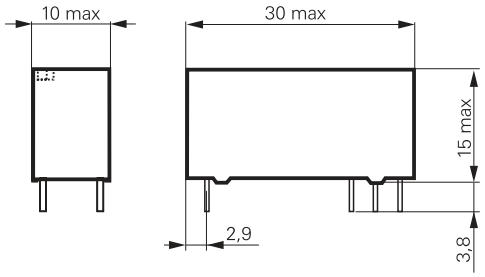


1 form A, 1 NO contact, 5mm

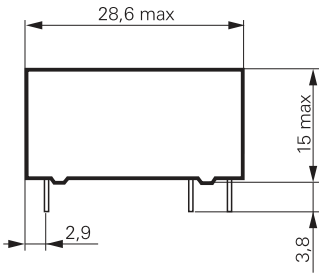


Dimensions

1 form C, 1 CO contact, 3.2mm



1 form A, 1 NO contact, 5mm



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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 $AgSnO_2$
8 AgNi 90/10

Contact information
01 1 form C (CO) contact
02 1 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	$AgSnO_2$	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