

Miniature Power PCB Relay MSR

- 1 pole 8 / 10 A, 1CO or 1NO contact
- High inrush currents with AgSnO contacts (TV4 = 65 A)
- 4 kV/8 mm coil-contact
- Reinforced insulation (protection class II)
- Ambient temperature up to 85°C at 8 A
- Plastic materials according to IEC60335-1 (domestic appliances)
- RoHS compliant (Directive 2002 / 95 / EC) as per product date code 0404

Applications

HVAC, interface technology, power supplies, TV-/Monitor control, computer-/communication technology, domestic appliances, Hi-Fi products, timers



REG.-Nr. 3919, **cRL**us E214024 Technical data of approved types on request

Contact data		
Contact configuration	1CO or	1NO
Contact set	single co	ontact
Type of interruption	micro disco	nnection
Rated current	versions A,B:	8 A
	versions C,D:	10 A
Rated voltage / max.switching voltage AC	240/400 VAC	
Maximum breaking capacity AC	2000	VA
Limiting making capacity, max 20 ms	A302: 65 A	
max 4 s, duty factor 10%	15 A	15 A
Contact material	AgSnO ₂ , AgCdO	AgNi0,15*
Mechanical endurance	10x10 ⁶ (cycles
Rated frequency of operation with / without lo	ad 6 / 1200	min ⁻¹
*pot recommended for AC leade with proing (CCO according ENG10	10.0)

*not recommended for AC loads with arcing (CC2 according EN61810-2)

Contact ratings

Туре	Load	Cycles
V23061-A1***-A302	8 A, 250 VAC, resistive load, 85°C, 1 mm mounting	
	distance, 6 cycles min ⁻¹ , 50% duty factor, EN61810-1	100x10 ³
V23061-C2***-A302	10 A, 250 VAC, resistive load, 85°C, 0 mm mounting	
	distance, 6 cycles min ⁻¹ , 50% duty factor, EN61810-1	10x10 ³
V23061-C2***-A302	5 A, 250 VAC, resistive load, 105°C, 0 mm mounting	
	distance, 6 cycles min ⁻¹ , 50% duty factor, EN61810-1	100x10 ³
V23061-A1***-A302	TV-4 Tungsten, 120 VAC, UL508	25x10 ³
V23061-****-A30*,	240 VAC, A300, Pilot duty, UL508	6x10 ³

Coil data

360 VDC	
typ. 220 mW	
2	
Class A, Class F	
	typ. 220 mW 2

Coil versions. DC-coil

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDČ	VDC	VDČ	Ohm	mW
001	3	2.1	0.3	40±10%	225
002	5	3.4	0.5	118±10%	212
003	6	4.1	0.6	165±10%	218
004	9	6.1	0.9	364±10%	223
005	12	8.2	1.2	652±10%	221
007	24	16.3	2.4	2270±10%	254
009	48	32.6	4.8	8790±10%	262
010	60	40.8	6.0	15265±15%	236

All figures are given for coil without preenergization, at ambient temperature +23°C Other coil voltages on request

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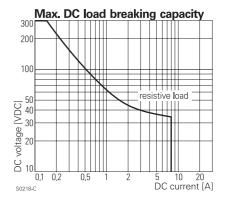
Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and

processing information only to be used together with the 'Definitions' at schrackrelays.com in the 'Schrack' section.

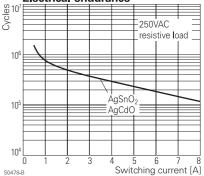
Specifications subject to change.

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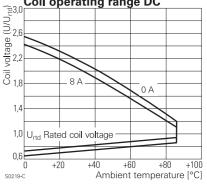




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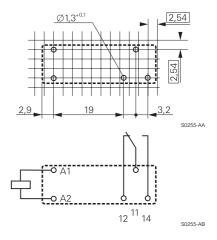
Miniature Power PCB Relay MSR (Continued)

Insulation	CO co	ontact	NO contact
Dielectric strength coil-contact circuit	4000 V _{rms}		Vrms
open contact circuit		1000	Vrms
Clearance / creepage coil-contact circuit	$\geq 8 / 8$	3 mms	≥ 8 / 8 mm
Material group of insulation parts		b	IIIb
Insulation to IEC 60664-1			
Type of insulation coil-contact circuit	reinfo	rced	reinforced
open contact circuit	funct	ional	functional
Rated insulation voltage	250) V	250 V
Pollution degree	3	2	3
Rated voltage system	230 V	400 V	230 / 400 V
Overvoltage category		I	

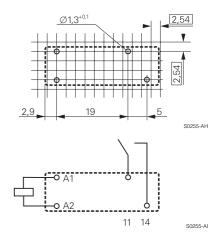
Other data		
RoHS - Directive 2002/95/EC	compliant as per product date code 0404	
Flammability class according to UL94	V-0	
For WG version: GWFI to IEC 60335-1	> 850 °C	
GWIT to IEC 60335-1	> 775 °C	
Ambient temperature range	-40+85°C	
Operate- / release time	6 / 2,5 ms	
Bounce time NO / NC contact	0,5 / 4 ms	
Vibration resistance (function) NO / NC conta		
Shock resistance (function) NO / NC contact	20 / 5 g	
Shock resistance (destruction) 100 g		
ategory of protection RTII-flux proof; RTIII- wash tight		
Mounting	pcb	
Mounting position	any	
Minimum mounting distance 0 mm		
Resistance to soldering heat flux-proof version 270°C / 10 s		
wash-tight version	on 260°C / 5s	
Relay weight	11 g	
Packaging unit	20 / 1000 pcs	

PCB layout / terminal assignment Bottom view on solder pins



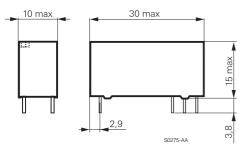


1 NO contact, 5 mm

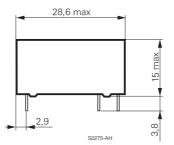


Dimensions

1 CO contact, 3.2 mm



1 NO contact, 5 mm



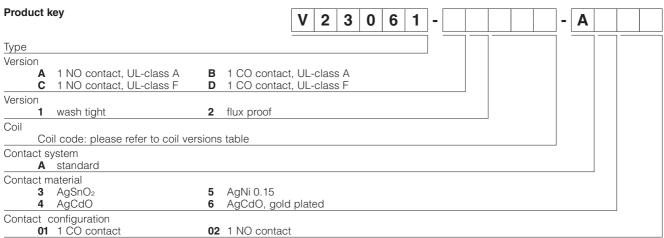
Datasheet Rev. GH1 Issued 2007/08 www.tycoelectronics.com www.schrackrelays.com Dimensions are in mm unless otherwise specified and are shown for reference purposes only. Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and

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Miniature Power PCB Relay MSR (Continued)



Other types on request

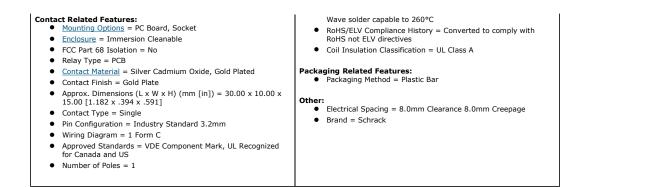
Product key	Version	Contacts	Contact material	Coil	Part number
V23061-A1002-A302	wash tight	1 NO contact	AgSnO ₂	5 VDC	0-1393222-4
V23061-A1002-A502	0		AgNi 0.15		0-1393222-6
V23061-A1003-A302			AgSnO ₂	6 VDC	0-1393222-9
V23061-A1003-A502			AgNi 0.15		1-1393222-3
V23061-A1005-A302			ÅgSnO₂	12 VDC	2-1393222-0
V23061-A1005-A502			AgNi 0.15		2-1393222-7
V23061-A1005-A602			AgCdO gold pl.		2-1393222-8
V23061-A1007-A302			AgSnO ₂	24 VDC	3-1393222-9
V23061-A1007-A502			AgNi 0.15		4-1393222-6
V23061-A1007-A602			AgCdO gold pl.		4-1393222-7
V23061-A1009-A502			AgNi 0.15	48 VDC	5-1393222-7
V23061-A1009-A602			AgCdO gold pl.		5-1393222-8
V23061-A1010-A502			AgNi 0.15	60 VDC	6-1393222-2
V23061-A1010-A602			AgCdO gold pl.		6-1393222-3
V23061-B1002-A301		1 CO contact	AgSnO ₂	5 VDC	7-1393222-2
V23061-B1002-A501			AgNi 0.15		7-1393222-4
V23061-B1002-A601			AqCdO gold pl.		7-1393222-5
V23061-B1003-A501			AaNi 0.15	6 VDC	8-1393222-1
V23061-B1003-A601			AaCdO aold pl.		8-1393222-2
V23061-B1005-A301			AgSnO ₂	12 VDC	9-1393222-1
V23061-B1005-A501			AgNi 0.15		9-1393222-7
V23061-B1005-A601			AaCdO aold pl.		9-1393222-9
V23061-B1007-A301			AgSnO ₂	24 VDC	1-1393223-7
V23061-B1007-A501			AgNi 0.15		2-1393223-5
V23061-B1007-A601			AgCdO gold pl.		2-1393223-6
V23061-B1009-A301			AgSnO ₂	48 VDC	3-1393223-7
V23061-B1009-A501			AgNi 0.15		3-1393223-9
V23061-B1009-A601			AgCdO gold pl.		4-1393223-0
V23061-B1010-A501			AgNi 0.15	60 VDC	4-1393223-3
V23061-B1010-A601			AgCdO gold pl.		4-1393223-4
V23061-A2002-A402	flux proof	1 NO contact	AgCdO	5 VDC	6-1393222-8
V23061-A2003-A402				6 VDC	1-1416200-9
V23061-A2005-A402				12 VDC	2-1416200-1
V23061-A2007-A402				24 VDC	2-1416200-3
V23061-A2009-A402				48 VDC	2-1416200-5
V23061-A2010-A402				60 VDC	2-1416200-6
V23061-B2002-A401		1 CO contact		5 VDC	2-1416200-7
V23061-B2003-A401				6 VDC	2-1416200-8
V23061-B2005-A401				12 VDC	3-1416200-1
V23061-B2007-A401				24 VDC	5-1393223-0
V23061-B2009-A401				48 VDC	3-1416200-6
V23061-B2010-A401				60 VDC	4-1416200-0

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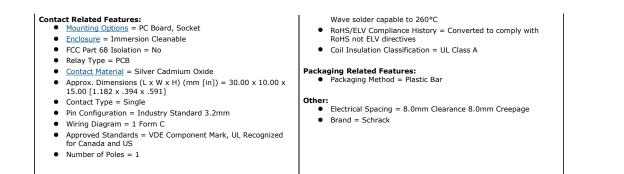
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3-1393222-9 Prod	uct Details			
æ	Industrial Relays (General	Purpose)	Quick Links	
1. Salar	Converted to EU RoHS but not E of Compliance) Product Highlights:	<u>EV Compliant (Statement</u>	 Check Pricing & Availability Search for Tooling Product Feature Selector Contact Us About This Product Request Samples (NEWI) 	
8-1393222-9 (V23061B1004A601) TE Part Number: 8-1393222-9	 MSR Series Contact Arrangement = 1 F Contact Current Rating = 8 Monostable Coil Magnetic SY. Without Coil Suppression Di View all Features Find Si 	Amps. ystem ode		
Documentation & Additional	Information			
Product Drawings: • None Available			Additional Information: Product Line Information	
Catalog Pages/Data Sheets: <u>Miniature Power PCB Re</u>			Related Products: • Tooling	
Product Specifications: • None Available Application Specifications: • None Available				
None Available Instruction Sheets: None Available				
CAD Files: • None Available				
		List all Documents		
Product Features (Please u	se the Product Drawing for all (design activity)		
Product Type Features: • <u>Termination Type</u> = Thr	ough Hole	Housing Related Fe Version = Pin appliances)	eatures: ning 3.2mm, Version for IEC 60335-1 (domestic	
 Electrical Characteristics: Contact Current Rating Coil Resistance (Ω) = 30 		 Pick-Up (V) = Drop-Out (V) 		
Coil Power, Nominal (m Actuating System = DC Coil Power, Nominal (W Input Voltage (VDC) = 9 Dielectric Strength - Co Coil Rating = Sensitive	<u>W)</u> = 220) = 0.22	Configuration Related Features: Contact Arrangement = 1 Form C, SPDT, 1 C/O Coil Magnetic System = Monostable Coil Suppression Diode = Without Coil Selection Criteria = Nominal Voltage Coil Latching = Without LED Indicator = Without		
Body Related Features: <u>Series</u> = MSR		Number of Co Industry Standards		
 Polarized = No Enclosure Color = White 	2	RoHS/ELV Co	mpliance = RoHS/Not ELV Compliant der Processes = Wave solder capable to 240°C,	



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1-1393223-2 Piouu					
1. State	Industrial Relays (General Converted to EU RoHS but not E of Compliance)		Quick Links Check Pricing & Availability Search for Tooling Product Feature Selector Contact Us About This Product		
1-1393223-2 (V23061B1006A401) TE Part Number: 1-1393223-2 ✓ Active Add to Part List	Product Highlights: MSR Series Contact Arrangement = 1 FG Contact Current Rating = 8. Monostable Coil Magnetic Sy Without Coil Suppression Div View all Features Find Sir	Amps. /stem ode	Request Samples (NEW!)		
Documentation & Additional In	ofrmation				
Product Drawings: • None Available			Additional Information: Product Line Information		
Catalog Pages/Data Sheets: • Miniature Power PCB Relay	<u>/ MSR</u> (PDF, English)		Related Products: • <u>Tooling</u>		
Product Specifications:None Available					
Application Specifications: • None Available					
Instruction Sheets: • None Available					
CAD Files: • None Available					
		List all Documents			
Product Features (Please use	e the Product Drawing for all c	lesign activity)			
Product Type Features: • <u>Termination Type</u> = Throug	gh Hole	Housing Related Fe Version = Pin appliances)	eatures: ning 3.2mm, Version for IEC 60335-1 (domestic		
 Electrical Characteristics: Contact Current Rating (Ar Coil Resistance (Ω) = 1455 		 Pick-Up (V) = Drop-Out (V) 			
Coil Power, Nominal (mW) Actuating System = DC Coil Power, Nominal (W) = Input Voltage (VDC) = 18 Dielectric Strength - Coil C Coil Rating = Sensitive	0.223	Configuration Related Features: Contact Arrangement = 1 Form C, SPDT, 1 C/O Coil Magnetic System = Monostable Coil Suppression Diode = Without Coil Selection Criteria = Nominal Voltage Coil Latching = Without LED Indicator = Without			
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 Polarized = No Enclosure Color = White 			s: mpliance = RoHS/Not ELV Compliant Ider Processes = Wave solder capable to 240°C,		



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