

## Miniature Power PCB RY II & RY II reflow-solderable

- 1 pole 8 A, 1 CO or 1 NO or 1 NC contact
- Low component height 12.3 mm
- 5 kV / 8 mm coil-contact
- Reinforced insulation (protection class II)
- Pinnings: 3.2 and 5 mm
- reflow-solderable version
- Sockets with PCB-type or screw-type terminals
- Especially suitable for resistive and inductive loads on NO and NC contacts
- Plastic materials according to IEC60335-1 (domestic appliances) (not at reflow-solderable version)
- RoHS compliant (Directive 2002/95/EC) as per product date code 0403

**Applications:** heating control, interface technology, domestic appliances, timers, temperature control

### Approvals

 REG.-Nr. 5358,  E214025  
Technical data of approved types on request

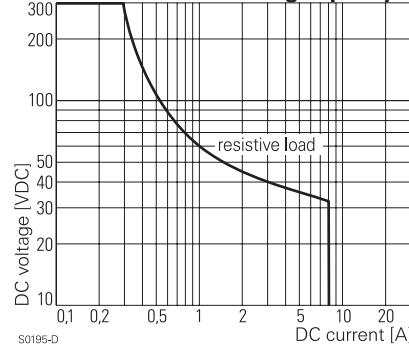


F0142-C

### Contact data

Contact configuration	1 CO or 1NO or 1NC
Contact set	single contact
Type of interruption	micro disconnection
Rated current	8 A
Rated voltage / max. switching voltage AC	250/400 VAC
Maximum breaking capacity AC	2000 VA
Contact material	AgNi0,15, AgSnO <sub>2</sub> , AgCdO
Mechanical endurance	30x10 <sup>6</sup> cycles
Rated frequency of operation with / without load	6 / 1200 min <sup>-1</sup>

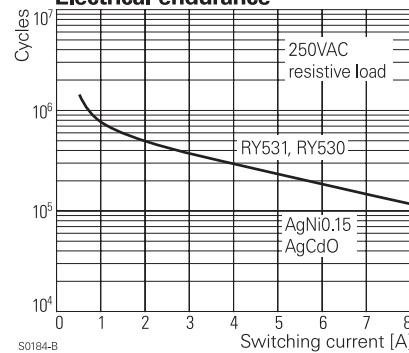
### Max. DC load breaking capacity



### Contact ratings

Type	Load	Cycles
RY**1***	NO, 8 A, 250 VAC, resistive, 70°C	1x10 <sup>5</sup>
RY**1***	NC, 8 A, 250 VAC, resistive, 70°C	5x10 <sup>4</sup>
RY** (0,1,2)***	8 A, 30 VDC, UL 508	3x10 <sup>4</sup>
RY** (0,1,2)***	0,28 A, 250 VDC, UL 508	3x10 <sup>4</sup>
RY** (0,1,2)***	1/2 HP, 240 VDC, UL 508	
RY** (0,1,2)***	1/4 HP, 120 VDC, UL 508	
RY** (0)***	8 A, 415 VAC, resistive, UL 508	6x10 <sup>3</sup>
RY** (0,1,2)***	Pilot duty - B300, UL 508	6000
RY*** ***	CO, 8 A, 250 VAC, resistive, 70°C	5x10 <sup>3</sup>
RY**1 ***	6(4)A, 250 VAC, 85°C, EN60730	1x10 <sup>5</sup>

### Electrical endurance



### Coil data

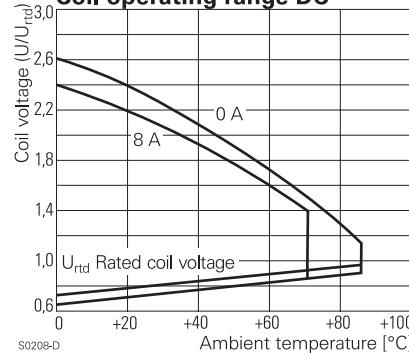
Rated coil voltage range DC coil	5...60 VDC
Coil power DC coil	typ. 220 mW
Operative range	2

### Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
005	5	3,5	0,5	112±10%	223
006	6	4,2	0,6	162±10%	222
009	9	6,3	0,9	320±10%	253
012	12	8,4	1,2	627±10%	230
024	24	16,8	2,4	2350±10%	245
048	48	33,6	4,8	9391±10%	245
060	60	42,0	6,0	14000±10%	257

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

### Coil operating range DC



**Miniature Power PCB RY II & RY II reflow-solderable** (Continued)

**Insulation**

	<b>CO contact</b>	<b>NO contact</b>
Dielectric strength coil-contact circuit open contact circuit	5000 V <sub>eff</sub> 1000 V <sub>eff</sub>	
Clearance / creepage coil-contact circuit	≥ 8 / 8 mm	
Material group of insulation parts	IIIa	
Tracking index of relay base	PTI250, PTI 175*	
Insulation to IEC 60664-1		
Type of insulation coil-contact circuit open contact circuit	reinforced functional	
Rated insulation voltage	250 V	250 V
Pollution degree	3	2
Rated voltage system	230 V	400 V
Overvoltage category	III	III

**Other data**

RoHS - Directive 2002/95/EC	compliant as per product date code 0403
Flammability class according to UL94	V-0
GWFI to IEC 60335-1	> 850 °C**
GWT to IEC 60335-1	> 750 °C**
Ambient temperature range	-40...+70°C
Ambient temperature max.	85°C at 6A
Operate- / release time	typ. 7 / 3 ms
Bounce time NO / NC contact	typ. 2.5 / 4.5 ms
Vibration resistance (function) NO / NC contact	20 / 5 g
Shock resistance (function) NO / NC contact	20 / 5 g
Shock resistance (destruction)	100 g
Category of protection	RTII-flux proof, RTIII- wash tight**
Mounting	pcb
Mounting position	any
Minimum mounting distance	≥ 0 mm
Soldering heat resistance flux proof version	270°C / 10 s
wash tight version	260°C / 5 s
Relay weight	8 g
Packaging unit	20 / 500 pcs

**Accessoires**

For technical details see datasheet

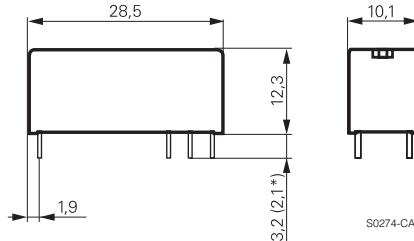
Accessoires RYII

\* reflow-solderable version

\*\* not as reflow-solderable version

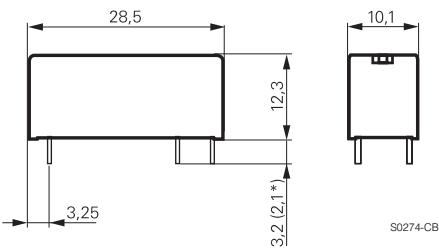
**Dimensions**

Pinning 3.2 mm



S0274-CA

Pinning 5 mm

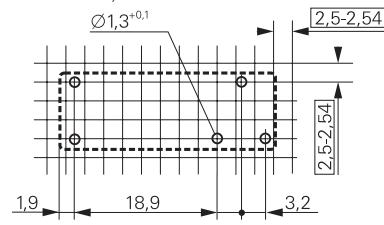


S0274-CB

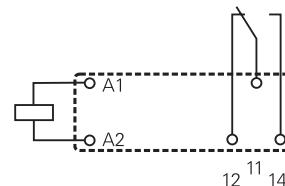
**PCB layout / terminal assignment**

Bottom view on solder pins

1 CO contact, 3.2 mm

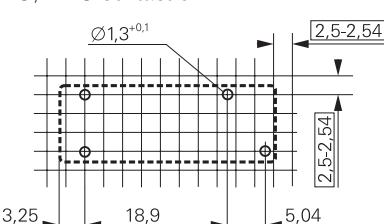


S0254-AA

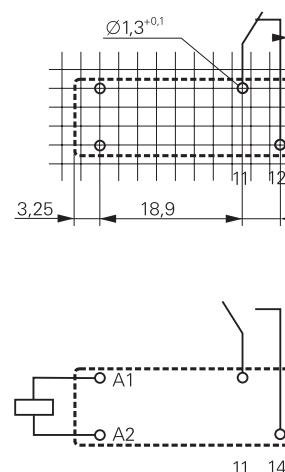


S0254-AB

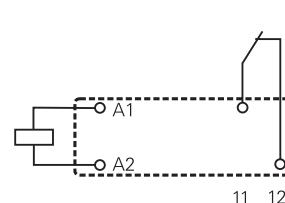
1 NO, 1 NC contact 5 mm



S0254-AC

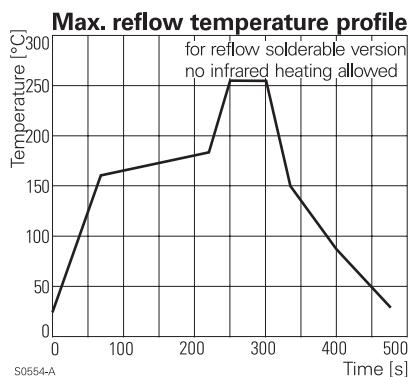
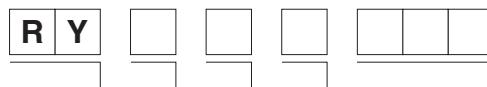


S0254-AD



S0254-AF

**Miniature Power PCB RY II & RY II reflow-solderable** (Continued)

**Soldering profile for reflow-solderable version**

**Product key**


## Type

## Version

**2** pinning 3.2 mm, flux proof  
**5** pinning 5 mm, flux proof

**6** pinning 3.2 mm, wash tight  
**A** pinning 5 mm, wash tight

## Contact configuration

**1** 1 CO contact, pinning 3.2 mm

**3** 1 NO contact, pinning 5 mm  
**5** 1 NC contact, pinning 5 mm

## Contact material

**0** AgCdO  
**1** AgNi 0.15

**2** AgNi 0.15 gold plated  
**3** AgSnO<sub>2</sub>

## Coil

Coil code: please refer to coil versions table

Other types on request