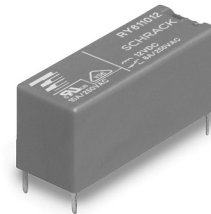


**Miniature Power PCB RYII-AP**

- 1 pole 8A, 1 form C (CO) or 1 form A (NO) or 1 form B (NC) contact
- Low component height 12.3mm
- 5kV/8mm coil-contact
- Reinforced insulation (protection class II)
- Pinnings: 3.2mm and 5mm
- Especially suitable for resistive and inductive loads on form A (NO) and form B (NC) contacts
- Plastic materials according to IEC 60335-1 (domestic appliances)

Typical applications  
heating control, interface technology, domestic appliances, timers, temperature control



F0142-E



**Approvals**

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

**Contact Data**

Contact arrangement	1 form C (CO) or 1 form A (NO) or 1 form B (NC)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A
Breaking capacity max.	2000VA
Contact material	AgNi0.15, AgSnO <sub>2</sub>
Frequency of operation, with/without load	6/1200min <sup>-1</sup>
Operate/release time max.	9/5ms
Bounce time max., form A/form B	6/10ms

**Contact ratings**

Type	Contact	Load	Cycles
<b>IEC61810</b>			
RY531	A (NO)	8A, 250VAC, 70°C	100x10 <sup>3</sup>
RY211	A (NO)	8A, 250VAC, 70°C	75x10 <sup>3</sup>
RY211	A (NO)	8A, 250VAC, 70°C	50x10 <sup>3</sup>
<b>UL508</b>			
RY211	A/B (NO/NC)	10A, 250VAC, general purpose, 70°C	30x10 <sup>3</sup>
RY211	A (NO)	1/2hp, 240VAC, 85°C	30x10 <sup>3</sup>
RY211	A/B (NO/NC)	B300, 70°C	6x10 <sup>3</sup>
<b>EN60730-1</b>			
RY211	A/B (NO/NC)	6(4)A, 250VAC, 85°C	100x10 <sup>3</sup>
RY211	A (NO)	8(4)A, 250VAC, 75°C	100x10 <sup>3</sup>
Mechanical endurance, DC coil			30x10 <sup>6</sup> operations

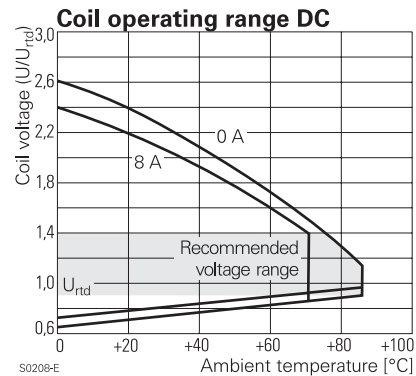
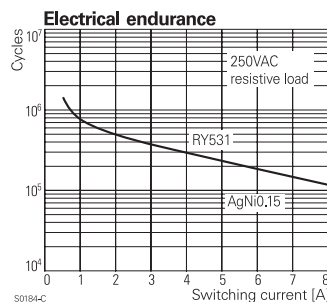
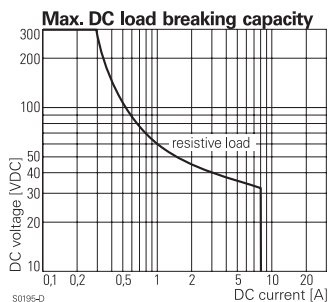
**Coil Data**

Coil voltage range	5 to 60VDC
Operative range, IEC 61810	2

**Coil versions, DC coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
005	5	3.5	0.5	112	223
006	6	4.2	0.6	162	222
009	9	6.3	0.9	320	253
012	12	8.4	1.2	627	230
024	24	16.8	2.4	2350	245
048	48	33.6	4.8	9391	245
060	60	42.0	6.0	14000	257

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



**Insulation Data**

Initial dielectric strength	
between open contacts	1000V <sub>rms</sub>
between contact and coil	5000V <sub>rms</sub>
Clearance/creepage	
between contact and coil	≥8/8mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI250
reflow-solderable version	PTI175

**Miniature Power PCB RYII-AP** (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](http://www.te.com/customersupport/rohssupportcenter)

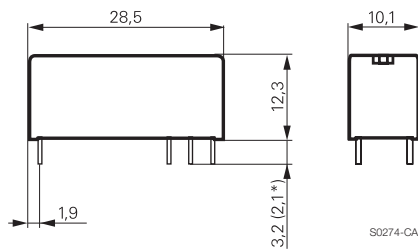
Ambient temperature	-40 to +70°C +85°C at 6A
Category of environmental protection IEC 61810	RTII - flux proof RTIII - wash tight
Vibration resistance (functional), form A (NO)/form B (NC)	20/5g
Shock resistance (functional) form A (NO)/form B (NC)	20/5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT, PCB-THR
Weight	8g
Resistance to soldering heat THT IEC 60068-2-20	RTII : 270°C/10s RTIII : 260°C/5s
Packaging/unit standard version	tube/20 pcs., box/500 pcs.

**Accessories**

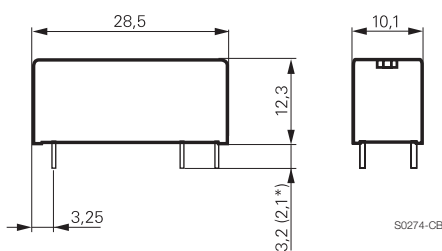
For details see datasheet [Accessories Miniature PCB Relay RY](#)

**Dimensions**

Pinning 3.2mm



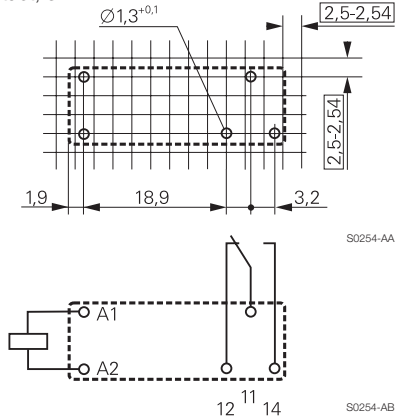
Pinning 5mm



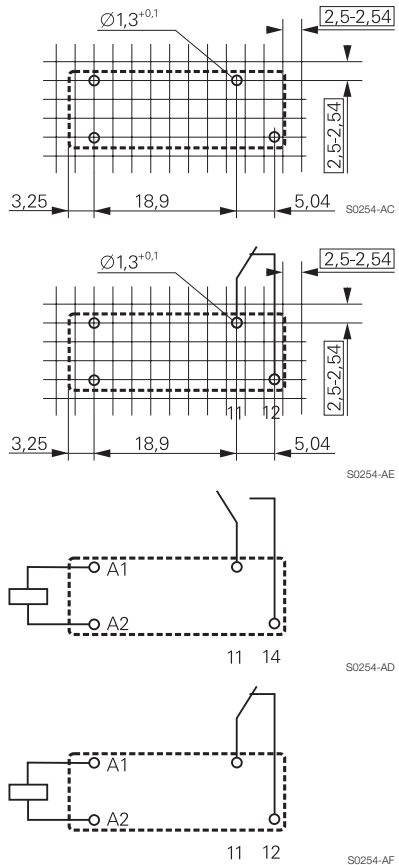
**PCB layout / terminal assignment**

Bottom view on solder pins

1 form C (CO) contact, 3.2mm



1 form A (NO), 1 form B (NC) contact 5mm



**Miniature Power PCB RYII-AP** (Continued)

<b>Product code structure</b>		Typical product code		<b>RY</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>012</b>				
<b>Type</b>		RY Miniature Power PCB RYII & RYII reflow solderable										
<b>Version</b>		<table border="0"> <tr> <td><b>2</b> pinning 3.2mm, flux proof</td> <td><b>6</b> pinning 3.2mm, wash tight <sup>2)</sup></td> </tr> <tr> <td><b>5</b> pinning 5mm, flux proof</td> <td><b>A</b> pinning 5mm, wash tight <sup>2)</sup></td> </tr> </table>							<b>2</b> pinning 3.2mm, flux proof	<b>6</b> pinning 3.2mm, wash tight <sup>2)</sup>	<b>5</b> pinning 5mm, flux proof	<b>A</b> pinning 5mm, wash tight <sup>2)</sup>
<b>2</b> pinning 3.2mm, flux proof	<b>6</b> pinning 3.2mm, wash tight <sup>2)</sup>											
<b>5</b> pinning 5mm, flux proof	<b>A</b> pinning 5mm, wash tight <sup>2)</sup>											
<b>Contact arrangement</b>		<table border="0"> <tr> <td><b>1</b> 1 form C (1 CO), pinning 3.2mm</td> <td><b>3</b> 1 form A (1 NO), pinning 5mm</td> </tr> <tr> <td></td> <td><b>5</b> 1 form B (1 NC), pinning 5mm</td> </tr> </table>							<b>1</b> 1 form C (1 CO), pinning 3.2mm	<b>3</b> 1 form A (1 NO), pinning 5mm		<b>5</b> 1 form B (1 NC), pinning 5mm
<b>1</b> 1 form C (1 CO), pinning 3.2mm	<b>3</b> 1 form A (1 NO), pinning 5mm											
	<b>5</b> 1 form B (1 NC), pinning 5mm											
<b>Contact material</b>		<table border="0"> <tr> <td><b>1</b> AgNi 0.15</td> <td><b>2</b> AgNi 0.15 gold plated</td> </tr> <tr> <td><b>3</b> AgSnO<sub>2</sub></td> <td></td> </tr> </table>							<b>1</b> AgNi 0.15	<b>2</b> AgNi 0.15 gold plated	<b>3</b> AgSnO <sub>2</sub>	
<b>1</b> AgNi 0.15	<b>2</b> AgNi 0.15 gold plated											
<b>3</b> AgSnO <sub>2</sub>												
<b>Coil</b>		Coil code: please refer to coil versions table										
<b>Version</b>		<table border="0"> <tr> <td><b>Blank</b> Standard version</td> </tr> <tr> <td><b>R</b> reflow-solderable</td> </tr> </table>							<b>Blank</b> Standard version	<b>R</b> reflow-solderable		
<b>Blank</b> Standard version												
<b>R</b> reflow-solderable												

<sup>2)</sup> not available as reflow-solderable version

Product code	Version	Contacts	Contact material	Coil	Part number
RY210005	pinning 3.2mm flux proof	1 form C, 1 CO contact	AgCdO	5VDC	1833007-3
RY210012				12VDC	1833007-1
RY210024				24VDC	1833007-2
RY211005			AgNi 0.15	5VDC	2-1833007-5
RY211012				12VDC	2-1833007-1
RY211024				24VDC	2-1833007-2
RY610005	pinning 3.2mm wash tight		AgCdO	5VDC	1833008-4
RY610012				12VDC	1833008-1
RY610024				24VDC	1833008-2
RY611005			AgNi 0.15	5VDC	2-1833008-4
RY611012				12VDC	2-1833008-1
RY611024				24VDC	2-1833008-2
RY531012	pinning 5.0mm flux proof	1 form A, 1 NO contact		12VDC	2-1833009-2
RY531024				24VDC	2-1833009-1