

**Solid State Relays**

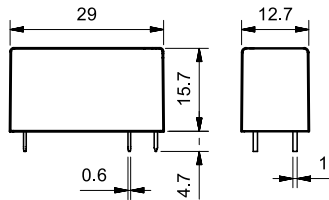
**Printed circuit mount:**

- direct or via PCB socket

**35 mm rail mount:**

- via screw or screwless sockets)

- Single circuit output switching options
  - 5 A 24 V DC
  - 3 A 240 V AC
- Silent, high speed switching with long electrical life
- LED indicator
- Low profile (15.7 mm)
- Wash tight: RT III
- 2500 V AC insulation, input-output



**41.81 - 9024**

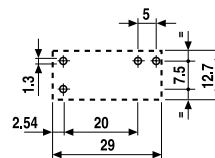
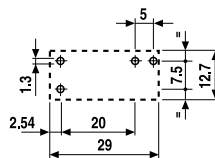
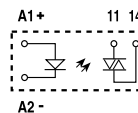
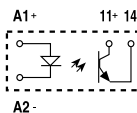


- 5 A, 24 V DC output switching
- PCB or 93 Series sockets

**41.81 - 8240**



- 3 A, 240 V AC output switching
- Zero crossing switching
- PCB or 93 Series sockets



Copper side view

Copper side view

**Output circuit**

Contact configuration		1 NO (SPST-NO)	1 NO (SPST-NO)
Rated current/ Maximum peak current (10 ms)	A	5/40	3/40
Rated voltage/ Maximum blocking voltage	V	(24/35)DC	(240/—)AC
Switching voltage range	V	(1.5...24)DC	(12...275)AC
Repetitive peak off-state voltage	V <sub>pk</sub>	—	600
Minimum switching current	mA	1	50
Max. "OFF-state" leakage current	mA	0.01	1
Max. "ON-state" voltage drop	V	0.3	1.1

**Input circuit**

Nominal voltage	V DC	12	24	12	24
Operating range	V DC	8...17	14...32	8...17	14...32
Control current	mA	5.5	9	8.8	9
Release voltage	V DC	4	9	4	9
Impedance	Ω	1550	2600	1030	2600

**Technical data**

Operate/release time	ms	0.05/0.25	10/10
Dielectric strength between input/output	V AC	2500	2500
Ambient temperature range	°C	-20...+60	-20...+60
Environmental protection		RT III	RT III

**Approvals** (according to type)

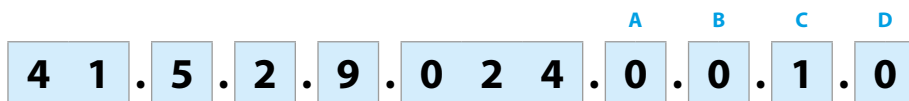


## Ordering information

### Electromechanical relay (EMR)

Example: 41 series low-profile PCB relay, 2 CO (DPDT), 24 V DC coil.

A



- Series** —————
- Type** —————  
3 = PCB - 3.5 mm pinning  
5 = PCB - 5 mm pinning  
6 = PCB - 5 mm pinning
- No. of poles** —————  
1 = 1 pole for  
    41.31, 12 A  
    41.61, 16 A  
2 = 2 pole for  
    41.52, 8 A
- Coil version** —————  
6 = DC bistable, 2 coils  
8 = AC  
9 = DC
- Coil voltage** —————  
See coil specifications

- A: Contact material**  
0 = Standard AgNi  
4 = AgSnO<sub>2</sub>  
5 = AgNi + Au
- B: Contact circuit**  
0 = CO (nPDT)  
3 = NO (nPST)

- D: Special versions**  
0 = Flux proof (RT II)  
1 = Wash tight (RT III)  
6 = Bistable version (RT II)
- C: Options**  
0 = Production line 0  
1 = Production line 1

**Selecting features and options: only combinations in the same row are possible.**  
Preferred selections for best availability are shown in **bold**.

Type	Coil version	A	B	C	D
41.31	DC	<b>0 - 4 - 5</b>	<b>0 - 3</b>	<b>1</b>	<b>0 - 1</b>
41.52	DC	<b>0 - 5</b>	<b>0 - 3</b>	<b>1</b>	<b>0 - 1</b>
41.61	DC	<b>0 - 4</b>	<b>0 - 3</b>	<b>1</b>	<b>0 - 1</b>
41.31/52/61	AC	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
41.52	DC bistable	4	<b>0</b>	<b>1</b>	<b>6</b>
41.61	DC bistable	4	<b>0 - 3</b>	<b>1</b>	<b>6</b>

### Solid state relay (SSR)

Example: 41 series SSR relay, 5 A output, 24 V DC supply.



- Series** —————
- Type** —————  
8 = SSR type
- Output** —————  
1 = 1 NO (SPST-NO)
- Input circuit** —————  
See coil specifications

- Output circuit**  
9024 = 5 A - 24 V DC  
8240 = 3 A - 240 V AC