



- High switching capacity up to 30 A
- "Bridge" type contacts which open the circuit with double break
- Flat insert connectors - faston 6,3 x 0,8 mm
- High resistance to interference • High strength of insulation
- Applications: household equipment, air-conditioning and ventilation systems, audio equipment, control devices, automation systems, etc.
- Recognitions, certifications, directives: RoHS, **CE**

### Contact data

Number and type of contacts		1 NO, 2 NO	
Contact material		<b>AgSnO<sub>2</sub></b>	
Rated / max. switching voltage	AC	250 V / 440 V	
Min. switching voltage		10 V	
Rated load	AC1	1 NO: 30 A / 250 V AC	2 NO: 25 A / 250 V AC
Min. switching current		10 mA	
Rated current		1 NO: 30 A	2 NO: 25 A
Max. breaking capacity	AC1	1 NO: 7 000 VA	2 NO: 6 250 VA
Min. breaking capacity		0,1 W	
Contact resistance		≤ 100 mΩ	

### Coil data

Rated voltage	50/60 Hz AC	24...230 V
	DC	12...110 V
Must release voltage		DC: ≥ 0,1 U <sub>n</sub>
Operating range of supply voltage		see Tables 1, 2
Rated power consumption	AC	1,7...2,5 VA
	DC	1,9 W

### Insulation according to PN-EN 60664-1

Insulation rated voltage	250 V	
Dielectric strength		
• between coil and contacts	4 000 V AC	type of insulation: reinforced
• contact clearance	2 000 V AC	type of clearance: full-disconnection
Contact - coil distance		
• clearance	≥ 9 mm	
• creepage	≥ 11 mm	

### General data

Operating / release time (typical values)	30 ms / 30 ms	
Electrical life		
• resistive AC1	1 200 cycles/hour	10 <sup>5</sup> 1 NO: 30 A, 250 V AC 2 NO: 25 A, 250 V AC
Mechanical life (cycles)	> 10 <sup>7</sup>	
Dimensions (L x W x H)	67 x 33 x 35 mm	
Weight	90 g	
Ambient temperature	• operating	-25...+75 °C
Cover protection category	IP 50 <b>1</b>	PN-EN 60529
Shock resistance	10 g	
Vibration resistance	1,5 mm DA (constant amplitude)	10...55 Hz

The data in bold type pertain to the standard versions of the relays.

**1** In cover with mounting flange.

**Coil data - DC voltage version**

Table 1

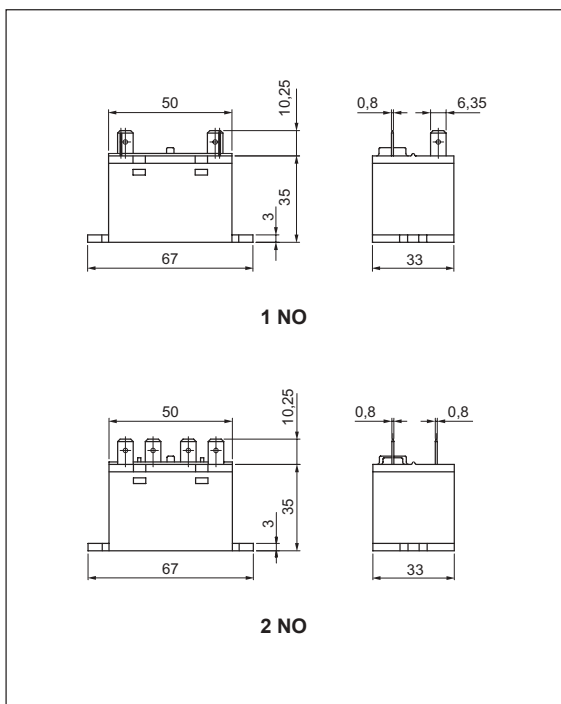
Coil code	Rated voltage V DC	Coil resistance ± 10% at 20°C Ω	Coil operating range at 20°C V DC		Power consumption W
			min.	max.	
1012	12	75,8	9,0	13,2	1,9
1024	24	303,0	18,0	26,4	1,9
1110	110	6 400,0	82,5	121,0	1,9

**Coil Data - AC 50/60 Hz voltage version**

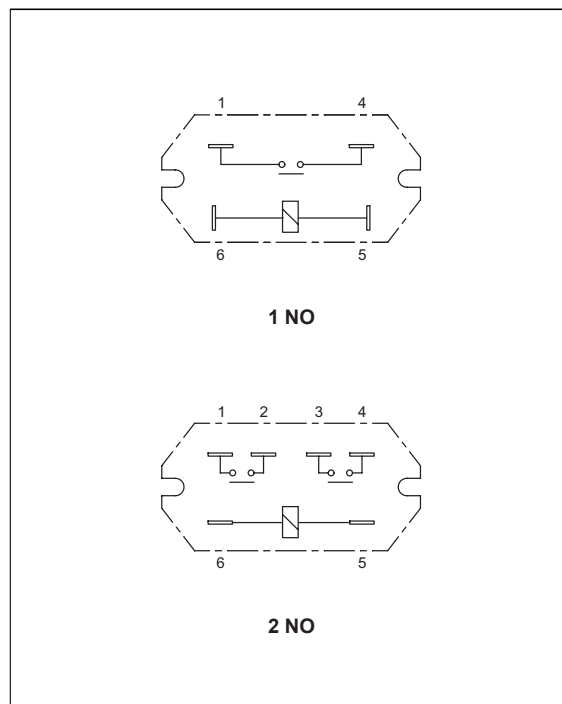
Table 2

Coil code	Rated voltage V AC	Coil resistance ± 10% at 20°C Ω	Coil operating range at 20°C V AC		Power consumption VA
			min.	max.	
5024	24	338	18,0	26,4	1,7
5048	48		36,0	52,8	1,7
5115	115	5 260	86,3	126,5	2,5
5230	230	21 000	172,5	253,0	2,5

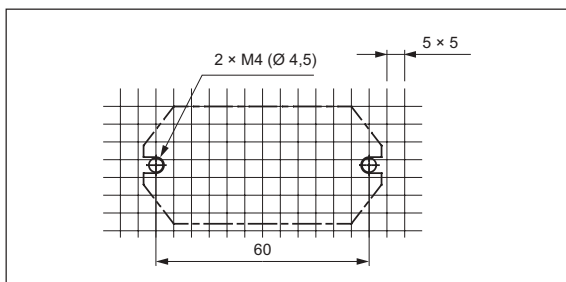
### Dimensions



### Connection diagrams (pin side view)



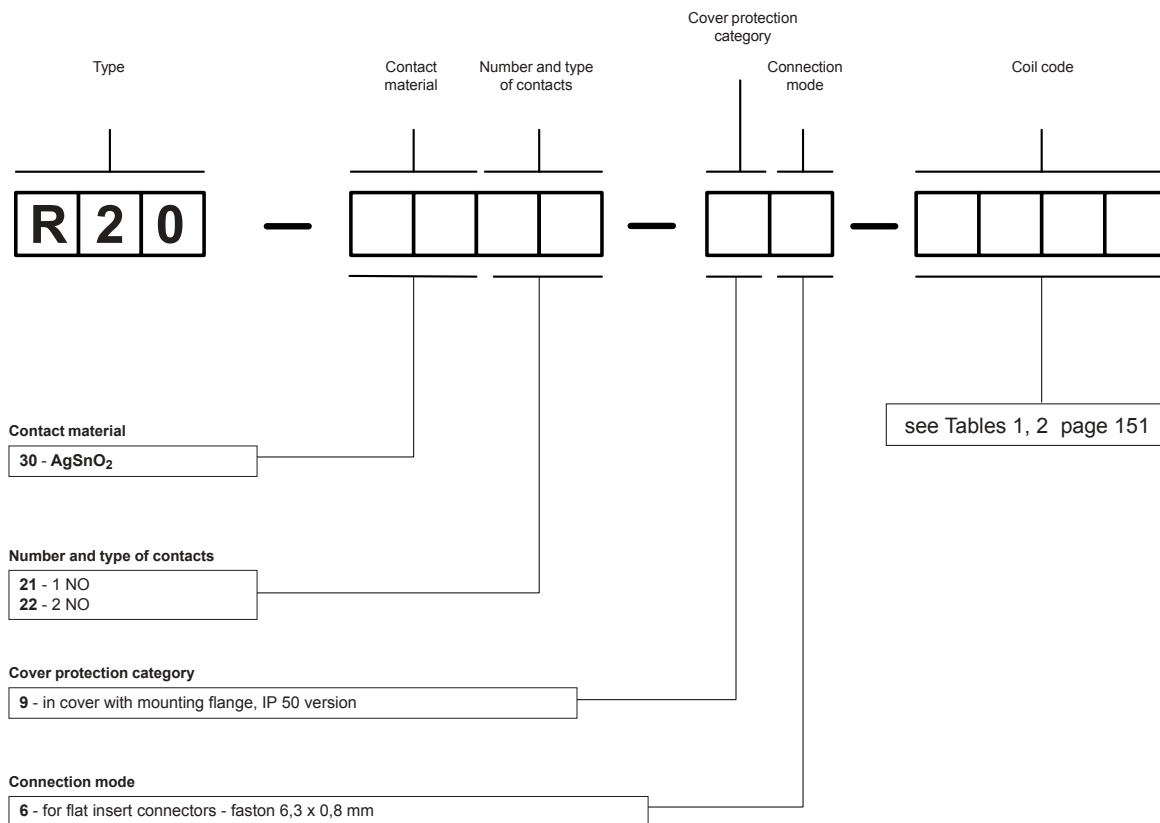
### Pinout



### Mounting

Relays **R20** are designed for flat insert connectors - faston 6,3 x 0,8 mm. Relays are on panel mounting with two M4 screws.

### Ordering codes



Example of ordering code:

**R20-3021-96-1012** relay **R20**, contact material AgSnO<sub>2</sub>, with one normally open contact, in cover with mounting flange IP 50, for flat insert connectors - faston 6,3 x 0,8 mm, voltage version 12 V DC