

## Features

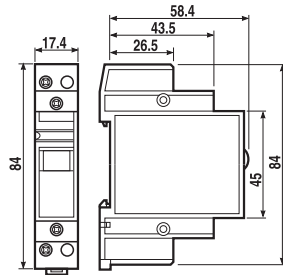
1 or 2 pole, 20 A relay for direct 35 mm rail (EN 60715) mounting

- 17.4 mm wide
- Test button
- Identification label
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

### 22.21



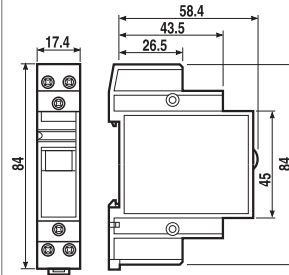
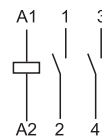
- Single phase switch 1 NO (SPST-NO)
- 35 mm rail (EN 60715) mount



### 22.22



- Double phase switch 2 NO (DPST-NO)
- 35 mm rail (EN 60715) mount



Contact specification		22.21	22.22
Contact configuration		1 NO (SPST-NO)	2 NO (DPST-NO)
Rated current/Maximum peak current	A	20/30	20/30
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	5,000	5,000
Rated load AC15 (230 V AC)	VA	1,000	1,000
Single phase motor rating (230 V AC)	kW	—	—
Breaking capacity DC1: 30/110/220 V	A	20/0.3/0.12	20/0.3/0.12
Minimum switching load	mW (V/mA)	1,000 (10/10)	1,000 (10/10)
Standard contact material		AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
Coil specification		22.21	22.22
Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240
	V DC	12 - 24 - 48 - 110	12 - 24 - 48 - 110
Rated power AC/DC	VA (50 Hz)/W	3/1.25	3/1.25
Operating range	AC (50 Hz)	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>
	DC	(0.9...1.1)U <sub>N</sub>	(0.9...1.1)U <sub>N</sub>
Technical data		22.21	22.22
Mechanical life AC/DC	cycles	500 · 10 <sup>3</sup>	500 · 10 <sup>3</sup>
Electrical life at rated load in AC1	cycles	50 · 10 <sup>3</sup>	50 · 10 <sup>3</sup>
Operate/release time	ms	15/8	15/8
Maximum impulse duration		continuous	continuous
Insulation between coil and contacts (1.2/50 μs)	kV	4	4
Ambient temperature range	°C	-40...+40	-40...+40
Protection category		IP 20	IP 20
Approvals (according to type)			

## Features

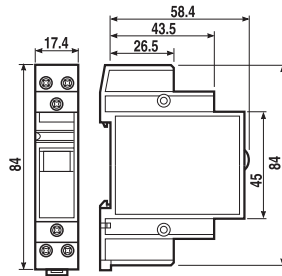
1 or 2 pole, 20 A relay  
for direct 35 mm rail (EN 60715) mounting

- 17.4 mm wide
- Test button
- Identification label
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

### 22.23



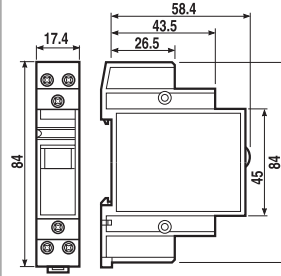
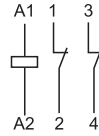
- Double phase switch 1NO+1NC (SPST-NO+SPST-NC)
- 35 mm rail (EN 60715) mount



### 22.24



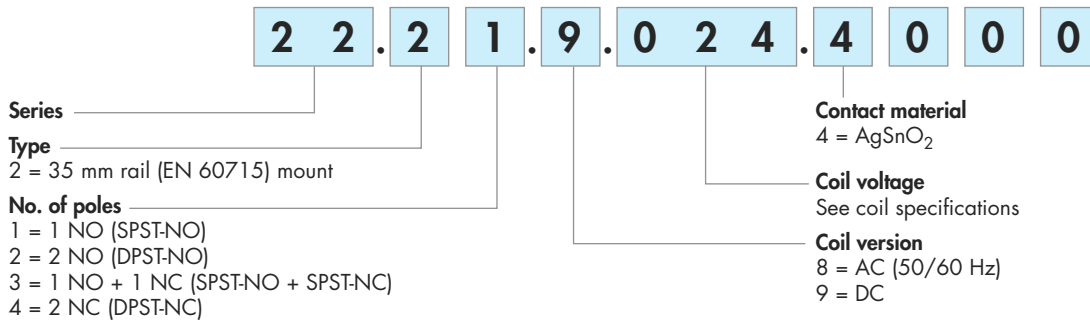
- Double phase switch 2 NC (DPST-NC)
- 35 mm rail (EN 60715) mount



Contact specification			
Contact configuration		1NO+1NC (SPST-NO+SPST-NC)	2 NC (DPST-NC)
Rated current/Maximum peak current	A	20/30	20/30
Rated voltage/Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	5,000	5,000
Rated load AC15 (230 V AC)	VA	1,000	1,000
Single phase motor rating (230 V AC)	kW	—	—
Breaking capacity DC1: 30/110/220 V	A	20/0.3/0.12	20/0.3/0.12
Minimum switching load	mW (V/mA)	1,000 (10/10)	1,000 (10/10)
Standard contact material		AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
Coil specification			
Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240	
	V DC	12 - 24 - 48 - 110	12 - 24 - 48 - 110
Rated power AC/DC	VA (50 Hz)/W	3/1.25	3/1.25
Operating range	AC (50 Hz)	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>
	DC	(0.9...1.1)U <sub>N</sub>	(0.9...1.1)U <sub>N</sub>
Technical data			
Mechanical life AC/DC	cycles	500 · 10 <sup>3</sup>	500 · 10 <sup>3</sup>
Electrical life at rated load in AC1	cycles	50 · 10 <sup>3</sup>	50 · 10 <sup>3</sup>
Operate/release time	ms	15/8	15/8
Maximum impulse duration		continuous	continuous
Insulation between coil and contacts (1.2/50 μs)	kV	4	4
Ambient temperature range	°C	-40...+40	-40...+40
Protection category		IP 20	IP 20
Approvals (according to type)		CE	PG

## Ordering information

Example: 22 series 35 mm rail mount relay, 1 NO (SPST-NO) 20 A contact, coil rated 24 V DC, contact material AgSnO<sub>2</sub>.



## Technical data

Contact specifications					
Nominal rate lamps					
incandescent (230V)	W	1,000			
compensated fluorescent (230V)	W	360			
Insulation					
Dielectric strength					
between supply and contacts	V AC	3,500			
between open contacts	V AC	2,000			
between adjacent contacts	V AC	2,000			
Other data					
Bounce time: NO / NC	ms	5 / 10			
Power lost to the environment					
without contact current	W	1.2			
with rated current	W	3.2 (22.21, 22.23)		5.2 (22.22, 22.24)	
Screw torque	Nm	0.8		0.8	
Max. wire size		<b>Coil terminals</b>		<b>Contact terminals</b>	
		solid cable	stranded cable	solid cable	stranded cable
	mm <sup>2</sup>	1x4 / 2x2.5	1x2.5 / 2x2.5	1x6 / 2x6	1x6 / 2x4
	AWG	1x12 / 2x14	1x14 / 2x14	1x10 / 2x10	1x10 / 2x12

If the coil is operated for a prolonged period of time, adequate ventilation of the relays must be provided - suggested gap of 9 mm between adjacent relays.

## Coil specifications

### DC version data

Nominal voltage U <sub>N</sub> V	Coil code	Operating range		Resistance R Ω	Consumption I at U <sub>N</sub> mA
		U <sub>min</sub> V	U <sub>max</sub> V		
12	9.012	10.8	13.2	115	104
24	9.024	21.6	26.4	460	52.2
48	9.048	43.2	52.8	1,850	25.9
110	9.110	99	121	9,700	11.3

### AC version data

Nominal voltage U <sub>N</sub> V	Coil code	Operating range		Resistance R Ω	Consumption I at U <sub>N</sub> (50 Hz) mA
		U <sub>min</sub> V	U <sub>max</sub> V		
8	8.008	6.8	8.8	6.5	360
12	8.012	10.2	13.2	13.5	245
24	8.024	20.4	26.4	41	135
48	8.048	40.8	52.8	186	68
110	8.110	93.5	121	970	26
120	8.120	102	132	1,380	24
230	8.230	196	253	4,200	12.5
240	8.240	204	264	4,400	12

### Accessories



020.01

**Adaptor for panel mounting**, 17.5 mm wide

020.01



020.24

**Sheet of marker tags**, plastic, 24 tags, 9x17 mm

020.24