



**finder**<sup>®</sup>  
SWITCH TO THE FUTURE

# Modular monostable relays 20 A



Hotel room  
energy-enabling  
units



Garden and  
night lighting



Streetlights and  
car park lighting



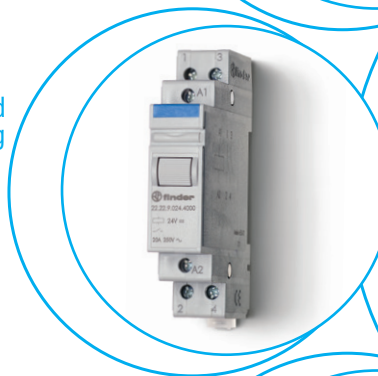
Bathrooms  
lighting  
control



Office lighting  
control



Pump control



**22**  
SERIES



FINDER reserves the right to alter characteristics at any time without notice. FINDER assumes no liability for damage to persons or property, caused as a result of the incorrect use or application of its products.

### 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

22.21/22

Screw terminals



### 22.21



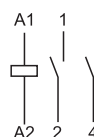
- Single phase switch 1 NO (SPST-NO)
- 35 mm rail (EN 60715) mount



### 22.22



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



For outline drawing see page 6

#### Contact specification

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	5000	5000
Rated load AC15 (230 V AC)	VA	1000	1000
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
Nominal lamp rating:			
230 V incandescent/halogen W		1000	1000
fluorescent tubes with electronic ballast W		400	400
fluorescent tubes with electromechanical ballast W		360	360
CFL W		200	200
230 V LED W		200	200
LV halogen or LED with electronic ballast W		200	200
LV halogen or LED with electromechanical ballast W		400	400
Minimum switching load	mW (V/mA)	1000 (10/10)	1000 (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)	12 - 24 - 230	
	V DC	12 - 24	12 - 24
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 relay (according to type)



**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

22.23/24  
Screw terminals



**22.23**



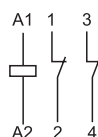
- Double phase switch 1 NO + 1 NC (SPST-NO + SPST-NC)
- 35 mm rail (EN 60715) mount



**22.24**



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



For outline drawing see page 6

**Contact specification**

Contact configuration		1 NO + 1 NC (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	5000	5000
Rated load AC15 (230 V AC)	VA	1000	1000
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
Nominal lamp rating:			
230 V incandescent/halogen W		1000	1000
fluorescent tubes with electronic ballast W		400	400
fluorescent tubes with electromechanical ballast W		360	360
CFL W		200	200
230 V LED W		200	200
LV halogen or LED with electronic ballast W		200	200
LV halogen or LED with electromechanical ballast W		400	400
Minimum switching load	mW (V/mA)	1000 (10/10)	1000 (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)	12 - 24 - 230	
	V DC	12 - 24	12 - 24
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**

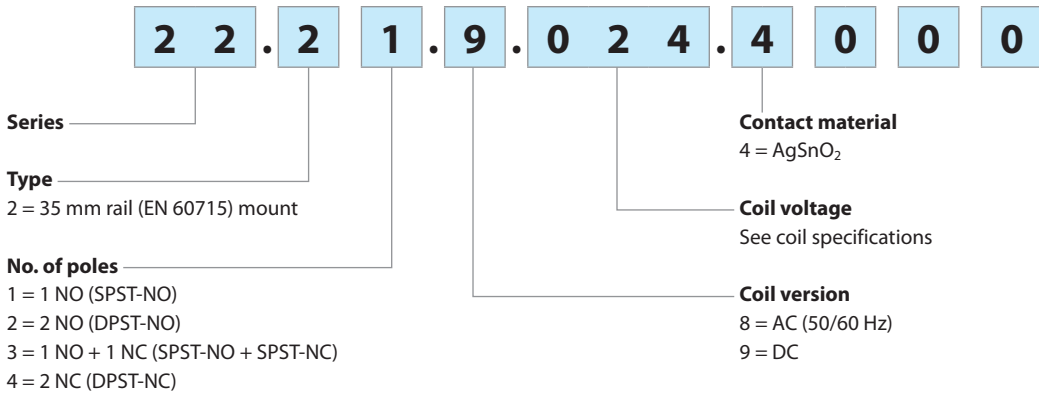
Mechanical life AC/DC	cycles	500 · 10 <sup>3</sup>	500 · 10 <sup>3</sup>
Electrical life at rated load in AC1	cycles	50 · 10 <sup>3</sup>	50 · 10 <sup>3</sup>
Operate/release time	ms	15/8	15/8
Maximum impulse duration		continuous	continuous
Insulation between coil and contacts (1.2/50 μs)	kV	4	4
Ambient temperature range	°C	-40...+40	-40...+40
Protection category		IP 20	IP 20

**Approvals relay** (according to type)



### 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

Insulation					
Dielectric strength					
between supply and contacts	V AC	3500			
between open contacts	V AC	2000			
between adjacent contacts	V AC	2000			
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>	1 x 4 / 2 x 2.5	1 x 2.5 / 2 x 2.5	1 x 6 / 2 x 6	1 x 6 / 2 x 4
	AWG	1 x 12 / 2 x 14	1 x 14 / 2 x 14	1 x 10 / 2 x 10	1 x 10 / 2 x 12

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

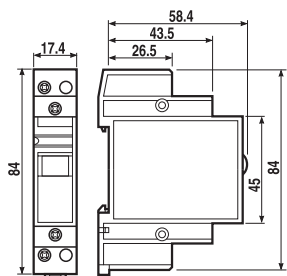
Nominal voltage	Coil code	Operating range		Resistance	Consumption
		U <sub>min</sub>	U <sub>max</sub>		
V		V	V	Ω	I at U <sub>N</sub> mA
12	<b>9.012</b>	10.8	13.2	115	104
24	<b>9.024</b>	21.6	24.6	460	52.2

#### AC version data

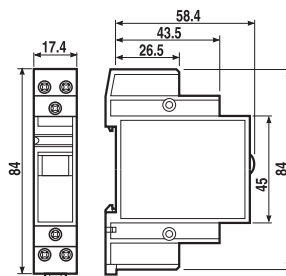
Nominal voltage	Coil code	Operating range		Resistance	Consumption
		U <sub>min</sub>	U <sub>max</sub>		
V		V	V	Ω	I at U <sub>N</sub> (50 Hz) mA
12	<b>8.012</b>	10.2	13.2	13.5	245
24	<b>8.024</b>	20.4	26.4	41	135
230	<b>8.230</b>	196	253	4200	12.5

### Outline drawing

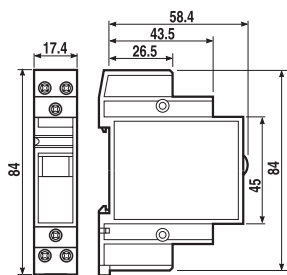
Type 22.21  
Screw terminal



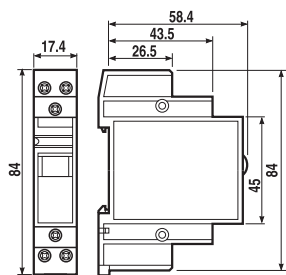
Type 22.22  
Screw terminal



Type 22.23  
Screw terminal



Type 22.24  
Screw terminal



### Accessories



020.01

Adaptor for panel mounting, 17.5 mm wide

020.01



022.09

Separator for rail mounting, plastic, 9 mm wide

022.09

