

Modular mono-stable 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

**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



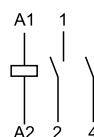
- Single phase switch 1 NO (SPST-NO)
- 35 mm rail (EN 60715) mount



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
Rated voltage/ Maximum switching voltage	V AC	250/400
Rated load AC1	VA	5000
Rated load AC15 (230 V AC)	VA	1000
Single phase motor rating (230 V AC)	kW	—
Breaking capacity DC1: 24/110/220 V	A	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 electromagnetic 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 electromagnetic ballast W	400	400
Minimum switching load	mW (V/mA)	1000 (10/10)
Standard contact material		AgSnO ₂

Coil specification

Nominal voltage (U _N)	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 _N	(0.85...1.1)U _N
	DC	(0.9...1.1)U _N	(0.9...1.1)U _N

Technical data

Mechanical life AC/DC	cycles	500 · 10 ³	500 · 10 ³
Electrical life at rated load in AC1	cycles	50 · 10 ³	50 · 10 ³
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)



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- 17.4 mm wide
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- 35 mm rail (EN 60715) mount
- Cadmium free contact material

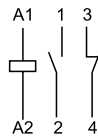
22.23/24
Screw terminals



22.23



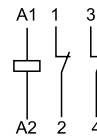
- Double phase switch 1 NO + 1 NC (SPST-NO + SPST-NC)
- 35 mm rail (EN 60715) mount



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: 24/110/220 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 electromagnetic 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 electromagnetic ballast W		400	400
Minimum switching load	mW (V/mA)	1000 (10/10)	1000 (10/10)
Standard contact material		AgSnO ₂	AgSnO ₂

Coil specification

Nominal voltage (U _N)	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 _N	(0.85...1.1)U _N
	DC	(0.9...1.1)U _N	(0.9...1.1)U _N

Technical data

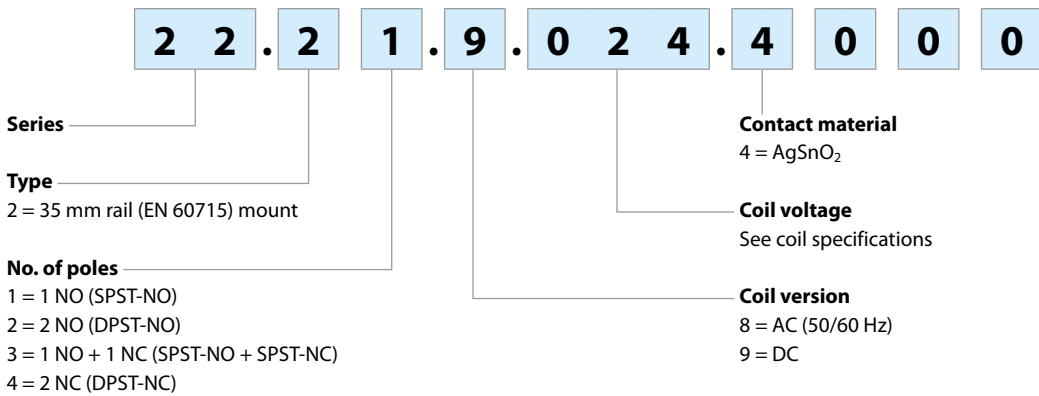
Mechanical life AC/DC	cycles	500 · 10 ³	500 · 10 ³
Electrical life at rated load in AC1	cycles	50 · 10 ³	50 · 10 ³
Operate/release time	ms	15/8	15/8
Maximum impulse duration		continuous	continuous
Insulation between coil and contacts (1.2/50 μs)	kV	4	4
Ambient temperature range	°C	-40...+40	-40...+40
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 AgSnO₂.



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	Coil terminals		Contact terminals		
		solid cable	stranded cable	solid cable	stranded cable
	mm ²	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

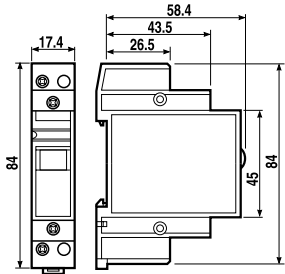
Nominal voltage	Coil code	Operating range		Resistance	Consumption
		U _{min}	U _{max}		
V		V	V	Ω	I at U _N mA
12	9.012	10.8	13.2	115	104
24	9.024	21.6	24.6	460	52.2

AC version data

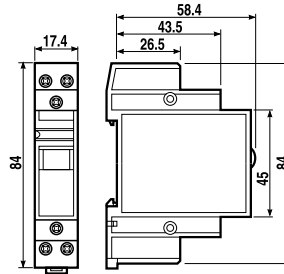
Nominal voltage	Coil code	Operating range		Resistance	Consumption
		U _{min}	U _{max}		
V		V	V	Ω	I at U _N (50 Hz) mA
12	8.012	10.2	13.2	13.5	245
24	8.024	20.4	26.4	41	135
230	8.230	196	253	4200	12.5

Outline drawing

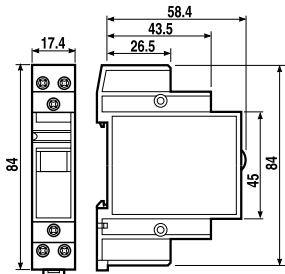
Type 22.21
Screw terminal



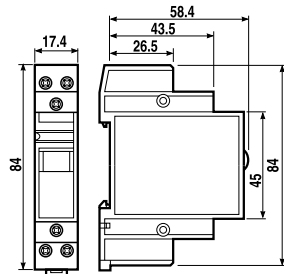
Type 22.22
Screw terminal



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

