

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

22.21/22
Screw terminal



For outline drawing see page 4

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	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
Nominal lamp rating: 230V incandescent/halogen W	1,000	1,000
fluorescent tubes with electronic ballast W	400	400
fluorescent tubes with electromechanical ballast W	360	360
CFL W	200	200
230V 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)	1,000 (10/10)	1,000 (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 (according to type)



22.21



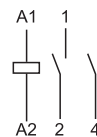
- Single phase switch 1 NO (SPST-NO)
- 35 mm rail (EN 60715) mount



22.22



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



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- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

22.21/22
Screw terminal



For outline drawing see page 4

22.23



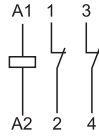
- Double phase switch
1NO+1NC (SPST-NO+SPST-NC)
- 35 mm rail (EN 60715) mount



22.24



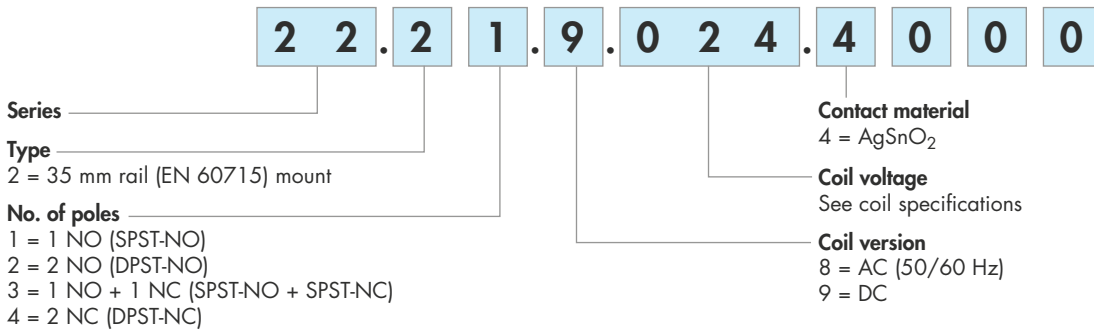
- Double phase switch 2 NC
(DPST-NC)
- 35 mm rail (EN 60715) mount



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
Nominal lamp rating: 230V incandescent/halogen	W	1,000	1,000
fluorescent tubes with electronic ballast	W	400	400
fluorescent tubes with electromechanical ballast	W	360	360
CFL	W	200	200
230V 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)	1,000 (10/10)	1,000 (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 (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	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			
Max. wire size		Coil terminals		Contact terminals	
		solid cable	stranded cable	solid cable	stranded cable
		mm ²	1x4 / 2x2.5	1x2.5 / 2x2.5	1x6 / 2x6
	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 _N	Coil code	Operating range		Resistance R	Consumption I at U _N
		U _{min}	U _{max}		
V		V	V	Ω	mA
12	9.012	10.8	13.2	115	104
24	9.024	21.6	26.4	460	52.2

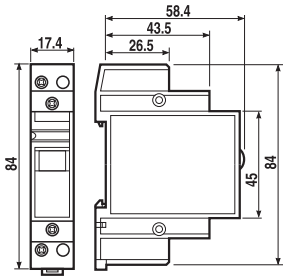
AC version data

Nominal voltage U _N	Coil code	Operating range		Resistance R	Consumption I at U _N (50 Hz)
		U _{min}	U _{max}		
V		V	V	Ω	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	4,200	12.5

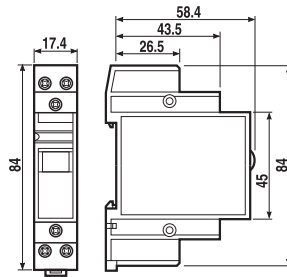


Outline drawings

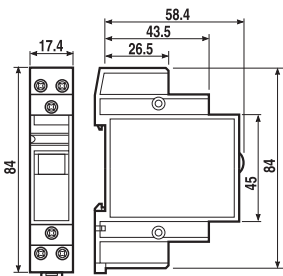
Type 22.21
Screw terminal



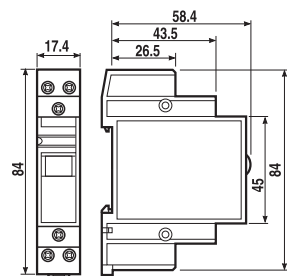
Type 22.22
Screw terminal



Type 22.23
Screw terminal



Type 22.24
Screw terminal



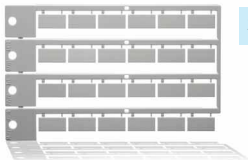
Accessories



020.01

Adaptor for panel mounting, 17.5 mm wide

020.01



020.24

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

020.24



022.09

Separator for rail mounting, plastic, 9 mm wide

022.09

