finder
RELAYING INNOVATION

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

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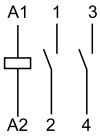
1 or 2 pole, 20 A relay
for direct 35 mm rail (EN 60715) mounting

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

22.21/22.22
Box clamp/Screw terminal

	22.21	22.22
	• Single phase switch 1 NO (SPST-NO) • 35 mm rail (EN 60715) mount	• 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: 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	$500 \cdot 10^3$	$500 \cdot 10^3$
Electrical life at rated load in AC1 cycles	$50 \cdot 10^3$	$50 \cdot 10^3$
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)	CE UK CA EAC	

22 SERIES
Modular monostable relays 20 A

1 or 2 pole, 20 A relay
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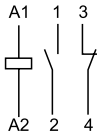
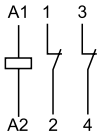
- 17.4 mm wide
- Test button
- Identification label
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

22.23/22.24
Box clamp/Screw terminal

	22.23	22.24
	• Double phase switch 1 NO + 1 NC (SPST-NO + SPST-NC) • 35 mm rail (EN 60715) mount	• 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)	$(0.85\ldots1.1)U_N$	$(0.85\ldots1.1)U_N$
DC	$(0.9\ldots1.1)U_N$	$(0.9\ldots1.1)U_N$
Technical data		
Mechanical life AC/DC cycles	$500 \cdot 10^3$	$500 \cdot 10^3$
Electrical life at rated load in AC1 cycles	$50 \cdot 10^3$	$50 \cdot 10^3$
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)	CE UK CA EAC	

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I-2023, www.findernet.com

Ordering information

Example: 22 series, 35 mm rail mount relay, 1 NO (SPST-NO) 20 A contact, coil rated 24 V DC, contact material $AgSnO_2$.

2 2 . 2 1 . 9 . 0 2 4 . 4 0 0 0

Series

Type
2 = 35 mm rail (EN 60715) mount

No. of poles
1 = 1 NO (SPST-NO)
2 = 2 NO (DPST-NO)
3 = 1 NO + 1 NC (SPST-NO + SPST-NC)
4 = 2 NC (DPST-NC)

Contact material
4 = $AgSnO_2$

Coil voltage
See coil specifications

Coil version
8 = AC (50/60 Hz)
9 = DC

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

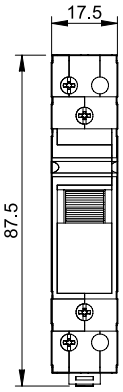
Nominal voltage	Coil code	Operating range		Resistance	Consumption
U_N		U_{min}	U_{max}	R	I at U_N
V		V	V	Ω	mA
12	**9**.012	10.8	13.2	115	104
24	**9**.024	21.6	24.6	460	52.2

AC version data

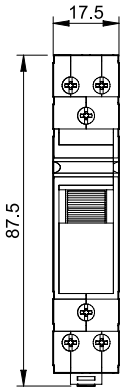
Nominal voltage	Coil code	Operating range		Resistance	Consumption
U_N		U_{min}	U_{max}	R	I at U_N (50 Hz)
V		V	V	Ω	mA
12	**8**.012	10.2	13.2	13.5	245
24	**8**.024	20.4	26.4	41	135
230	**8**.230	196	253	4200	12.5

Outline drawing

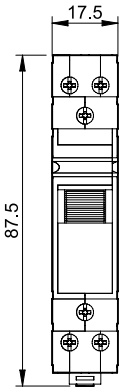
Type 22.21
Box clamp/Screw terminal



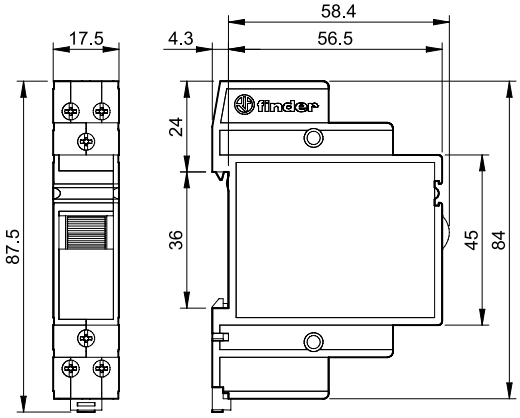
Type 22.22
Box clamp/Screw terminal



Type 22.23
Box clamp/Screw terminal



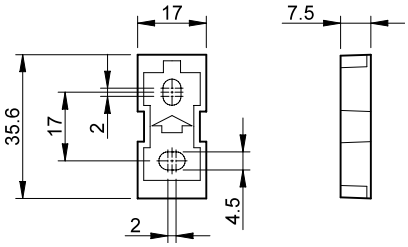
Type 22.24
Box clamp/Screw terminal



Accessories

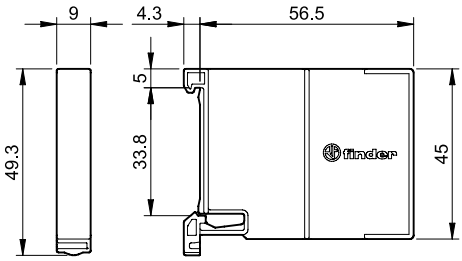
020.01

Adaptor for panel mounting, 17.5 mm wide	020.01



022.09

Separator for rail mounting, plastic, 9 mm wide	022.09



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