finder®
SWITCH TO THE FUTURE

Modular monostable relays 20 A

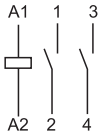
- Hotel room energy-enabling units
- Garden and night lighting
- Streetlights and car park lighting
- Bathrooms lighting control
- Office lighting control
- Pump control

22
SERIES

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	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: 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		$AgSnO_2$	$AgSnO_2$
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 EAC	

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

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- Test button
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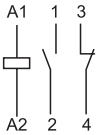
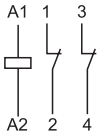
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

22.23/24
Screw terminals

	22.23	22.24
		
	• Double phase switc 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: 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	$AgSnO_2$	$AgSnO_2$
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 EAC	

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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)

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

Coil voltage
See coil specifications

Contact material
4 = $AgSnO_2$

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

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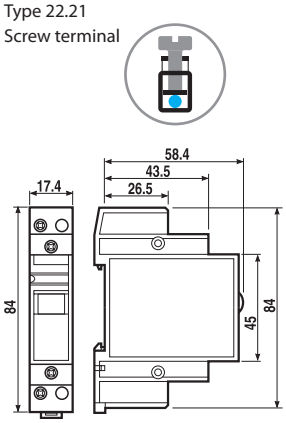
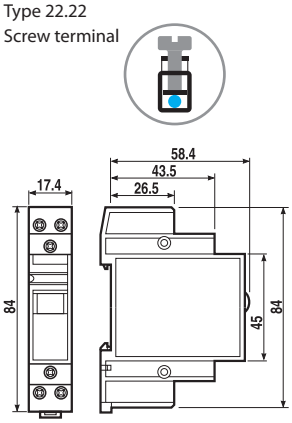
Outline drawing

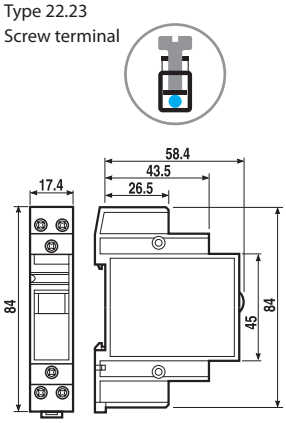
Type 22.21
Screw terminal



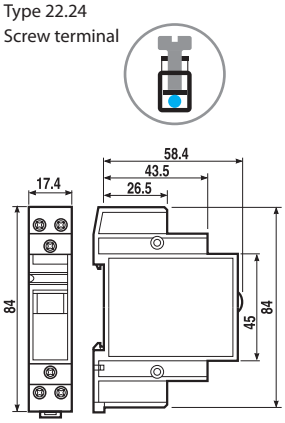
Type 22.22
Screw terminal



Type 22.23
Screw terminal



Type 22.24
Screw terminal



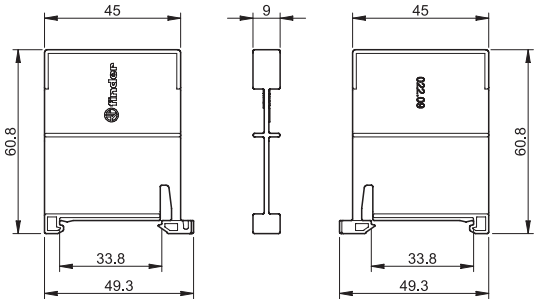
Accessories

020.01

Adaptor for panel mounting, 17.5 mm wide	020.01

022.09

Separator for rail mounting, plastic, 9 mm wide	022.09



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