Features

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

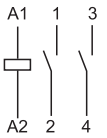
- 17.4 mm wide
- Test button
- Identification label
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

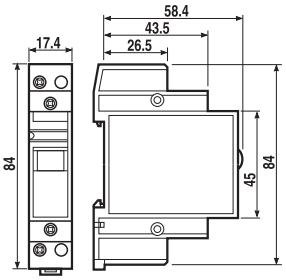
22.21

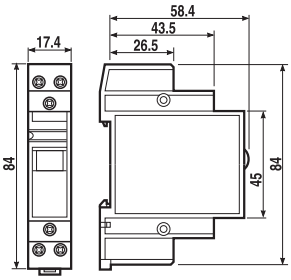
- Single phase switch 1 NO (SPST-NO)
- 35 mm rail (EN 60715) mount

22.22

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







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
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)	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240	
	V DC	12 - 24 - 48 - 110	12 - 24 - 48 - 110
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 (according to type)		CE EAC	

Features

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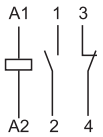
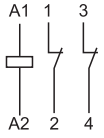
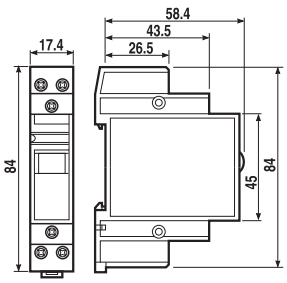
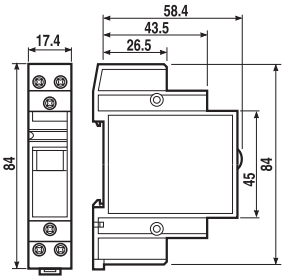
- AC coils and DC coils
- 35 mm rail (EN 60715) mount
- Cadmium free contact material

	22.23	22.24
		
	• Double phase switch 1NO+1NC (SPST-NO+SPST-NC) • 35 mm rail (EN 60715) mount	• 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
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)	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240	
	V DC	12 - 24 - 48 - 110	12 - 24 - 48 - 110
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 (according to type)		CE EAC	

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

Contact specifications					
Nominal rate lamps					
incandescent (230V)	W	1,000			
compensated fluorescent (230V)	W	360			
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		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	1x6 / 2x4
	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 U_{min}	Operating range U_{max}	Resistance R	Consumption I at U_N
V		V	V	Ω	mA
12	**9**.012	10.8	13.2	115	104
24	**9**.024	21.6	26.4	460	52.2
48	**9**.048	43.2	52.8	1,850	25.9
110	**9**.110	99	121	9,700	11.3

AC version data

Nominal voltage U_N	Coil code	Operating range U_{min}	Operating range U_{max}	Resistance R	Consumption I at U_N (50 Hz)
V		V	V	Ω	mA
8	**8**.008	6.8	8.8	6.5	360
12	**8**.012	10.2	13.2	13.5	245
24	**8**.024	20.4	26.4	41	135
48	**8**.048	40.8	52.8	186	68
110	**8**.110	93.5	121	970	26
120	**8**.120	102	132	1,380	24
230	**8**.230	196	253	4,200	12.5
240	**8**.240	204	264	4,400	12

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