

- One module (17.5mm) wide
- Test button
- Identification label
- AC and DC coils
- 35 mm rail (EN 50022) mount

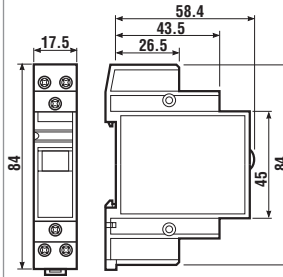
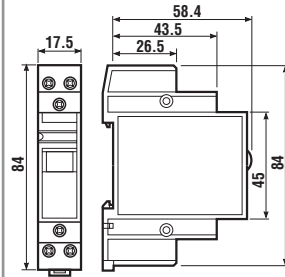
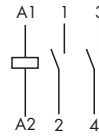
## 22.21

## 22.22



- Single phase switch 1 NO  
- 35 mm rail (EN 50022)

- Double phase switch 2 NO  
- 35 mm rail (EN 50022)



<b>Contact specifications</b>			
Contact configuration		1 NO	2 NO
Rated current/Max. peak current	A	20/30	20/30
Rated voltage/Max. switching voltage	V AC	250/400	250/400
Rated load in AC1	VA	5,000	5,000
Rated load in AC15 (230 VAC)	VA	1,000	1,000
Single phase motor rating (230 VAC)	kW/HP	—	—
Breaking capacity: 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		AgNi	AgNi
<b>Coil specifications</b>			
Nominal voltage	V AC (50/60Hz)	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240	
	V DC	12 - 24 - 48 - 110	12 - 24 - 48 - 110
Rated power AC/DC	VA (50Hz)/W	2.3/1.25	2.3/1.25
Operating range	AC (50Hz)/W	$(0.85...1.1)U_N$	
	DC	$(0.9...1.1)U_N$	
<b>Technical data</b>			
Mechanical life	cycles	$500 \cdot 10^3$	$500 \cdot 10^3$
Electrical life at rated load in AC1	cycles	$50 \cdot 10^3$	$50 \cdot 10^3$
Maximum impulse duration		continuous	continuous
Surge test (1.2/50µs) between coil and contacts	V	4,000	4,000
Ambient temperature range	°C	-40...+40	-40...+40
Protection category		IP 20	IP 20
<b>Approvals:</b> (according to type)		<b>CE</b>	

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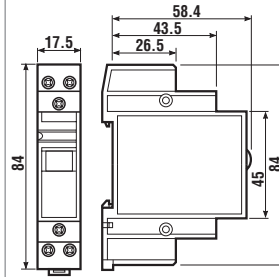
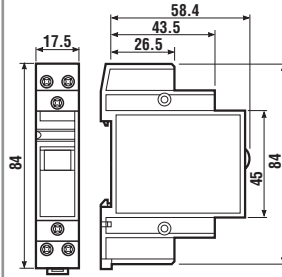
## 22.23

## 22.24



- Double phase switch  
1 NO + 1 NC  
- 35 mm rail (EN 50022)

- Double phase switch 2 NC  
- 35 mm rail (EN 50022)



Contact specifications		22.23	22.24
Contact configuration		1 NO + 1 NC	2 NC
Rated current/Max. peak current	A	20/30	20/30
Rated voltage/Max. switching voltage	V AC	250/400	250/400
Rated load in AC1	VA	5,000	5,000
Rated load in AC15 (230 VAC)	VA	1,000	1,000
Single phase motor rating (230 VAC)	kW/HP	—	—
Breaking capacity: 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		AgNi	AgNi
Coil specifications		22.23	22.24
Nominal voltage	V AC (50/60Hz)	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240	8 - 12 - 24 - 48 - 110 - 120 - 230 - 240
	V DC	12 - 24 - 48 - 110	12 - 24 - 48 - 110
Rated power AC/DC	VA (50Hz)/W	2.3/1.25	2.3/1.25
Operating range	AC (50Hz)/W	(0.85...1.1)U <sub>N</sub>	(0.85...1.1)U <sub>N</sub>
	DC	(0.9...1.1)U <sub>N</sub>	(0.9...1.1)U <sub>N</sub>
Technical data		22.23	22.24
Mechanical life	cycles	500 · 10 <sup>3</sup>	500 · 10 <sup>3</sup>
Electrical life at rated load in AC1	cycles	50 · 10 <sup>3</sup>	50 · 10 <sup>3</sup>
Maximum impulse duration		continuous	continuous
Surge test (1.2/50µs) between coil and contacts	V	4,000	4,000
Ambient temperature range	°C	-40...+40	-40...+40
Protection category		IP 20	IP 20
Approvals: (according to type)			

## ORDERING INFORMATION

Example: a 22 series 35 mm rail (EN 50022) mount relay with 1 NO (SPST-NO) - 20 A contacts, with coil rated at 24 V DC, contact material AgSnO<sub>2</sub>.

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

**Series**

**Type**

2 = 35 mm rail (EN 50022) mount

**No. of poles**

1 = 1 NO (SPST-NO)

2 = 2 NO (DPST-NO)

3 = 1 NO (SPST-NO) + 1 NC (SPST-NC)

4 = 2 NC (DPST-NC)

**Contact material**

0 = AgNi standard

4 = AgSnO<sub>2</sub>

**Coil voltage**

see coil specifications

**Coil version**

8 = AC (50/60 Hz)

9 = DC

## TECHNICAL DATA

### CONTACT SPECIFICATIONS

NOMINAL RATE LAMPS		
- incandescence (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
SURGE TEST (1.2/50µs)		
- between supply and contacts	V	4,000

### OTHER DATA

**22.21**

**22.22, 22.23, 22.24**

POWER LOST IN THE ENVIRONMENT					
- without contact current	W	1.2		1.2	
- with rated current	W	3.2		5.2	
		<b>COIL CLAMPS</b>		<b>CONTACT CLAMPS</b>	
MAX WIRE SIZE		solid cable	flexible cable	solid cable	flexible cable
	mm <sup>2</sup>	1x4 / 2x2.5	1x2.5 / 2x2.5	1x6 / 2x6	1x6 / 2x4
	AWG	1x12 / 2x14	1x14 / 2x14	1x10 / 2x10	1x10 / 2x12
TORQUE	Nm	0.8			0.8

If the coil is operated for a prolonged period of time, adequate ventilation of the relays must be provided, for example leaving a gap of about 9mm between pairs of relays.

## COIL SPECIFICATIONS

### AC VERSION DATA

Nominal voltage U <sub>N</sub> V	Coil code	Operating range		Resistance R Ω	Absorption I at U <sub>N</sub> (50Hz) mA
		U <sub>min</sub> V	U <sub>max</sub> V		
8	8.008	6.8	8.8	6.5	275
12	8.012	10.2	13.2	13.5	185
24	8.024	20.4	26.4	42	95
48	8.048	40.8	52.8	185	48
110	8.110	93.5	121	980	21
120	8.120	102	132	1,400	18
230	8.230	195.5	253	4,250	10
240	8.240	204	264	4,400	9.5

### DC VERSION DATA

Nominal voltage U <sub>N</sub> V	Coil code	Operating range		Resistance R Ω	Absorption I at U <sub>N</sub> mA
		U <sub>min</sub> V	U <sub>max</sub> V		
12	9.012	10.8	13.2	115	104.3
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