

- One module (17.4mm) wide
- Test button with mechanical indicators
- 6 functions available
- AC and DC coils
- Identification label
- Possible to connect illuminated push buttons
- 35 mm rail (EN 50022) mount

	20.21	20.22, 24, 26, 28	20.23
	- Single phase switch 1 NO - 35 mm rail mount	- Double phase switch - 35 mm rail mount	- Double phase switch 1 NC + 1 NO - 35 mm rail mount
<b>Contact specifications</b>			
Number of contacts	1 NO	2 NO	1 NC + 1 NO
Rated current/Max. peak current	A 16/30	A 16/30	A 16/30
Rated voltage/Max. switching voltage	V AC 250/400	V AC 250/400	V AC 250/400
Rated load in AC1	VA 4,000	VA 4,000	VA 4,000
Rated load in AC15 (230 VAC)	VA 750	VA 750	VA 750
Nominal lamp rating: incandescence (230V)	W 2,000	W 2,000	W 2,000
compensated fluorescent (230V)	W 750	W 750	W 750
uncompensated fluorescent (230V)	W 1,000	W 1,000	W 1,000
halogens (230V)	W 2,000	W 2,000	W 2,000
Minimum switching load	mW(V/mA) 1,000 (10/10)	mW(V/mA) 1,000 (10/10)	mW(V/mA) 1,000 (10/10)
Standard contact material	AgNi	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	5.5/5	5.5/5
Operating range	AC	(0.85...1.1)U <sub>N</sub> (50Hz)/(0.9...1.1)U <sub>N</sub> (60Hz)	
	V DC	(0.9...1.1)U <sub>N</sub>	(0.9...1.1)U <sub>N</sub>
<b>Technical data</b>			
Mechanical life	cycles	300 · 10 <sup>3</sup>	300 · 10 <sup>3</sup>
Electrical life at rated load in AC1	cycles	100 · 10 <sup>3</sup>	100 · 10 <sup>3</sup>
Maximum impulse duration		1 h (according to EN60669)	1 h (according to EN60669)
Insulation between coil and contacts (1.2/50µs)	kV	4	4
Ambient temperature range	°C	-40...+40	-40...+40
Protection category		IP 20	IP 20
<b>Approvals:</b> (according to type)			

## ORDERING INFORMATION

Example: a 20 series 35 mm rail (EN 50022) mount relay with double phase switch, 2 NO - 16 A contacts, coil rated at 12 V DC and with AgSnO<sub>2</sub> contacts.

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

**Series**

**Type**

2 = 35 mm rail (EN 50022) mount

**No. of poles**

1 = Single phase switch 1 NO

2 = Double phase switch 2 NO

3 = Double phase switch 1 NC + 1 NO

4 = 4 sequence double phase switch 2 NO

6 = 3 sequence double phase switch 2 NO

8 = 4 sequence double phase switch 2 NO

**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

### 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

**20.21**

**20.22, 20.23, 20.24, 20.26, 20.28**

POWER LOST TO THE ENVIRONMENT		20.21		20.22, 20.23, 20.24, 20.26, 20.28	
- with rated current	W	1.3		2.6	
MAX WIRE SIZE	mm <sup>2</sup>	<b>COIL CLAMPS</b>		<b>CONTACT CLAMPS</b>	
		solid cable	stranded cable	solid cable	stranded cable
		1x4 / 2x2.5	1x2.5 / 2x2.5	1x6 / 2x4	1x4 / 2x2.5
	AWG	1x12 / 2x14	1x14 / 2x14	1x10 / 2x12	1x12 / 2x14
SCREW 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>	Coil code	Operating range		Resistance R	Consumption I at U <sub>N</sub> (50Hz)
		U <sub>min</sub>	U <sub>max</sub>		
V		V	V	Ω	mA
8	8.008	6.8	8.8	4	800
12	8.012	10.2	13.2	7.5	550
24	8.024	20.4	26.4	27	275
48	8.048	40.8	52.8	106	150
110	8.110	93.5	121	590	64
120	8.120	102	132	680	54
230	8.230	195.5	253	2,500	28
240	8.240	204	264	2,700	27.5

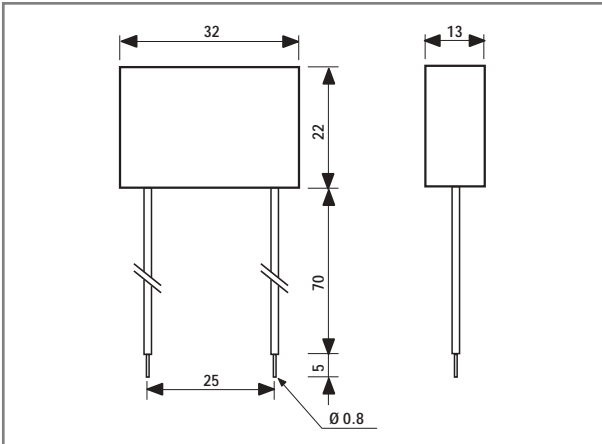
### DC VERSION DATA

Nominal voltage U <sub>N</sub>	Coil code	Operating range		Resistance R	Consumption I at U <sub>N</sub>
		U <sub>min</sub>	U <sub>max</sub>		
V		V	V	Ω	mA
12	9.012	10.8	13.2	27	440
24	9.024	21.6	26.4	105	230
48	9.048	43.2	52.8	440	110
110	9.110	99	121	2,330	47

TYPE	Number of steps	SEQUENCES			
		1	2	3	4
20.21	2				
20.22	2				
20.23	2				
20.24	4				
20.26	3				
20.28	4				

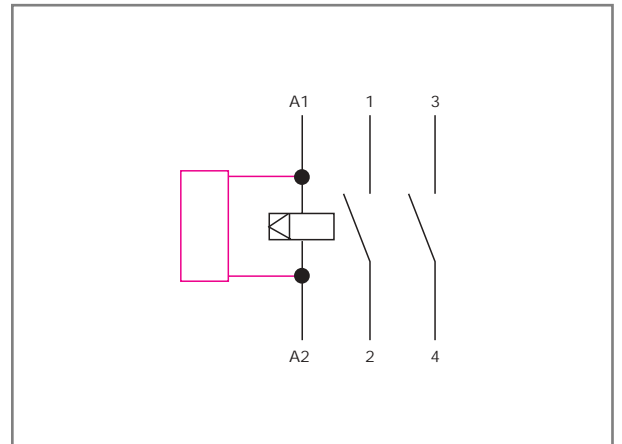
## ACCESSORIES

### MODULE FOR ILLUMINATED PUSH-BUTTONS



#### Type 026.00

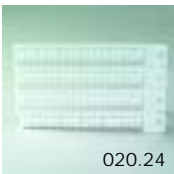
Sealed version, 7.5 cm insulated and flexible terminals.



#### Example of wiring diagram of type 026.00

This module is necessary if using up to a maximum of 15 illuminated pushbuttons (1.5 mA max, 230 V AC) in the switching input circuit. It must be connected in parallel to the coil of the relay (see diagram).

## ACCESSORIES



020.24

Sheet of marker tags (24 tags)	020.24
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