MODULAR STEP RELAYS



- •A range of one module (17.5mm) wide modular step relays with 1 or 2 NO 16A 250V AC contacts
- •Test button with mechanical indicators
- •6 functions available
- •AC/DC coils
- •Identification label
- •Clamps suitable for two 4 mm² wires each
- •Clamps not lined up to make wiring easier
- •DIN rail 46277 mount
- Possible to connect illuminated push buttons (by means of capacitor)
- •In conformity with IEC 669 1 and IEC 669 2 2
- •Approvals (according to type): IMQ, RINA, SEV, UTE













RINA

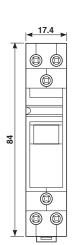


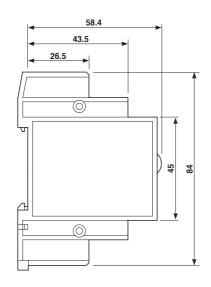
MODULAR STEP RELAY

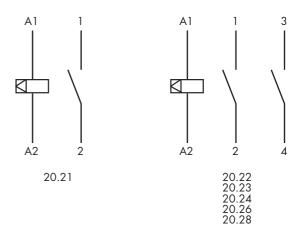
TYPE 20.21 single phase switch 1 NO
TYPE 20.22 double phase switch 2 NO
TYPE 20.23 double phase switch 1 NO + 1 NC

TYPE 20.24 4 sequence double phase switch
TYPE 20.26 3 sequence double phase switch
TYPE 20.28 4 sequence double phase switch
-20.28 type suggested for rolling shutter automation

- ordering information: see page 24







TYPE	number	SEQUENCES			
	of steps	1°	2°	3°	4°
20.21	2		7		
20.22	2	\ \ \	77		
20.23	2	\	7\		
20.24	4	1 \	77	14	
20.26	3	1 1	14	77	
20.28	4	1 1	7 \	1 1	17

TECHNICAL DATA

DIELECTRIC STRENGTH			
tested at:	between coil and contacts	3500 V	
leakage current ≤ 30 mA for	between open contacts	2000 V	
1 min at 50 Hz	between adjacent contacts	2000 V	
Insulation resistance	$\geq 10 \cdot 10^3 M\Omega$		
MAXIMUM SWITCHING FREQUENCY	- without load: 3600 operations/h - at rated load: 900 operations/h		
AMBIENT TEMPERATURE	- 40 to 40°C		
MECHANICAL LIFE	300 · 10 ³ operations		
PROTECTION CATEGORY	IP 20		

CONTACT **SPECIFICATION**

rated current	16 A		
MAXIMUM PEAK CURRENT	30 A		
rated voltage	250 V AC		
MAXIMUM SWITCHING VOLTAGE	400V AC		
NOMINAL RATE AC1: compensated fluorescent lamps: uncompensated fluorescent lamps: incandescence lamps:: halogen lamps:	4000 VA 750 W 1000 W 2000 W 2000 W	230 V AC 230 V AC 230 V AC 230 V AC	
ELECTRICAL LIFE	$\geq 100 \cdot 10^3$ operations		
STANDARD CONTACT MATERIAL	Ag Ni		

COIL **SPECIFICATION**

AC - alternating current 50 ÷ 60 Hz DC - direct current

NOMINAL VOLTAGE UN	AC: 8 - 12 - 24 - 48 - 110 - 125 - 230 - 240 V DC: 12 - 24 - 48 - 60 - 110 V		
rated power consumption	AC: 5.5 VA DC: 5 W		
OPERATING RANGE	AC (50 Hz): (0.85 ÷ 1.1) Un AC (60 Hz): (0.9 ÷ 1.1) Un DC: (0.9 ÷ 1.1) Un		
MAXIMUM IMPULSE DURATION	ACCORDING TO IEC 669		

If the coil works for a prolonged period of time, adaquate ventilation of the relays must be provided, for example leaving a gap of abent 9mm between them.

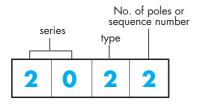
AC - DC VERSION DATA (R values relate to +20°C. Tolerance of R and I values: $\pm 10\%$.)

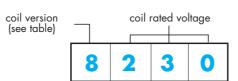
		AC	D	C
Nominal voltage Un	Resistance R	Current consumption I at Un (50 Hz)	Resistance R	Current consumption I at UN
(V)	(Ω)	(mA)	(Ω)	(mA)
8	3.5	700	_	_
12	7	450	27	440
24	27	210	105	230
48	105	110	440	110
110	600	45	2330	47
125	700	42	_	_
230	2500	23.5	_	_
240	2700	22	_	_

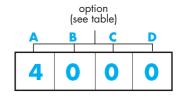


ORDERING INFORMATION

Example: A 20 series double phase switch relay with 2 NO contacts, coil rated at 230V AC with Ag Sn O2 contact material.







COIL VERSION

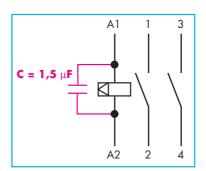
CODE		Coil types
9	DC	Direct current
8	AC	Alternating current (50/60 Hz)

OPTION

A	Contact material	В	Contact circuit	С	Light and mechanical indicators	D	Special application
0	standard	0	standard	0	standard	0	standard
4	Ag SnO2						

CHARACTERISTIC OF THE CAPACITOR

A capacitor C = 1.5 μF (ordering code 02600) is available if using a maximum of 10 illuminated push-buttons (1.5 mA max, 230 V AC) in the switching input circuit. This capacitor has to be connected in parallel to the coil of the relay (see diagram).



CODE 02600

MATERIAL	metallised polypropylene
TOLERANCE CAPACITY	± 10%
RATED VOLTAGE	250 V AC
MAX TEMPERATURE	+ 85 °C
DIELECTRIC STRENGTH	1.6 kV, 50 Hz, 60s, (25 ± 5)°C
APPROVALS	VDE S

Sealed version, 7.5 cm insulated and flexible terminals.

