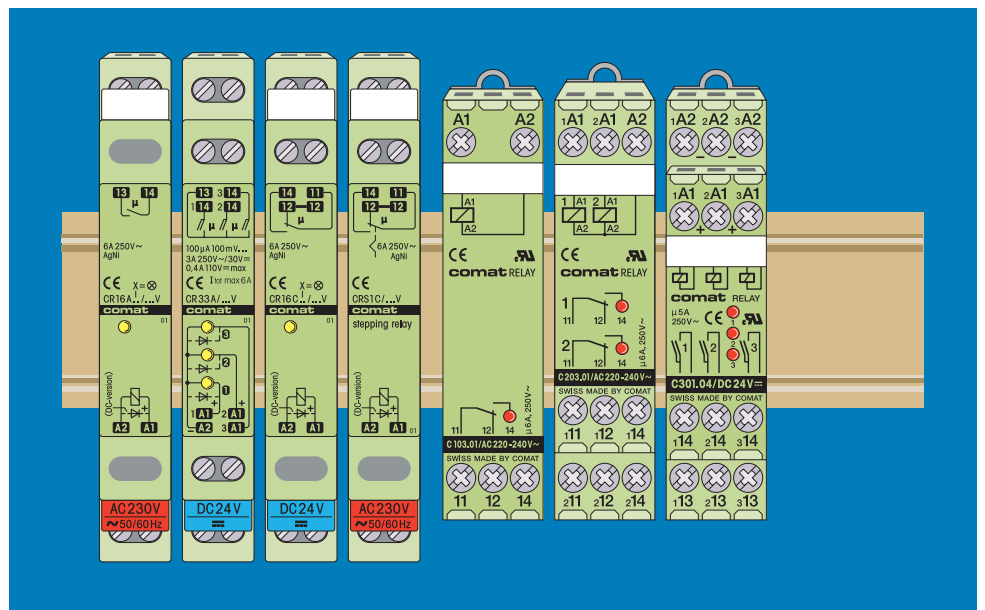


Industrial Relays

DIN Relays



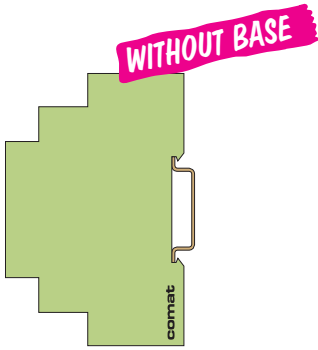
DIN

DIN Relays Recommended application

6A										
5A										
3A										
2A										
1A										
10mA										
1mA										
100µA										
I	1	CR16 C103.01	CRS1C							C103.06
	2	C133.01		CR23	CR11					
	2x 1	C203.01		CR33		C203.04				C203.06
	3x 1							C301.04		

twin contacts

DIN Interface



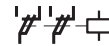
Power Relay



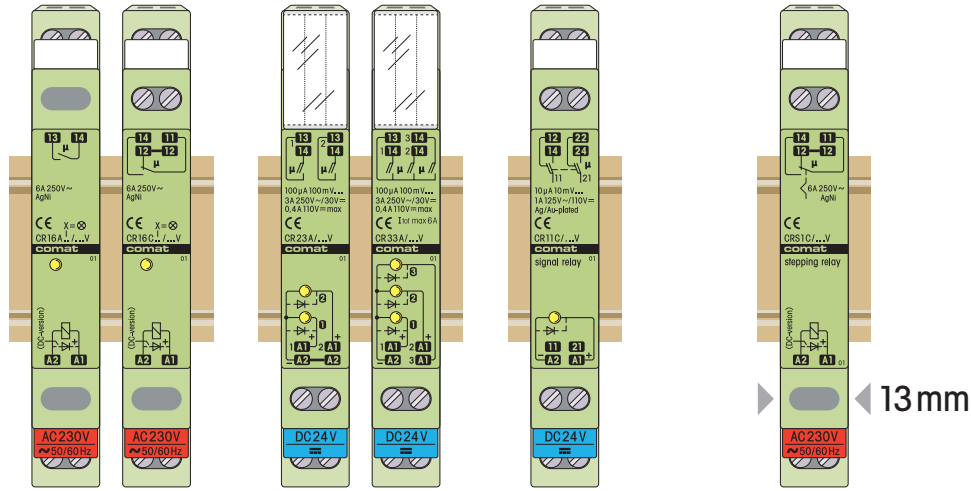
Control Relay



Signal Relay



Step-on/Step-off Relay



CR16AX CR16CX CR23A CR33A CR11C CRS1C

Power Relay
13mm series, 1 x NO resp. 1 x CO up to 6A. Integrated LED and coil wiring.

Control Relay (Signal relays)
13mm series, 2/3 channel, each 1 x NO Au twin contact. Recommended max. load 200 mA/24V resistiv. Integrated LED and coil wiring.

Signal Relay
13mm series, 1 channel, 2 x CO Au twin contact. Recommended max. load 200 mA/24V, resistiv. Integrated LED and coil wiring.

Stepping Relay
13mm series, 1 x CO suitable for permanent energizing. Supply loss safe. Integrated LED and coil wiring.

DIN Interface Relais

- No external coil wiring required
- Mounting on DIN rail TS 35

Test voltage: \square 2000V / 2000V /

T_{amb.} operation/storage: -20...+60/-40...+85°C



Connection

μ = contact opening < 3mm

Data at T_{amb.} = 20°C

Contact material
Switching load AC1/DC1
Peak inrush power
Switching cycles mech./electr.(AC1)

Operation voltage AC/50Hz/DC
Power consumption AC/DC
Triggering delay / release time

DC \equiv
 $\nabla \leq 10\%$

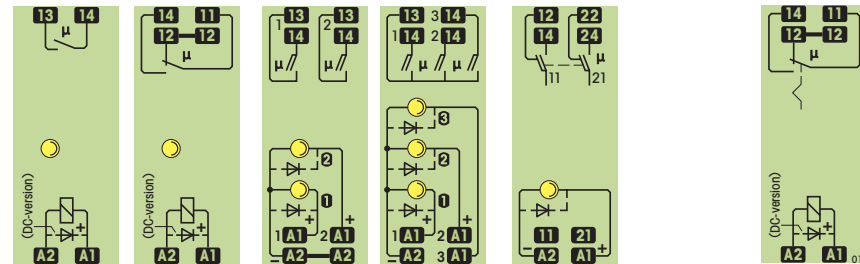
AC \sim
50/60Hz

6A 250V~
10mA 12V

3A 250V~
100 μ A 100mV

1A 250V~
100 μ A 10mV

6A 250V~
10mA 12V



AgNi
1500VA/...180W
15A/20ms
30x10⁶ / $\geq 1,5 \times 10^5$

AC -20% +10% / DC $\pm 15\%$
2,5VA/0,25W
10ms/20ms

Ag-alloy/Au3 μ m
750VA/...90W
20x10⁶ / $\geq 1,5 \times 10^5$

- / DC $\pm 20\%$
0,25W
6ms/4ms

Ag-alloy/Au5 μ m
65VA/...30W
—
200x10⁶ / $\geq 10^5$

- / DC $\pm 25\%$
0,25W
3ms/4ms

AgNi
1500VA/...180W
15A/20ms
DC:10x10⁶; AC:10⁵ / $\geq 10^5$

AC $\pm 15\%$ / DC $\pm 15\%$
2VA/1,5W
Recomm. triggering time ≥ 50 ms

CR16AX CR16CX / DC...V

CR23A CR33A / DC...V

CR11C / DC...V

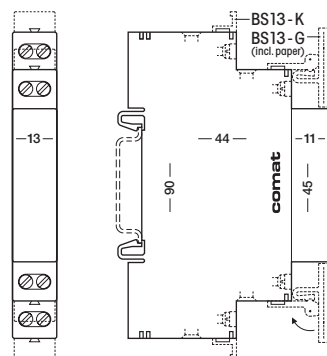
CRS1C / DC...V

CR16AX CR16CX / AC...V

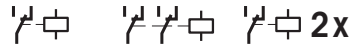
CRS1C / AC...V

Ordering example

Relay
CRS1C/AC230V



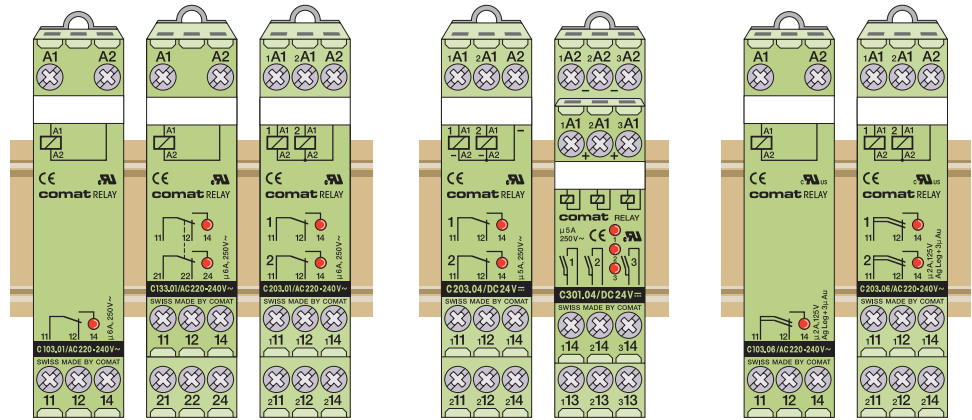
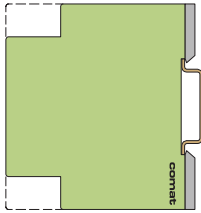
Power Relays



Control Relays



Signal Relays



DIN Interface Relay

- No external coil wiring required
- Mounting on DIN rail TS 35

Test voltage: \square 2000V / 2000V \square

T_{amb.} operation/storage: -20...+60/-40...+85°C

C103.01 C133.01 C203.01 C203.04 C301.04 C103.06 C203.06

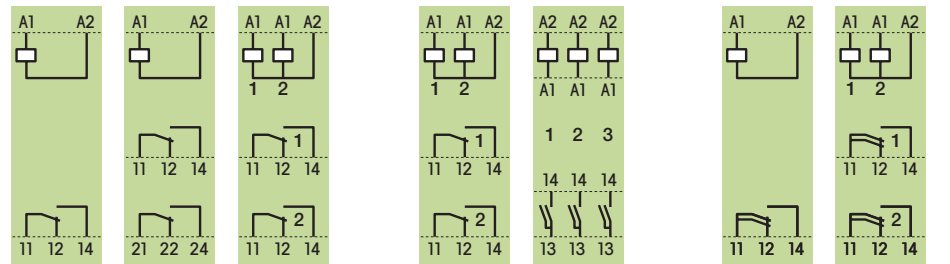
<p>Power Relay</p> <p>DIN series 17,5 mm, 1/2 channels with 1/2 x CO contacts up to 6A. Integrated LED and coil wiring.</p>	<p>Control Relay</p> <p>High efficient 2/3 channel control relay DIN series 17,5 mm, each 1 x CO resp. 1 x NO twin contact. Multi-layer contact up to 5A. Very versatile in application. Integrated LED and coil wiring.</p>	<p>Signal Relay</p> <p>DIN series 17,5 mm, 1/2 channel each 1 x CO Au twin contact. Recommended max. load 200mA/24V. Integrated LED and coil wiring.</p>
--	---	---



6A 250V~	5A 250V~	2A 125V~
10mA 24V	1mA 0,1V	10µA 10mV

Connection

µ = contact opening < 3mm



Data at T_{amb.} = 20°C

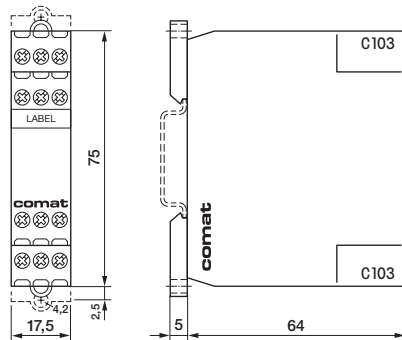
<p>Switching load AC1/DC1</p> <p>Peak inrush power</p> <p>Switching cycles mech./electr. (AC1)</p>	<p>AgNi</p> <p>1500VA/...300W</p> <p>15A/20ms</p> <p>20 x 10⁶ / ≥ 10⁵</p>	<p>Ag-alloy</p> <p>1250VA/...150W</p> <p>10A/20ms</p> <p>50 x 10⁶ / ≥ 1,5 x 10⁵</p>	<p>Ag-alloy/Au3µm</p> <p>250VA/...60W</p> <p>—</p> <p>100 x 10⁶ / ≥ 10⁵</p>
<p>Operation voltage AC 50Hz/DC</p> <p>Power consumption AC/DC</p> <p>Triggering delay / release time</p>	<p>0,85...1,15U_n</p> <p>≤ 0,6W ≤ 1,7W 2x ≤ 0,6W</p> <p>10ms/10ms</p>	<p>0,8...1,2U_n</p> <p>0,25W (per channel)</p> <p>6ms/30ms</p>	<p>0,8...1,2U_n</p> <p>0,25W (per channel)</p> <p>10ms/20ms</p>

DC ≡ $\frac{U}{U_n} \leq 10\%$
 AC ~ 50/60Hz
 UC $\frac{R}{\sim} \approx \infty$

C103.01	C133.01	C203.01 / DC ... V	12	C203.04	C301.04 / DC ... V	C103.06	C203.06 / DC ... V
C103.01	C133.01	C203.01 / AC ... V	110-127, 220-240			C103.06	C203.06 / AC ... V
C103.01	C133.01	C203.01 / UC ... V	24, 36, 48			C103.06	C203.06 / UC ... V

Ordering example

Relay
C301.04/DC 24V





Kühn Controls AG

Notes:

You want more information about this product, please call us: tel: +49 (0)7082-940000 or send us a fax: +49 (0)7082-940001, or email: sales@kuehn-controls.de or visit our Website: www.kuehn-controls.de