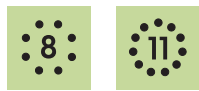
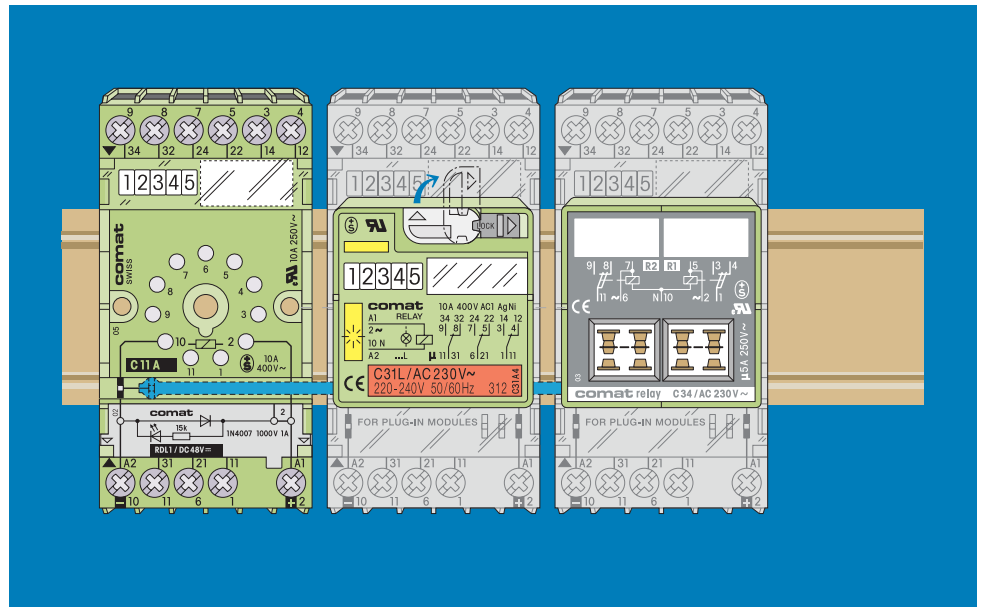


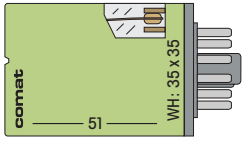
Industrial Relays

Long Life Relays

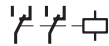


		Long Life Relays		Recommended application																													
10A																																	
														6A																			
																									5A								
10mA																																	
5mA																																	
1mA																																	
I	2	C21	C22																														
	3	C31	C32																														
2 x	1	C33		C34																													
3 x	1			C39																													

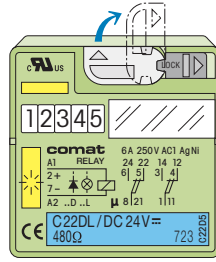
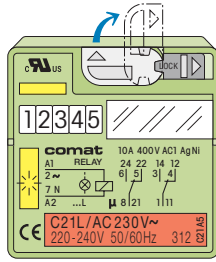
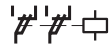
— twin contacts



Power Relay



Control Relay



THE UNDESTRUCTIBLE ONES

2-pole Industrial Relay according to IEC 67-1

- lockable manual operation
- mechanical flag indicator

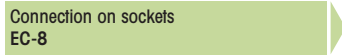
Test voltage: \square 2500V / 1500V

T_{amb.} operation/storage: -40...+70/-40...+85°C



Connection No. on socket →

Designation according to DIN/EN 50 011 →



μ = contact opening < 3 mm

Data at T_{amb.} = 20°C (standard coil \square)

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

- Operation voltage AC50Hz/DC
- Power consumption
- Triggering delay / release time

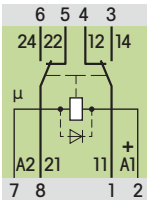


⊗ = Type "L" (option)

C21

Universal Power Relay 10A
with 2 power changeover-contacts this is the robust relay for AC and DC circuits ranging from 10mA 10V.

10A 250V/4A 440V~
10mA 10V



Ag (Ag Cu Ni)
2500VA/...300W
40A (20ms)
100x10⁶/≥ 7x10⁵
0,8...1,2/0,8...1,25Un
2,5VA/1,2W
15/=8, ~15ms

24, 48, 115, 230
C21 \square / AC ... V

12, 24, 48, 110, 220
C21 / DC ... V

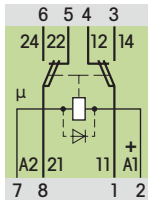
12, 24, 48, 110, 220
C21D \square / DC ... V

Option \square = with ⊗

C22

Relay like ..C21, but with twin contacts 6A
The control relay with highest switching reliability for control and signal circuits ranging from 1mA 5V.

6A 250V~
1mA 5V



Ag (Ag Cu Ni)
1500VA/...200W
15A (20ms)
100x10⁶/≥ 1,5x10⁵
0,8...1,2/0,8...1,25Un
2,5VA/1,2W
15/=8, ~15ms

24, 48, 115, 230
C22 \square / AC ... V

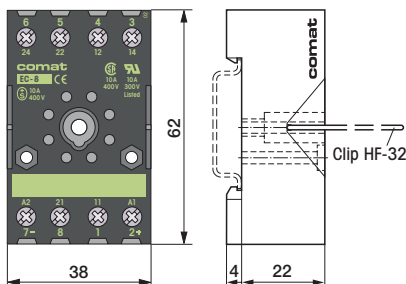
12, 24, 48, 110, 220
C22 / DC ... V

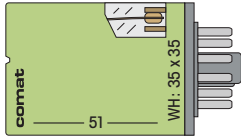
12, 24, 48, 110, 220
C22D \square / DC ... V

Ordering example

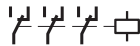
- Relay C21/AC230V
- Socket EC-8
- Retaining clip HF-32 (option)

Economy socket EC-8

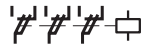




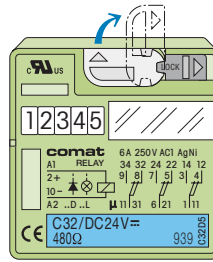
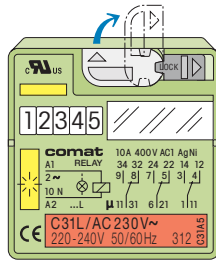
Power Relay



Control Relay



THE UNINDESTRUCTIBLE ONES



3-pole Industrial Relay according to IEC 67-1

- lockable manual operation
- mechanical flag indicator

Test voltage: \square 2500V / 1500V ∇

T_{amb.} operation/storage: -40...+70/-40...+85°C



Connection No. on socket →
Designation according to DIN/EN 50 011 →


Connection on sockets
EC-11, C11A, C12B

μ = contact opening < 3mm

Data at T_{amb.} = 20°C (standard coil \square)

- Contact material
- Switching power AC1/DC1
- Peak inrush power
- Switching cycles mech./electr. (AC1)
- Operation voltage AC 50Hz/DC
- Power consumption
- Triggering delay / release time

Standard  **AC ~**
50/60Hz

Standard  **DC =**
 $\nabla \leq 10\%$

D, DL  **DC =**
 $\nabla \leq 10\%$

⊗ = Type "L" (option)

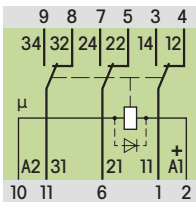
Railway  **DC =**
D/R $\nabla \leq 10\%$

The railway-relays C31D/R DC comply to fire protection standards according NFF 16101/2 and ISO 9125/2.

C31

Universal Power Relay 10A
with 3 power changeover-contacts this is the robust relay for AC and DC circuits ranging from 10mA 10V.

10A 250V/4A 440V~
10mA 10V



Ag (AgCuNi)
2500VA/...300W
40A (20ms)
100x10⁶/≥ 7x10⁵
0,8...1,2/0,8...1,25Un
2,5VA/1,2W
15/=8, ~15ms

24, 48, 115, 230
C31  / AC ...V

12, 24, 48, 110, 220
C31  / DC ...V

12, 24, 48, 110, 220
C31D  / DC ...V

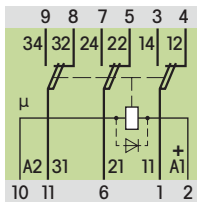
Option  = with ⊗

24, 36, 110
C31D/R DC ...V


C32

Relay like ..C31, but with twin contacts 6A
The control relay with highest switching reliability for control and signal circuits ranging from 1mA 5V.


6A 250V~
1mA 5V



Ag (AgCuNi)
1500VA/...200W
15A (20ms)
100x10⁶/≥ 1,5x10⁵
0,8...1,2/0,8...1,25Un
2,5VA/1,2W
15/=8, ~15ms

24, 48, 115, 230
C32  / AC ...V

12, 24, 48, 110, 220
C32 / DC ...V

12, 24, 36, 48, 110, 220
C32D  / DC ...V

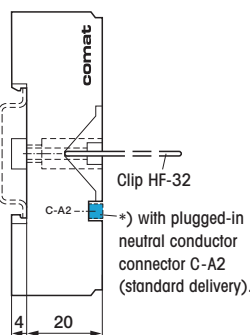
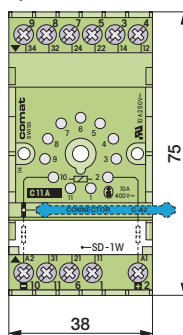
24, 36, 110
C32D/R DC ...V

For suitable coil windings see "R-modules" page 31

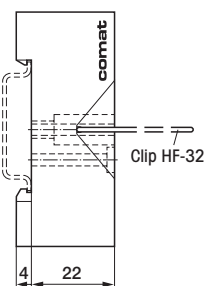
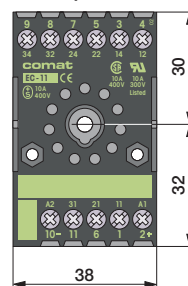
Ordering example

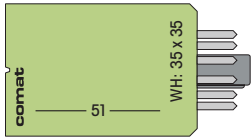
- Relay C31/AC230V
- Socket EC-11 or C11A
- Retaining clip HF-32 (option)

System socket C11A *)



Economy socket EC-11





Power Relay

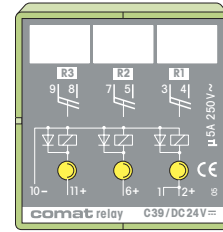
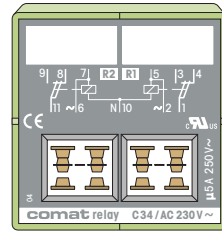
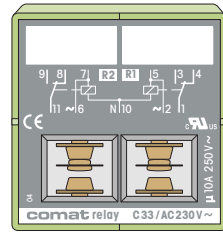
2x

Control Relay

2x

Control and Signal Relay

3x



2- and 3-channel Industrial Relays according to IEC 67-1

- Single or twin contacts
- Front contact inspection window or LED display (C39)

Test voltage: 2000V / 2000V

T_{amb.} operation/storage: -25...+60/-40...+85°C



Connection No. on socket →
Designation according to DIN/EN 50011 →

Connection on sockets
EC-11, C11A, C12B

μ = contact opening < 3 mm

Data at T_{amb.} = 20°C (standard coil)

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

Operation voltage AC50Hz/DC
Power consumption per channel
Triggering delay / release time

AC ~
50/60Hz

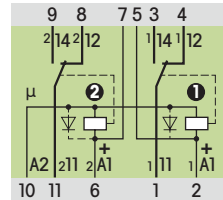
DC ==
≤ 10%

C33

Double-channel Power Relay 10A

With 2x1 power changeover contacts this is a robust relay for AC and DC circuits ranging from 10mA12V.
Width per channel: 17,5mm.

10A 250V~
10mA 12V

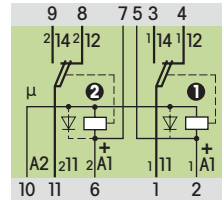


C34

Relay like C33, but with twin contacts 5A

The control relay with highest switching reliability for control and signal circuits ranging from 1mA 6V.
Width per channel: 17,5mm.

5A 250V~
1mA 6V

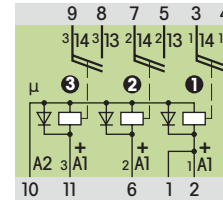


C39

Triple-channel Twin Contact Relay 5A

With 3x1 No contact it is ideal for interface applications ranging from 1mA 100mV. LED display for each channel.
Width per channel: 11,7mm.

5A 250V~
1mA 100mV



AgCdO
2500VA/...300W
40A(16ms)
20x10⁶ / ≥ 10⁵

0,8...1,15U_N
1,3VA/0,55W
15/25ms

24, 48, 115, 230
C33 / AC ... V

12, 24, 48, 110
C33 / DC V

AgNi
1250VA/...200W
20A(16ms)
20x10⁶ / ≥ 10⁵

0,8...1,15U_N
1,3VA/0,55W
15/25ms

24, 48, 115, 230
C34 / AC ... V

12, 24, 48, 110
C34 / DC V

Ag-alloy
1250VA/...150W
10A(20ms)
50x10⁶ / ≥ 1,5x10⁵

0,8...1,2U_N
0,25W
8/12ms

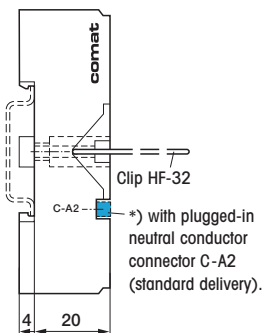
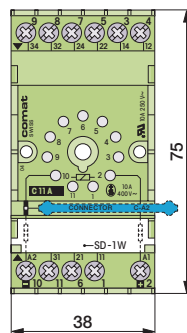
12, 24, 48
C39 / DC V

Ordering example

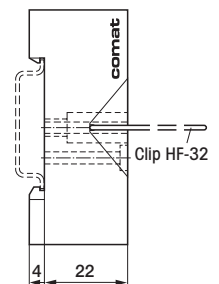
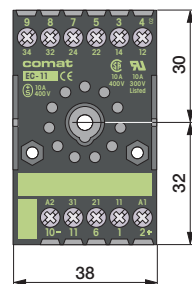
Relay C34/AC 230V
Socket EC-11 or C11A

Retaining clip HF-32 (option)

System socket C11A *)



Economy socket EC-11





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