

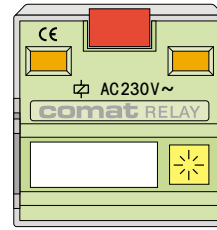
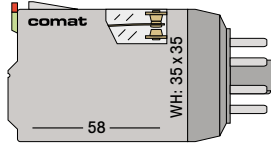
Industrial relays Standard

CR 4 01

CR 4 Recommended application

16A						
10A	@ 220V $\overline{=}$					
6A						
10mA						
5mA						
1mA						
I	1	C5-M10				
	2		C2-A20	C3-R20	C2-T21	
	3		C5-A30	C3-A30		C3-T31 C3-T32
	4			C4-A40		

twin contacts; C3-R20: remanence relay; C5-M10: with blow magnet



**Industrial relays
2-, 3- and 4-pole**

STANDARD

2-pole miniature industrial relays according to IEC 67-1

- lockable manual operation
 - mechanical flag indicator
- Test voltage: \square 2500V \downarrow 2500V \downarrow
 Tamb. operation / storage: -20 ..+60/-40 ..+85°C

CE

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

Connection with socket
 EC-8

μ = contact opening < 3 mm

Data at Tamb. = 20°C (standard coil \square)

- Contact material
- Switching load AC1/DC1
- Peak inrush power
- Recommended minimum load
- Switching cycles mech./electr.(AC1)
- Operation voltage AC50 Hz/DC
- Power consumption AC/DC
- Triggering delay / release time

Standard **AC** \sim
 50/60 Hz

Standard **DC** \equiv
 $\downarrow \leq 10\%$

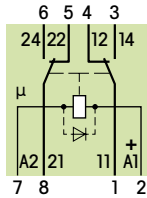
D, DX **DC** \equiv
 $\downarrow \leq 10\%$

= Type "X" (option)

C2-A20

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~



- AgNi
- 2500 VA/... 250 W
- 30 A (20 ms)
- 10 mA 10 V
- $20 \times 10^6 / \geq 5 \times 10^5$
- 0,8...1,2 U_N
- 2,2 VA/1,3 W
- 16/8 ms

24, 48, 115, 230
 C2-A20 / AC \downarrow ... V

12, 24, 48, 110, 125, 220
 C2-A20 / DC \downarrow ... V

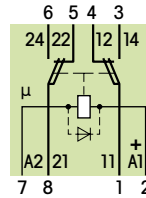
12, 24, 48, 110, 125, 220
 C2-A20D / DC \downarrow ... V

Option = with

C2-T21

Relay like ..A20, but with double contacts 6A
 The control relay with highest switching reliability for control and signal circuits ranging from 5mA 5V.

6A 250V~



- AgNi+0,2μAu
- 1200 VA/... 150 W
- 15 A (20 ms)
- 5 mA 5 V
- $20 \times 10^6 / \geq 2 \times 10^5$
- 0,8...1,2 U_N
- 2,2 VA/1,3 W
- 16/8 ms

24, 48, 115, 230
 C2-T21 / AC \downarrow ... V

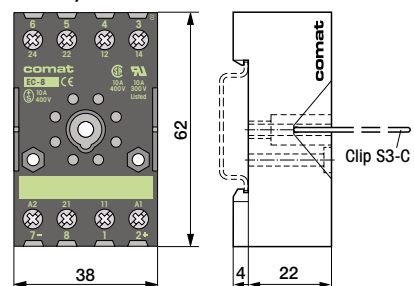
12, 24, 48, 110, 125, 220
 C2-T21 / DC \downarrow ... V

12, 24, 48, 110, 125, 220
 C2-T21D / DC \downarrow ... V

Ordering example

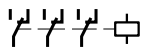
- Relay C2-A20X/AC230V
- Socket EC-8
- Retaining clip S3-C (option)

Economy socket EC-8

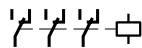




Power relay



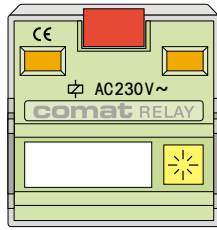
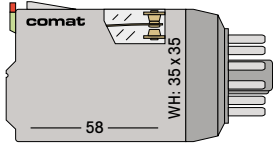
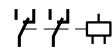
Control relay



Signal relay

10 μ Au

Remanence relay



3-pole miniature industrial relays according to IEC 67-1

- lockable manual operation
 - mechanical flag indicator
- Test voltage: \square 2500V \downarrow 2500V \downarrow
 Tamb. operation/storage: -40...+60/-40...+85°C



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

Connection with sockets
 EC-11, C11A, C12B

μ = contact opening < 3mm

Data at Tamb. = 20°C (standard coil \square)

- Contact material
- Switching load AC1/DC1
- Peak inrush power
- Recommended minimum load
- Switching cycles mech./electr.(AC1)
- Operation voltage AC50Hz/DC
- Power consumption AC/DC
- Triggering delay / release time

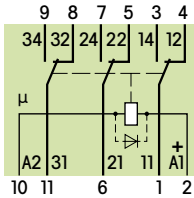
- Standard AC ~ 50/60Hz
- Standard DC \equiv $\varphi \leq 10\%$
- D, DX DC \equiv $\varphi \leq 10\%$

⊗ = Type "X" (option)

C3-A30

Universal power relay 10A
 With 3 power changeover-contacts this is the robust relay for AC and DC circuits ranging from 10mA10V.

10A 250V~



AgNi
 2500VA/...250W
 30A(20ms)
 10mA10V
 20x10⁶/≥5x10⁵
 0,8...1,2Un
 2,2VA/1,3W
 16/8ms

24, 48, 115, 230
 C3-A30 X / AC ...V

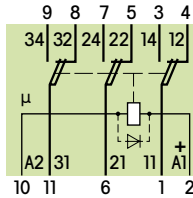
12, 24, 48, 110, 125, 220
 C3-A30 / DC ...V

12, 24, 48, 110, 125, 220
 C3-A30D X / DC ...V

C3-T31

Relay like ..A30, but with double contacts 6A
 The control relay with highest switching reliability for control and signal circuits ranging from 5mA 5V.

6A 250V~



AgNi+0,2 μ Au
 1200VA/...150W
 15A(20ms)
 5mA 5V
 20x10⁶/≥2x10⁵
 0,8...1,2Un
 2,2VA/1,3W
 16/8ms

24, 48, 115, 230
 C3-T31 X / AC ...V

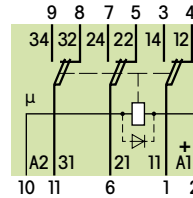
12, 24, 48, 110, 125, 220
 C3-T31 / DC ...V

12, 24, 48, 110, 125, 220
 C3-T31D X / DC ...V

C3-T32

Relay like ..T31, but 10 μ gold plated contacts
 The twin contact relay with highest switching reliability for signal circuits ranging from 1mA 5V.
 Recommend. upto 0,2A 30V.

6A 250V~



AgNi+10 μ Au
 1200VA/...150W
 15A(20ms)
 1mA 5V
 20x10⁶/≥2x10⁵
 0,8...1,2Un
 2,2VA/1,3W
 16/8ms

24, 48, 115, 230
 C3-T32 X / AC ...V

12, 24, 48, 110, 125, 220
 C3-T32 / DC ...V

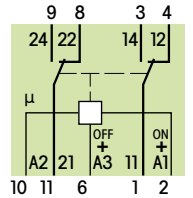
12, 24, 48, 110, 125, 220
 C3-T32D X / DC ...V

C3-R20

Remanence relay 10A with AC or DC coil
 A1(2)=ON; A3(6)=OFF.
 Minim. triggering time 50ms, permanent triggering admissible.

Without option X.

10A 250V~



AgNi
 2500VA/...250W
 30A(20ms)
 10mA10V
 20x10⁶/≥3x10⁵
 0,8...1,2Un
 ON/OFF 1,5/0,5 VA//W
 16/10ms (τ_L > 50ms)

24, 48, 115, 230
 C3-R20 / AC ...V

12, 24, 48, 110, 125
 C3-R20 / DC ...V

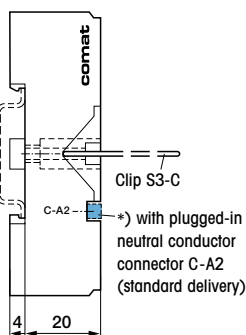
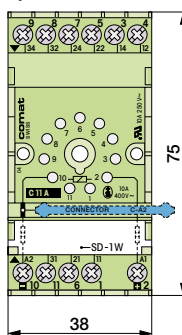
Option X = with ⊗

For suitable coil wirings see "R-modules" →

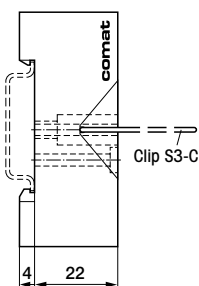
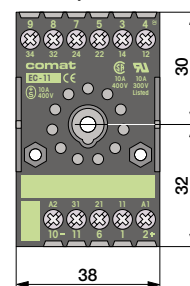
Ordering example

- Relay C3-A30X/AC230V
- Socket EC-11 or C11A
- Retaining clip S3-C (option)

System socket C11A *)



Economy socket EC-11

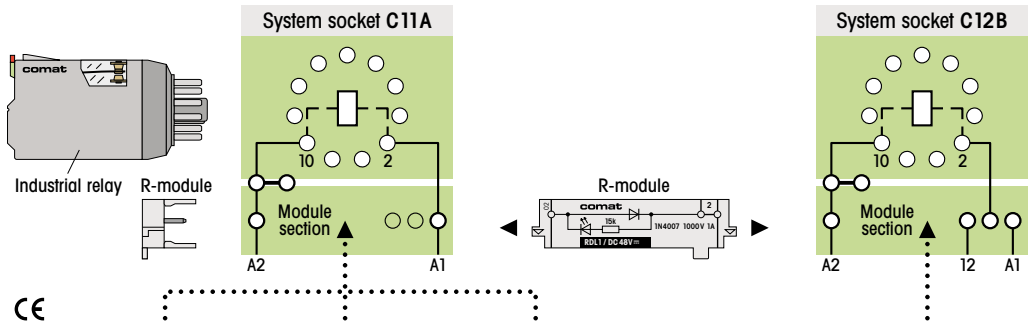




Plug-in coil wirings for 3-pole industrial relays C3

Relay modules indicate the relay's switch mode and/or help limiting cutoff voltage peaks in the control circuit by means of a diode or a RC module. The types R..2/3 are equipped with additional

diodes for signal or OR-circuits. For parallel or serial connections the relay modules are simply plugged in the sockets C11A or C12B.



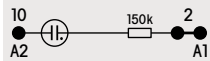
CE

Relay coil →

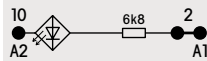
Illuminated displays



RL1/AC 110-240V ~



RL1/UC 12-24V ~



see RL1/UC...V

With additional diode output (12), e.g. for collective alarm messages.

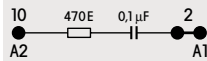
With additional diode input (12), e.g. as logical addition.

Suppressing units

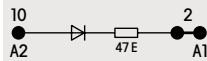


see RC1/UC...V

RC1/UC 110-240V ~



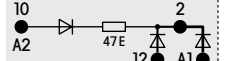
RD1/DC 12-220V ==



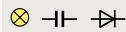
RD2/DC 12-220V ==



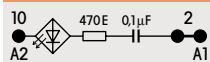
RD3/DC 12-220V ==



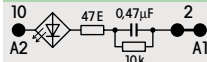
Suppressing units with illuminated displays



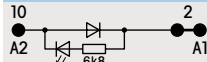
RCL1/AC 110-240V ~



RCL1/UC 24V ~



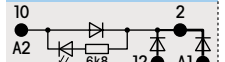
RDL1/DC 12-24V ==



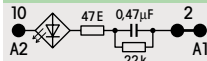
RDL2/DC 12-24V ==



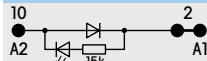
RDL3/DC 12-24V ==



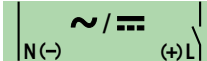
RCL1/UC 48V ~



RDL1/DC 48V ==

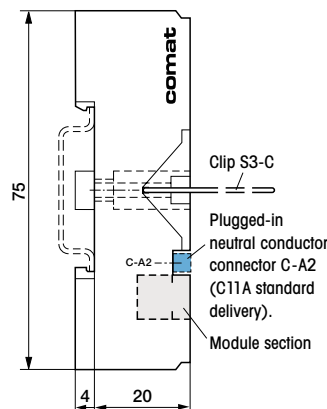
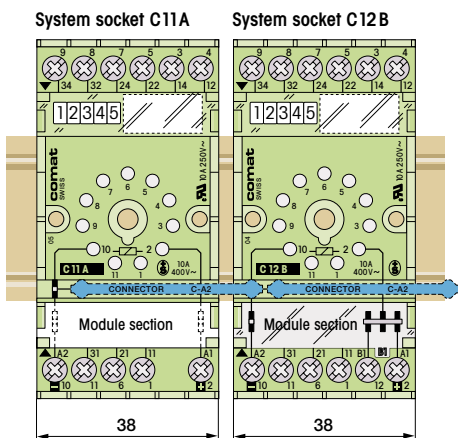


Current types
Triggering

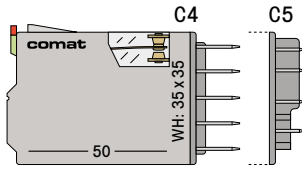
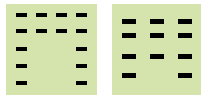


Ordering example

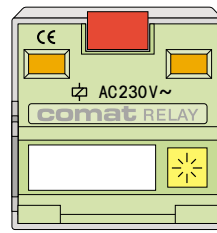
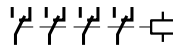
- Module RCL1/UC48V
- Socket C11A
- Relay, type C3-...
- Clip S3-C (option)



- Jack on the socket
- Plug pin on the R-module



Power relay

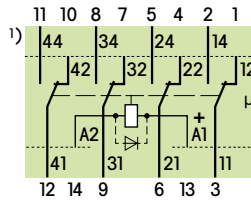


C4-A40

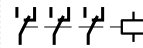
Universal power relay 10A

With 4 power changeover-contacts this is the robust relay for AC and DC circuits ranging from 10mA 10V.

10A 250V~



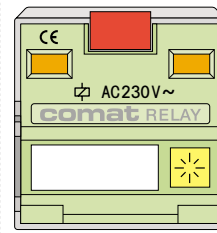
High power relay for AC and DC



16A 400V~



10A @ 220V=

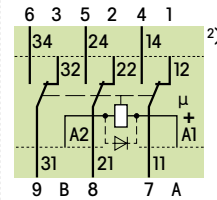


C5-A30

Universal power relay 16A

With 3 power changeover-contacts this is the robust relay for AC and DC circuits ranging from 10mA 10V.

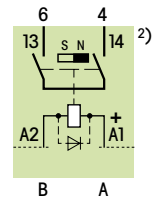
16A 400V~/6A AC15



C5-M10

Highpower relay, in particular for DC loads upto 10A 220V= (DC1) With 2 contacts in series and a blow magnet for safe arc extinguishing.

16A 400V~/6A AC15



Industrial relays 3- and 4-pole

3- and 4-pole industrial relays with flat blade connection

- lockable manual operation
- mechanical flag indicator

Test voltage C4: 2500V / 2500V

Test voltage C5: 4000V 4000V

T_{amb.} operation/

storage: -40...+60/-40...+85°C

CE

HIGH POWER

Connection No. on socket →

Designation according to DIN/EN 50011 →

Connection with socket

1) CS-14 2) CS-15

μ = contact opening < 3mm
C5-M: > 3mm (1,7+1,7)

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



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



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

AgNi
2000VA/...250W
30A(20ms)
10mA 10V
20x10⁶/≥ 6x10⁵
0,8...1,2Un
2,4VA/1,4W
20/8ms

AgNi
4000VA/...400W
40A(20ms)
10mA 10V
20x10⁶/≥ 3x10⁵
0,8...1,2Un
2,4VA/1,4W
20/10ms

AgNi
4000VA/...880W
40A(20ms)
10mA 10V
20x10⁶/≥ 3x10⁵
0,8...1,2Un
2,4VA/1,3W
20/10ms

Standard AC ~ 50/60Hz

Standard DC = ≤10%

D, DX DC = ≤10%

⊗ = Type "X" (option)

24, 48, 115, 230
C4-A40 X / AC ... V

12, 24, 48, 110, 125, 220
C4-A40 / DC ... V

12, 24, 48, 110, 125, 220
C4-A40D X / DC ... V

Option X = with ⊗

24, 48, 115, 230, 400
C5-A30 X / AC ... V

12, 24, 48, 110, 125, 220
C5-A30 / DC ... V

12, 24, 48, 110, 125, 220
C5-A30D X / DC ... V

Option X = with ⊗

24, 48, 115, 230, 400
C5-M10 X / AC ... V

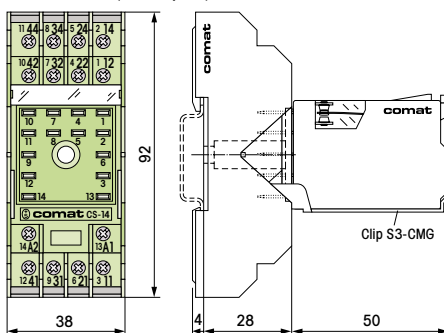
12, 24, 48, 110, 125, 220
C5-M10 / DC ... V

12, 24, 48, 110, 125, 220
C5-M10D X / DC ... V

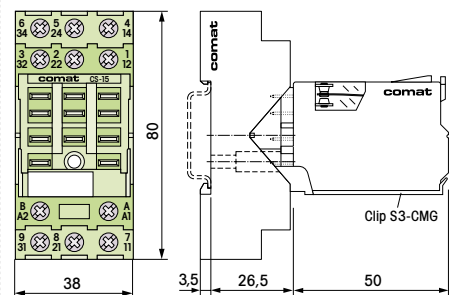
Ordering example

- Relay C4-A40X/AC230V
- Socket CS-14 (clip incl.)

Socket CS-14 (for relay C4)



Socket CS-15 (for relay C5)





Verwaltung und Vertrieb weltweit
Administration et vente mondiale
Management and Distribution world-wide.

Entwicklung und Fertigung
Développement et fabrication
Development and Manufacture.