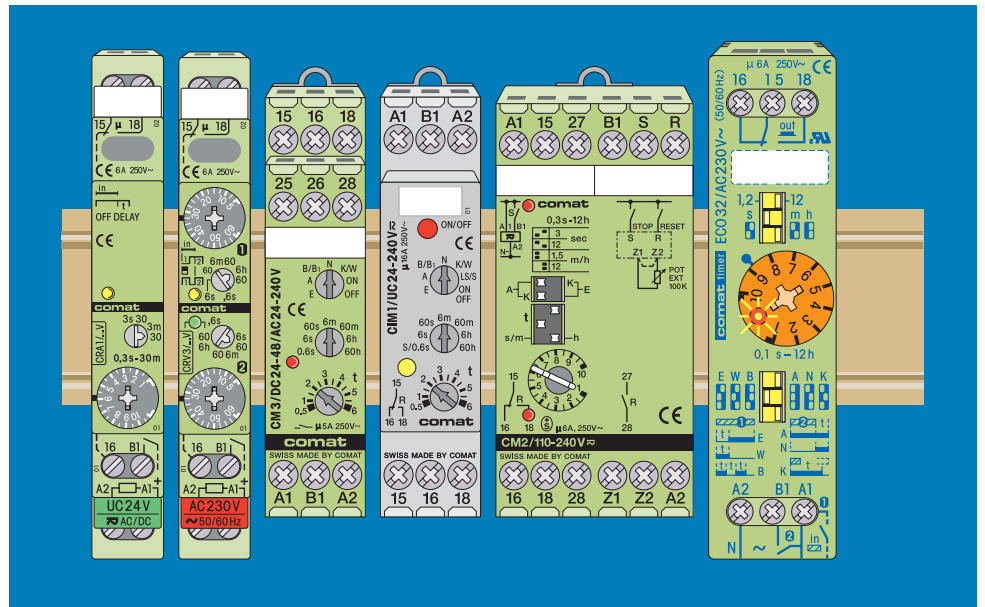


*Time delay Relays*

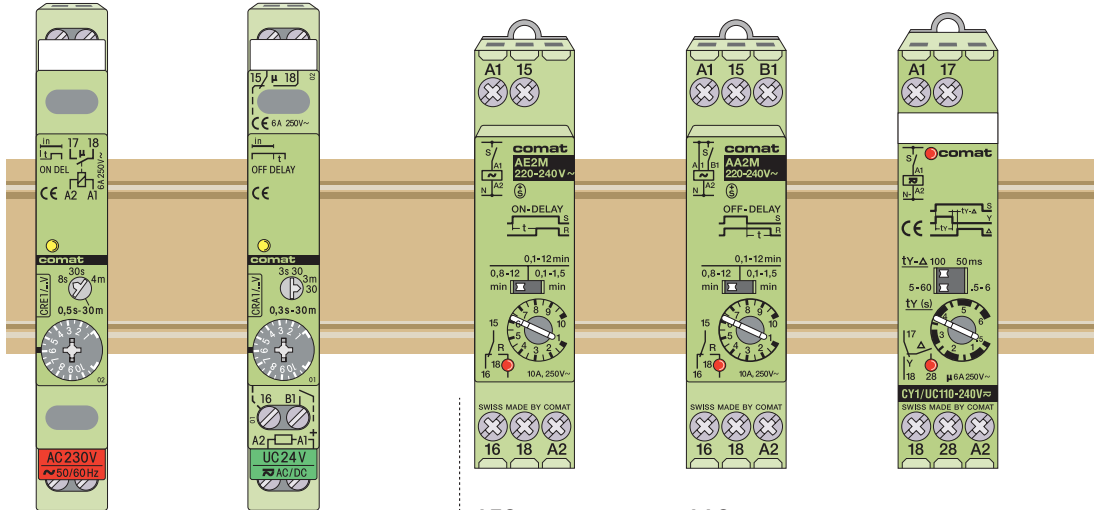
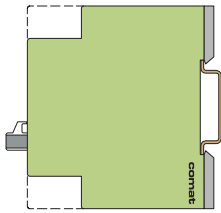
# DIN Time Delay Relays



**DIN**

- Multifunction Time Delay Relays
- Extra slim Time Delay Relays 13 mm
- DIN-A (Installation, distribution panel)
- DIN-C (Industry)
- 22,5 mm Seies

**DIN Time Delay Relays (mono-function)**



**Economy Time Delay Relays**  
 Only 13 or 17,5mm wide.  
 Ideal for applications with a fixed function E, A or Y.  
 For snap-on installation in accordance with DIN 43880.

**CRE1**

**Economy time delay relay**

- on delay
- voltage controlled
- LED for R.

**CRA1**

**Economy time delay relay**

- off delay
- voltage controlled
- LED for R

**AE2  
AE2M**

**Economy time delay relay**

- on delay
- voltage controlled
- 1 changeover contact
- Output-LED

**AA2  
AA2M**

**Economy time delay relay**

- off delay
- voltage controlled
- 1 changeover contact
- Output-LED

**CY1**

**Star-delta time delay relay**

- with adjustable  $\lambda$ - $\Delta$  interval
- Safety locking of the  $\Delta$  output

**E** **Triggering**  
 Function (page \*)

**E**

**A**

**E**

**A**

**Y**

**Time range**  
 ★ TF60 setting (page \*)

**0,5s-30min**  
 s, min

**0,3s-30min.**  
 s, min ★

**AE2 0,8s-1,5min**  
**AE2M 0,1-12min**

**AA2 0,8s-1,5min**  
**AA2M 0,1-12min**

**t $\lambda$  0,5-60s**  
**t $\lambda$ - $\Delta$  50/100ms**

**μ<sup>1</sup> MAX**

**6A 250V~**

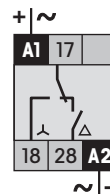
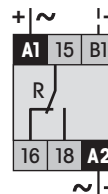
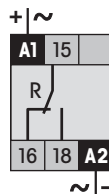
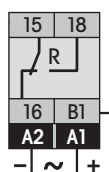
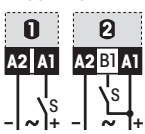
**6A 250V~**

**10A 250V~**

**10A 250V~**

**6A 250V~**

**Triggering**



**~ AC 50/60Hz**

**~ UC AC/DC**

**AC 230V**

**AC 115V**

**UC 24V**

**AC 230V**

**AC 115V**

**UC 24V**

**AC 220-240V**

**AC 110-127V**

**UC 24V**

**AC 220-240V**

**AC 110-127V**

**UC 24V**

**UC110-240V**

**UC 24-60V**

**Ordering no.**

**CRE1 / ...V**

**CRA1 / ...V**

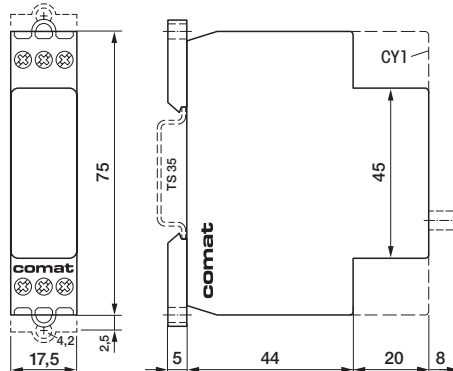
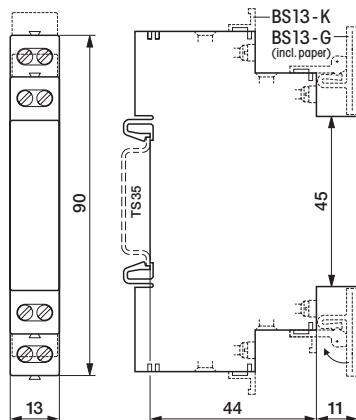
**AE2 / ...V**  
**AE2M / ...V**

**AA2 / ...V**  
**AA2M / ...V**

**CY1 / ...V**

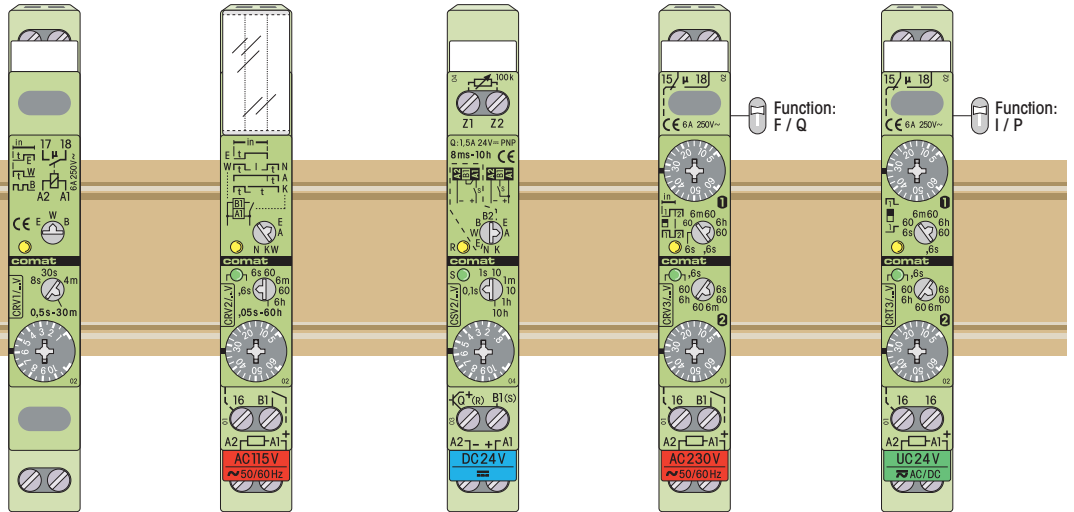
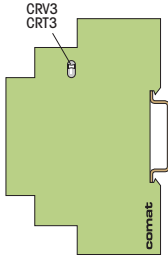
**Ordering example**

**Timer CRE1/AC230V**



Multifunctional Time Delay Relays

13mm SLIM BUT.....



CRV1

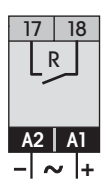
**Economy Time Delay and Blinker Relay**

- 3 functions
- voltage controlled
- LED for R



0,5s-30 min  
s, min

6A 250V~



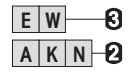
AC 230V  
AC 115V  
UC 24V

CRV1 / ... V

CRV2

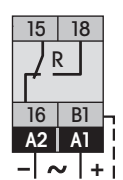
**Universal Multifunctional Time Delay Relay**

- 2 delay functions
- 2 shot timing modes
- pulse shaping K
- LED for B1 and R



0,05s-60 h  
s, min, h \*

6A 250V~

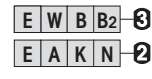


AC 230V  
AC 115V  
UC 24V

CRV2 / ... V

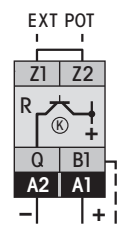
CSV2

**Multifunctional Time Delay Relay**  
like CRV2, but with solidstate output and connection for remote potentiometer.



8ms-10h  
s, min, h \*

1,5A 24V=



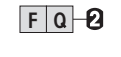
DC 24V

CSV2 / ... V

CRV3

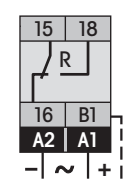
**Double Time Delay Relay**

- F (E and A) or Q (W and N)
- t1/t2 separately settable
- LED for B1 and R
- Function switch at the right side of the device



t1: 50ms-60h  
t2: 50ms-60h \*

6A 250V~



AC 230V  
AC 115V  
UC 24V

CRV3 / ... V

CRT3

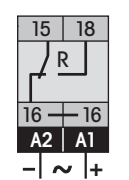
**Universal Repeat Cycle Timer**

- Pulse or pause start
- t1/t2 separately settable
- LED for A1 and R
- Function switch at the right side of the device



t1: 50ms-60h  
t2: 50ms-60h \*

6A 250V~



AC 230V  
AC 115V  
UC 24V

CRT3 / ... V

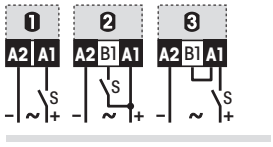
Extra slim 13mm Time Delay Relay System for all timing functions from 50ms up to 60 hours. With only 13mm fitting width especially suited for use in the industrial inter-face sector.

E 1 Triggering Function (page \*)

Time range \* TF60 setting (page \*)

μs MAX

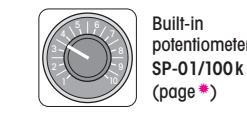
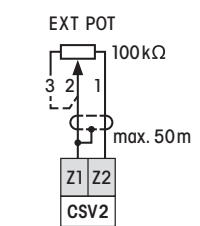
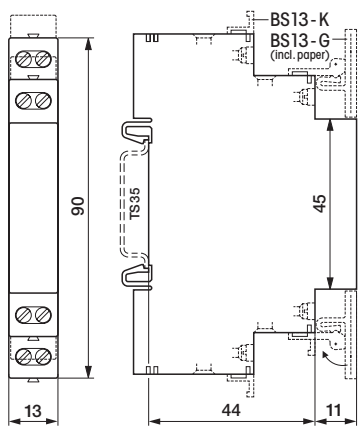
Triggering



AC 50/60Hz  
UC AC/DC  
DC 10%

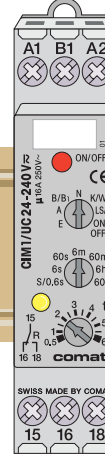
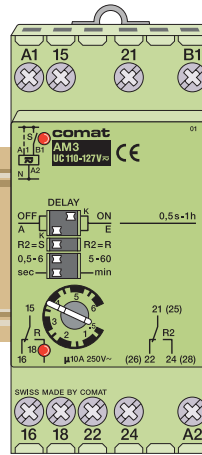
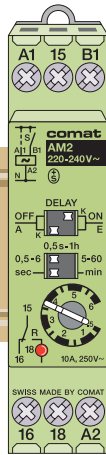
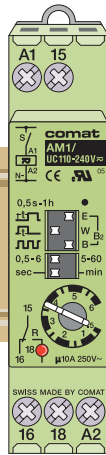
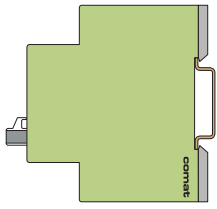
Ordering no.

Ordering example  
Timer CRV1/AC230V



# Multifunctional Time Delay Relays Universal Function Relay

**NEW**



17,5 mm time delay relay system in compact design. Suited for snap-on installation in accordance with DIN 43 880. CIM1 mit Treppenhauseautomat und Schrittschalter.

### AM1

**Economy Time Delay and Blinker Relay**

- on delay
- one shot leading edge
- 2 blinker functions
- Output-LED

### AM2

**Universal Time Delay Relay**

- on delay
- off delay
- one shot leading edge
- pulse shaping K
- voltage controlled
- Output-LED

### AM3

**Universal Time Delay Relay with instantaneous contact or both contacts delayed (programmable).** Functions like type AM2. Display of control input B1 (S) in addition to the output-LED.

### CIM1

**Universal Function Relay**

- 9 functions
- stepping switch (S)
- staircase lighting timer (LS)
- 1 change-over contact
- hand function switch for maintenance functions (ON/OFF)

**E** 1 Triggerring  
Function (page \*)

**E W B B2** 1

**E** 2 3  
**A K** 2 **W** 3

**E** 2 3  
**A K** 2 **W** 3

**E** 1 **B W** 3  
**A K N B1 S LS** 2

**Time range**  
Partial ranges

0,5 s - 60 min  
0,5 - 6 s ... 5 - 60 min

0,5 s - 60 min  
0,5 - 6 s ... 5 - 60 min

0,5 s - 60 min  
0,5 - 6 s ... 5 - 60 min

0,6 s - 60 h  
sec, min, h

μ MAX

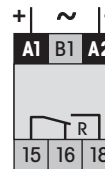
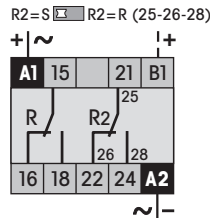
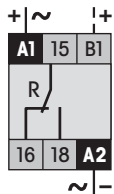
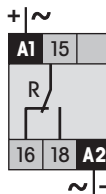
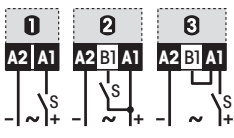
10 A 250 V ~

10 A 250 V ~

10 A 250 V ~

16 A 250 V ~

Triggerring



~ AC 50/60 Hz

~ UC AC/DC

UC110-240V

AC220-240V

AC220-240V

UC24-240V

UC24-60V

AC110-127V

UC110-127V

UC24-60V

UC24-60V,

Ordering no. →

AM1 / ... V

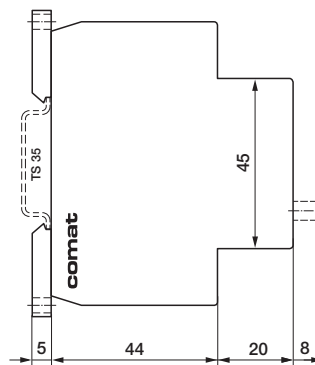
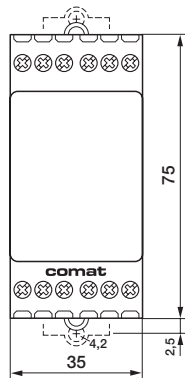
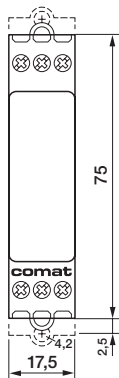
AM2 / ... V

AM3 / ... V

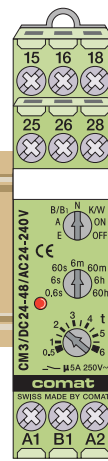
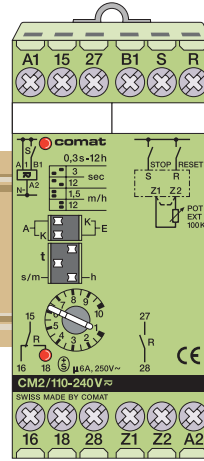
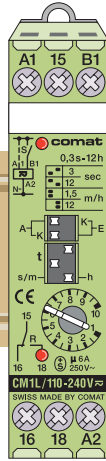
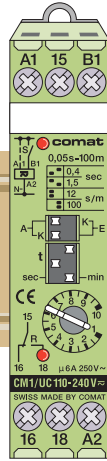
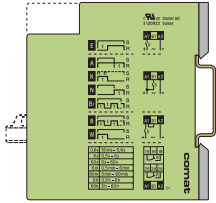
CIM1 / ... V

Ordering example

Universal function relay  
CIM1/UC24-240V



Multifunctional Time Delay Relays



17,5 mm  
Time Delay Relay System  
in compact design.  
(For snap-on installation in  
accordance with DIN 43 880,  
see series DINA and C13.)

CM1

- Universal Time Delay Relay**
- on delay
  - off delay
  - one shot leading edge
  - pulse shaping K
  - voltage controlled
  - LED for B1 and R

CM1L

- Universal Time Delay Relay**  
like type CM1, but with extended  
time range.

CM2

- Universal Time Delay Relay**  
like type CM1, but with time  
stop and reset input  
as well as  
connection for remote  
potentiometer 100k.

CM3

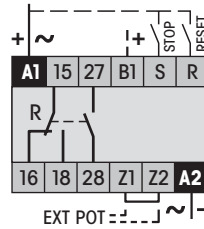
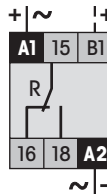
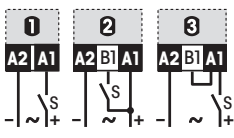
- Universal Time Delay Relay**
- 7 functions
  - Maintenance switch ON/OFF
  - 2 separate change-over contacts
  - supply voltages:  
DC12-24 V or  
DC24-48/AC24-240 V

**E** 1 Triggering  
Function (page 7)

Time range  
Partial ranges

μ | MAX

Triggering



UC AC/DC  
DC 100%

UC110-240V 16<sup>2</sup>/s...60Hz  
UC24-60V

UC110-240V 16<sup>2</sup>/s...60Hz  
UC24-60V

UC110-240V  
UC24-60V

DC24-48V/AC24-240V  
DC12-24V

Ordering no. →

CM1/...V

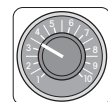
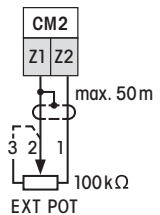
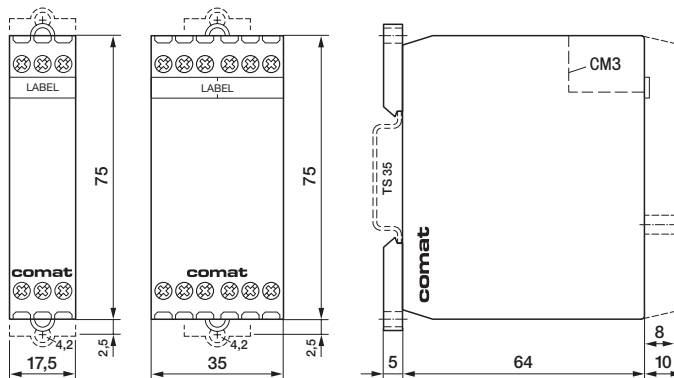
CM1L/...V

CM2/...V

CM3/...V

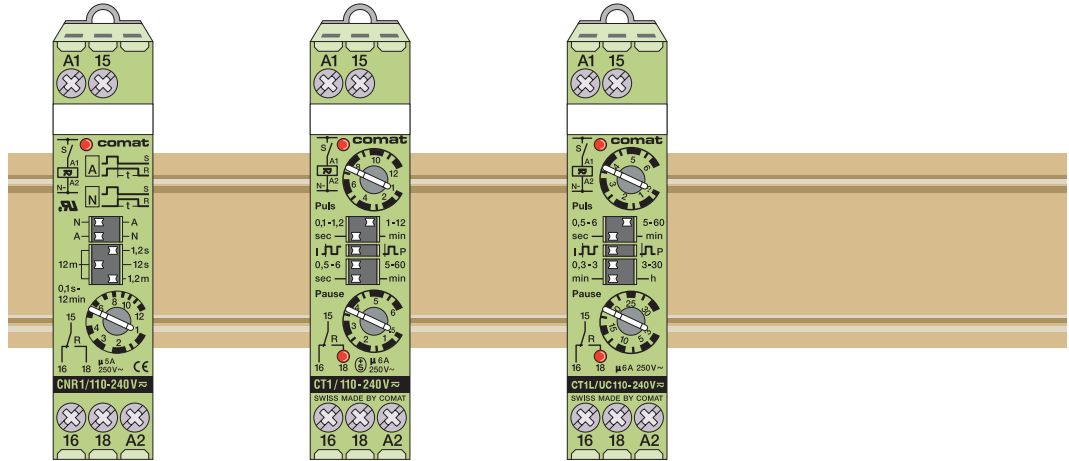
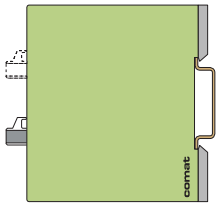
Ordering example

Timer CM1/UC110-240V



Built-in  
potentiometer  
SP-01/100k  
(page 7)

# Multifunctional Time Delay Relays



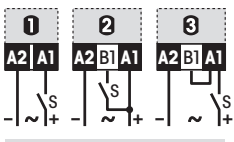
17,5mm  
Time Delay Relay System  
in compact design.  
(For snap-on installation in  
accordance with DIN 43 880.)

**E** **0** Triggering  
Function (page \*)

Time range  
Partial ranges

μ<sup>s</sup> MAX

Triggering



**~** UC AC/DC

Ordering no. →

## CNR1

**Time Delay Relay,  
no auxiliary voltage**

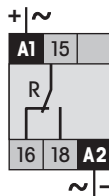
- Function runs after cut off power supply
- Minimum triggering time 150ms only

**A N** **0**

no auxiliary voltage

t1: 0,1s-12 min  
sec, min

5A 250V~



UC110-240V  
UC24-60V

CNR1 / ... V

## CT1

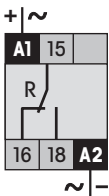
**Universal Repeat Cycle  
Timer**

- pulse or pause start
- t1/t2 separately settable
- LED for A1 and R

**I P** **0**

t1: 0,1s-12 min  
t2: 0,5s-60 min

6A 250V~



UC110-240V  
UC24-60V

CT1 / ... V

## CT1L

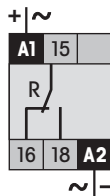
**Universal Repeat Cycle  
Timer**

Like CT1 both with extended  
time range.

**I P** **0**

t1: 0,5s-60 min  
t2: 0,3min-30h

6A 250V~

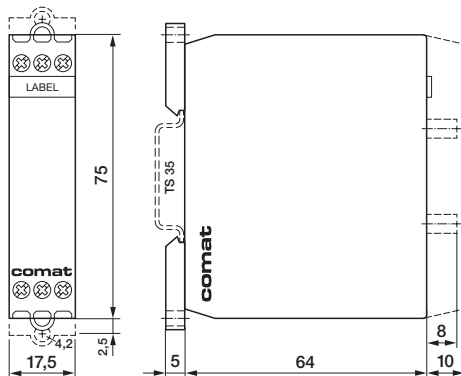


UC110-240V  
UC24-60V

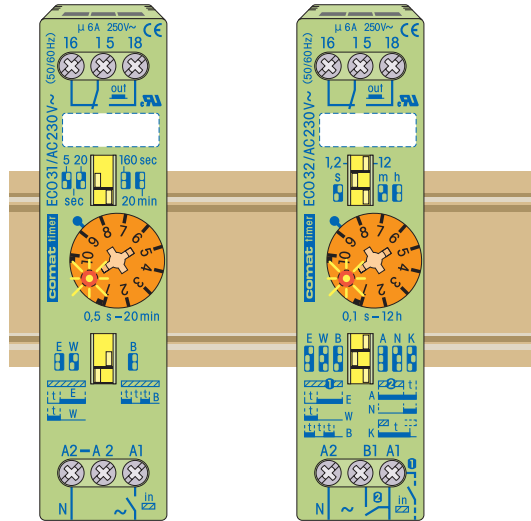
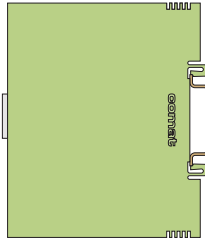
CT1L / ... V

Ordering example

Timer CIM1/UC24-240V



# Multifunctional Time Delay Relays



Multifunctional Time Delay Relays 22,5mm for timing functions from 0,1s up to 12 hours.

## ECO31

### Economy Time Delay and Blinker Relay

- 3 functions
- voltage controlled
- LED for R

## ECO32

### Multifunctional Time Delay Relay

- 2 delay functions
- 2 shot timing modes
- blinker pulse shaping K
- LED for R

**E** **0** Triggering  
Function (page \*)

**E W B** **0**

**E W B** **0**  
**A K N** **2**

Time range  
★ TF60 setting (page \*)

0,5s-20min  
sec, min

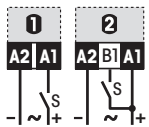
0,1s-12h ★  
sec, h

μ MAX

6A 250V~

6A 250V~

Triggering



~ AC 50/60Hz

AC 230V

AC 230V

~ UC AC/DC

AC 115V

AC 115V

UC 24V

UC 24V

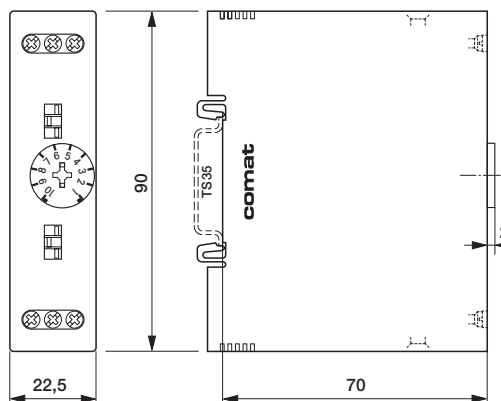
Ordering no. →

ECO31 / ... V

ECO32 / ... V

Ordering example

Timer ECO31/AC 230 V





**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](mailto:sales@kuehn-controls.de) or visit our Website: [www.kuehn-controls.de](http://www.kuehn-controls.de)