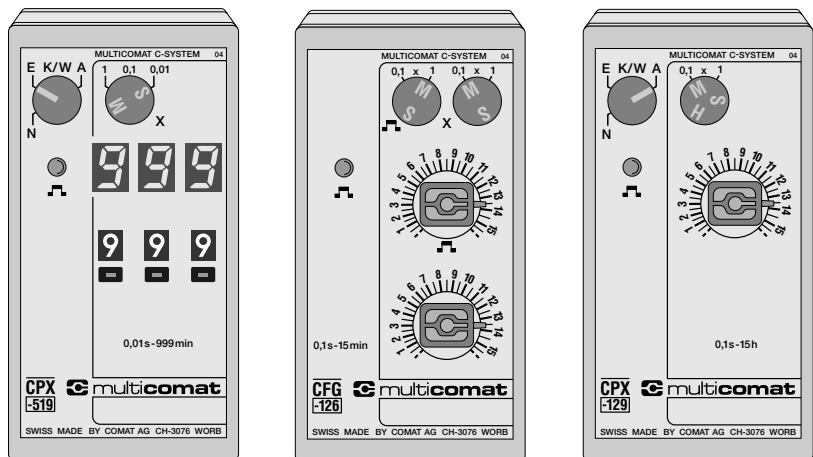


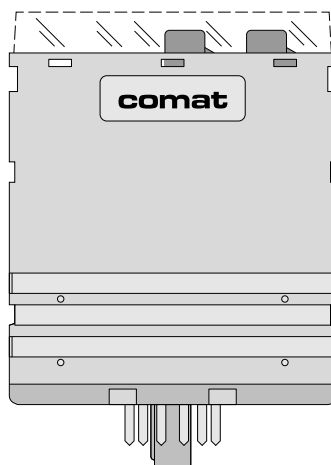
## Plug-in time delay relays

C



### Main characteristics

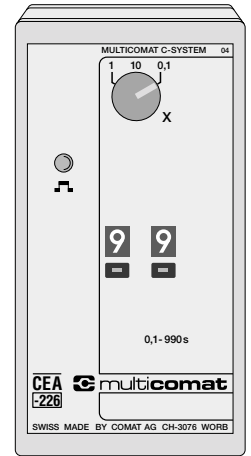
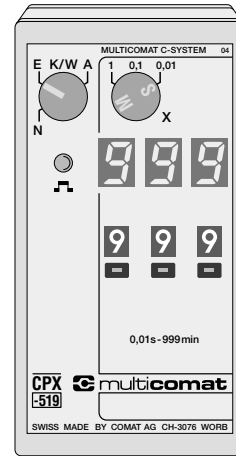
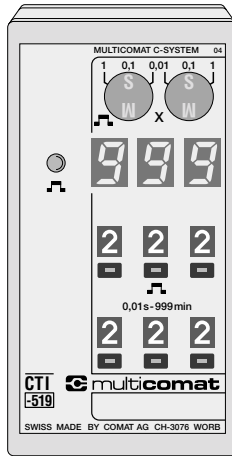
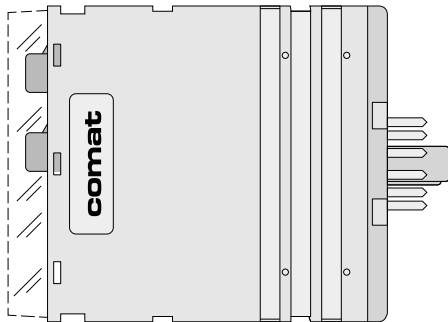
- Plug-in industrial time delay relay with 2 delay changeover contacts.
- 11 pin submagnal plug as specification IEC 67-1-18a.
- Suitable for front panel mounting with accessory FZ-23.
- With transparent front cover FS-23.
- Programmable timing modes and time ranges.
- Digital indication of the residual time sequence.
- Digital time setting by decade switches or analog setting by potentiometer.
- Quartz time basis or RC oscillator with frequency divider.
- LED display of the relay function.
- Drive by two-wire proximity switch NAMUR or by potential free control contact.
- Pin-compatible for one or several timing modes.
- Conform with CE; IEC255.



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 www.multicomat.net



This issue replaces all previous issues.  
Availability, errors and specifications subject to change without notice.



CTI-519

CPX-519

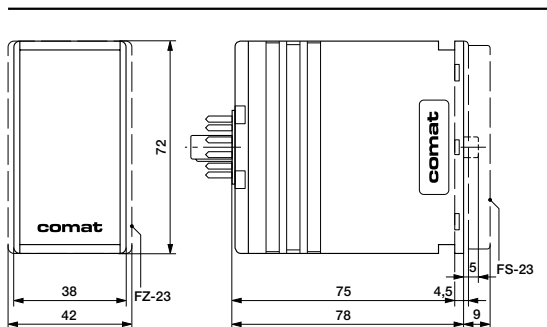
CEA-226

Specification

Functions	
	Connection diagram no.
	Method of programming
Time ranges	
	Partial ranges
	1
	2
	3
	4
	5
	6
Voltages	
AC 50/60 Hz	-15/+10%
AC 50/60 Hz	-15/+10%
AC 40/60 Hz or DC	-20/+25%
AC 40/60 Hz or DC	-20/+25%
DC	-15/+10%

Output circuit	$\gamma^{1)}$
Switching current max.	6A
Switching voltage max.	250V~
Switching capacity	AC: 1200VA; DC: ...250W
Mechanical life	30 million operations
Contact material	Ag Ni 90/10

<sup>1)</sup> Values for resistiv load or for inductive loading with spark suppression. Other contact material on request.



Front mounting accessory FZ-23 (□ 38,5 x 70<sup>+0,5</sup> mm, max. 3mm thick).  
Transparent front cover FS-23 (part of the scope of delivery).

Repeat cycle timer

Pulse: interval  
= 1:5,994 millions

I	22/23
2x0,01s-999min	2x6
	0,01 - 9,99s
	0,1 - 99,9s
	1 - 999s
	0,01 - 9,99min
	0,1 - 99,9min
	1 - 999min
ANX:	AC 110-240V~
UFK:	UC 24-48V~
UCB:	UC 12V~
DNX:	DC 110-240V=

General<sup>3)</sup>

Repeat accuracy	
Voltage stability	
Temperature stability	
Time range tolerance max.	
Setting accuracy	
Reset time during t	
Reset time after time expiry	
Triggering time	
Triggering delay time	
Load of S (6 - 7)	
Control line	
Ambient temperature range	
Storage temperature range	
Climate	
Transient voltage protection	
Testing voltage	
Standards	
Protection/case material	
Weight incl. packing	

[ ] = with voltage control operation  
<sup>3)</sup> Data at Tamb = 25°C and U<sub>nom</sub>

Time delay relay

2 delay functions  
3 single shot timing modes

E A K W N	22/23 23 23 22 23
Switch	
0,01s-999min	6
	0,01 - 9,99s
	0,1 - 99,9s
	1 - 999s
	0,01 - 9,99min
	0,1 - 99,9min
	1 - 999min
ANX:	AC 110-240V~
UFK:	UC 24-48V~
UCB:	UC 12V~
DNX:	DC 110-240V=

Type C..-519 - 226

±2 [10] ms <sup>1)</sup>
±2 ms <sup>2)</sup>
±0,03 % <sup>2)</sup>
±0,05 %
±0,05 %
50 [100] ms
50 ms
≥ 15 ms
10...15 ms
12V= / 2,5 mA
max. 50Ω
-25...+60°C
-25...+85°C
relative humidity 10-95%
CE, IEC 255.4, annex E, Kl. III
2 kV, 50 Hz, 1 min
VDE 0435/0110 Gr. C, CE
IP40/Noryl SE1 (UL 94V-I)
approx. 135g, with transf. 230g

<sup>1)</sup> referred to the set time  
<sup>2)</sup> max. tolerance total

Time delay relay

on delay or  
off delay

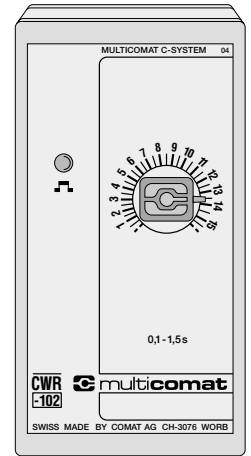
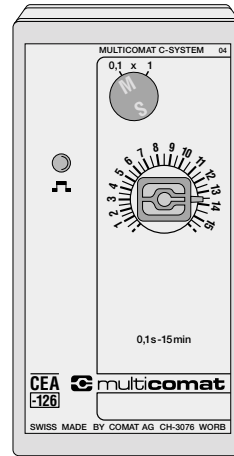
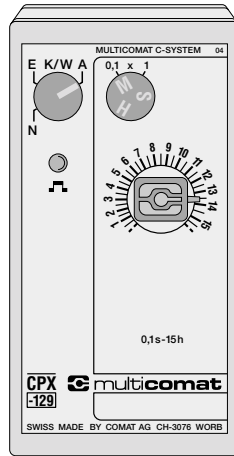
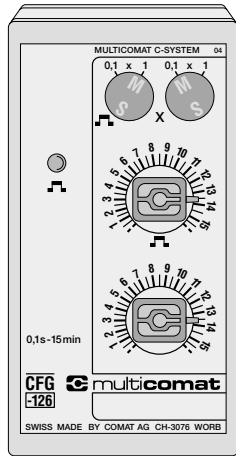
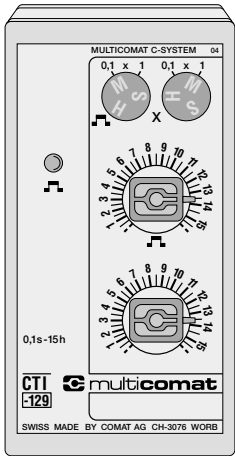
E A	22/23 24
Connection	5-6-7
0,1s-990s	3
	0,1 - 9,9s
	1 - 99s
	10 - 990s
ATX:	AC 220-240V~
ANP:	AC 110-120V~
UFK:	UC 24-48V~
UCB:	UC 12V~
DNX:	DC 110-240V=

Type C..-129 - 102

±0,5% [15 ms] <sup>1)</sup>
±1 % <sup>2)</sup>
±0,1 %/°C
-0+0,5 %
-0/+5 %
50 [100] ms
50 ms
≥ 15 ms
10...15 ms
12V= / 2,5 mA
max. 50Ω
-25...+60°C
-25...+85°C
relative humidity 10-95%
CE, IEC 255.4, annex E, Kl. III
2 kV, 50 Hz, 1 min
VDE 0435/0110 Gr. C, CE
IP40/Noryl SE1 (UL 94V-I)
approx. 120g, with transf. 215g

<sup>1)</sup> referred to the set time  
<sup>2)</sup> max. tolerance total

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**CTI-129**

**CFG-126**

**CPX-129**

**CEA-126**

**CWR-102**

**Repeat cycle timer**

Pulse: interval  
= 1:0,54 million

<b>I</b>
21
2x0,1s-15h
2x6
0,1 - 1,5s
1 - 15s
0,1 - 1,5 min
1 - 15 min
0,1 - 1,5 h
1 - 15 h
ATX: AC 220-240V~
ANP: AC 110-120V~
UFK: UC 24-48V~
UCB: UC 12V~
DNX: DC 110-240V=

**One shot cycle timer**

3 double timing modes

<b>F G H</b>
24 23 22
Connection 5-6-7
2x0,1s-15 min
2x4
0,1 - 1,5s
1 - 15s
0,1 - 1,5 min
1 - 15 min
ATX: AC 220-240V~
ANP: AC 110-120V~
UFK: UC 24-48V~
UCB: UC 12V~
DNX: DC 110-240V=

**Time delay relay**

2 delay modes  
3 single shot timing modes

<b>E A K W N</b>
22/23 23 23 22 23
Switch
0,1s-15h
6
0,1 - 1,5s
1 - 15s
0,1 - 1,5 min
1 - 15 min
0,1 - 1,5 h
1 - 15 h
ATX: AC 220-240V~
ANP: AC 110-120V~
UFK: UC 24-48V~
UCB: UC 12V~
DNX: DC 110-240V=

**Time delay relay**

On delay or  
off delay

<b>E A</b>
22/23 24
Connection 5-6-7
0,1s-15 min
4
0,1 - 1,5s
1 - 15s
0,1 - 1,5 min
1 - 15 min
ATX: AC 220-240V~
ANP: AC 110-120V~
UFK: UC 24-48V~
UCB: UC 12V~
DNX: DC 110-240V=

**Single shot relay**

3 single shot timing  
modes

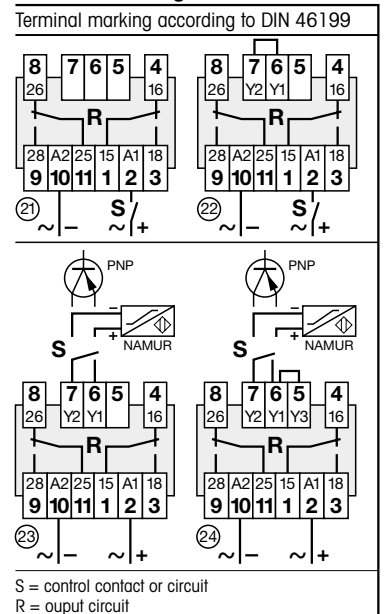
<b>W N Q (t1 = t2)</b>
22 24 23
Connection 5-6-7
0,1-1,5s
ATX: AC 220-240V~
ANP: AC 110-120V~
UFK: UC 24-48V~
UCB: UC 12V~
DNX: DC 110-240V=

Functions

<b>E</b> On delay		S => R on with delay SOFF => R off
<b>A</b> Off delay		S => R on SOFF => R off with delay
<b>K</b> Pulse shaping		S (pulse or continuous contact) => R on for t S... no influence on R and t
<b>W</b> One shot leading edge		S => R on for t SOFF => R off (pulse clipping)
<b>N</b> One shot trailing edge		SOFF => R on for t S on for t => R off
<b>ON OFF</b>		S = triggering R = output circuit => = switches...

<b>I</b> Repeat cycle timer, pulse start		S => R periodically on/off according to t1 and t2 SOFF => R off
<b>F</b> On and off delay		S => R on with delay (t1) SOFF => R off with delay (t2)
<b>G</b> On delay - single shot		S (pulse or continuous contact) => R after t1 on for t2 S... no influence on R and t
<b>H</b> On delay - single shot		S => R after t1 on for t2 SOFF => R off
<b>Q</b> One shot leading and trailing edge		S => R on for t1 SOFF => R on for t2 SOFF on for t1 => R off
<b>ON OFF</b>		S = triggering R = output circuit => = switches...

Connection diagram

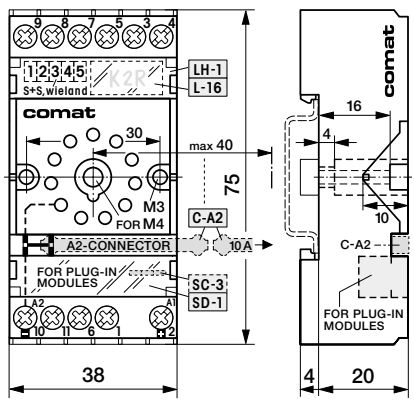


Case S3

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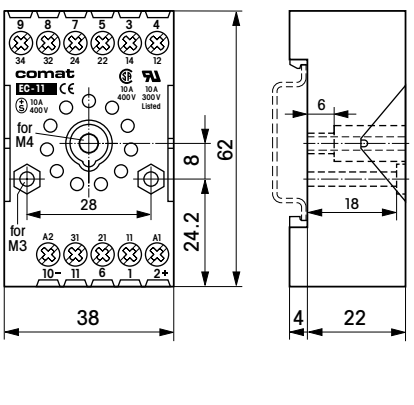
SWISS MADE BY COMAT AG  3076 WORB

**C11A** Relay socket with screw, connections for panel or DIN mounting-snap fit



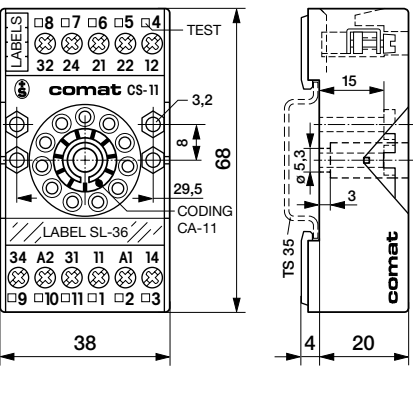
Labels: LH-1, L-16, C-A2, SC-3, SD-1. Dimensions: 38, 75, max 40, 16, 4, 10, 20, 4, 30, 10A, 10, 6, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38.

**EC-11** Relay socket with screw, connections for panel or DIN mounting-snap fit



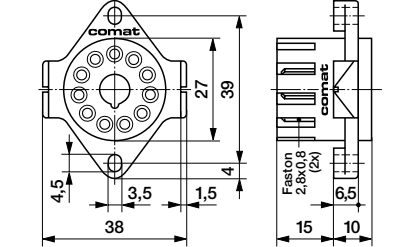
Labels: comat, 10A 30V 400V 300V Rated. Dimensions: 38, 62, 8, 24.2, 4, 22, 6, 18, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38.

**CS-11** Relay socket with screw, connections for panel or DIN mounting-snap fit



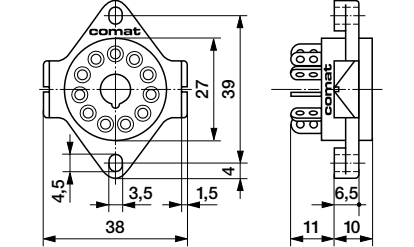
Labels: TEST, CODING CA-11, LABEL SL-36. Dimensions: 38, 68, 3.2, 8, 29.5, 15, 3, 3, 4, 20, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38.

**11 PGF** Relay socket for fasten connectors (2xAMP 2,8x0,8 DIN 46247)



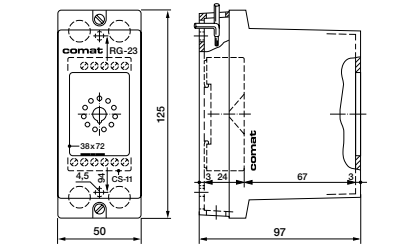
Labels: Faston 2,8x0,8 (2x). Dimensions: 38, 27, 39, 4, 1,5, 3,5, 4,5, 15, 10, 6,5, 11, 10.

**11 PGL** Relay socket for chassis mounting (solder tags: 3,8x0,8 mm)



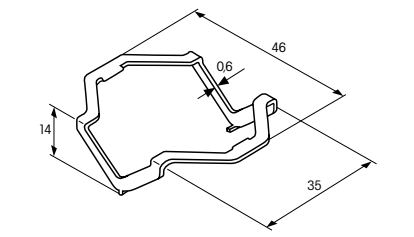
Labels: comat. Dimensions: 38, 27, 39, 4, 1,5, 3,5, 4,5, 11, 10, 6,5.

**RG-23** Surface mounting case with built-in relay socket (protected connection terminals)



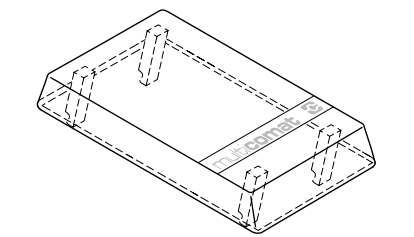
Labels: comat, RG-23, 38x72, 1,5, 3,5, 11. Dimensions: 50, 125, 24, 67, 97, 1,5, 3,5, 11.

**HF-24** Retaining clip made of special spring steel suitable for all relay sockets



Dimensions: 46, 35, 14, 0,6.

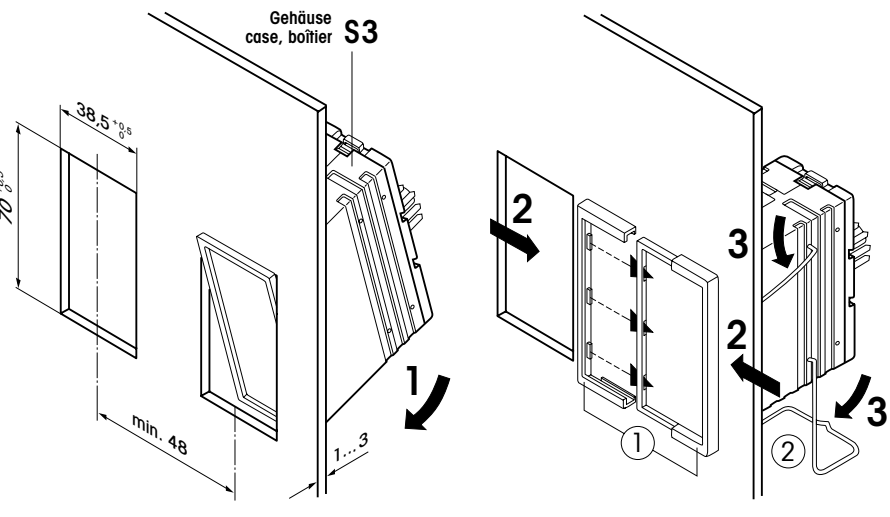
**FS-23** Transparent cover (always included with the relay)



Empty space for additional accessories or notes.

Empty space for additional accessories or notes.

**FZ-23** Front of panel mounting accessory comprising 2 front frame parts ① and 2 retaining clips ②



Labels: Gehäuse case, boîtier S3. Dimensions: 38,5, 70, min. 48, 1...3. Assembly steps: 1, 2, 3.

Example of order: 1 Relay socket C11A