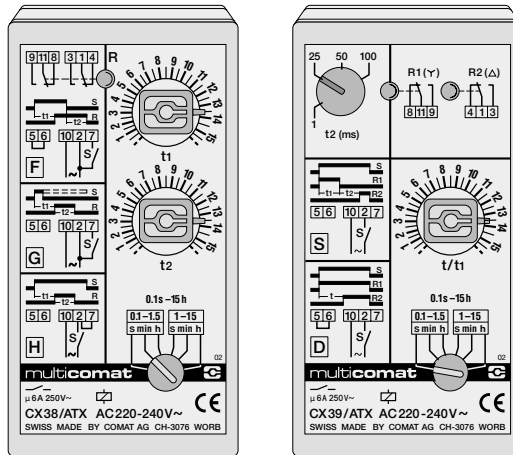
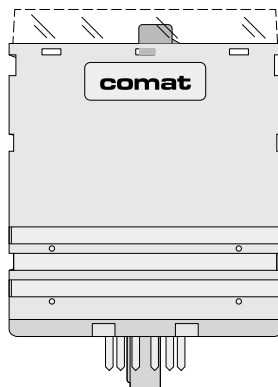


Programmable time delay relays CX-30



Electronic time delay relays of the series CX-30 point out the following main characteristics:

- Plug in industrial time delay relays with voltage control operation on 2 delayed change-over contacts 6A, 250V~
- 11 pin submagnal plug as specification IEC 67-1-18a
- Timing modes programmable by means of a link on the relay base
- Suitable for front panel mounting with accessory FZ-23
- Digital time circuit comprising RC oscillator and frequency divider
- LED display of the relay function



multiCOMAT programmable time delay relays are at work, world wide in all spheres of industry.

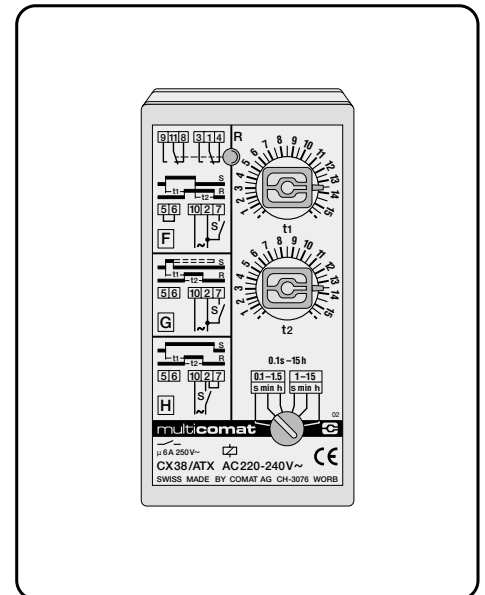
CX 38

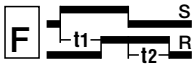
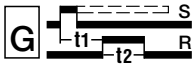
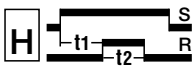

Data at $T_{amb.} = 25^{\circ}\text{C}$ and $V_{nom.}$

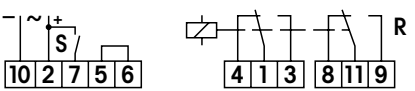
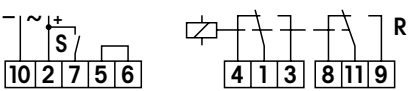
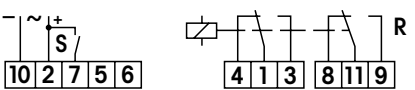
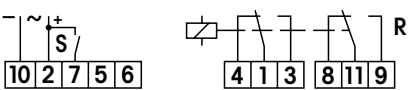
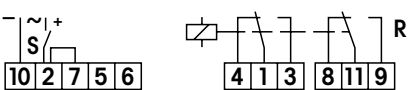
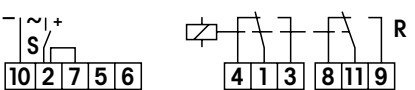
Type	Time range	Partial range		
		0,1–1,5 s	0,1–1,5 min	0,1–1,5 h
CX 38	0,1 s – 15 h	1–15 s	1–15 min	1–15 h
The partial ranges are programmable at the range switch				

Voltages		Current consumption		
Designation	Tolerances	I max. AC	I max. DC	
ATX: 220–240V~ AC 50/60 Hz	-15/+10%	20 mA		
ANP: 110–120V~ AC 50/60 Hz	-15/+15%	35 mA		
UFK: 24–48V≈ AC 40/60 Hz or DC	-20/+25%	55 mA	35 mA	
DNX: 110–240V= DC	-15/+10%		15 mA	
UCB: 12V≈ AC 40/60 Hz or DC	-20/+25%	400 mA	400 mA	

Instead of contact \underline{S} , executions ATX and ANP can also be driven by two wire proximity switches for AC specified by a max. leakage current of 3 mA and a min. load current of 5 mA.



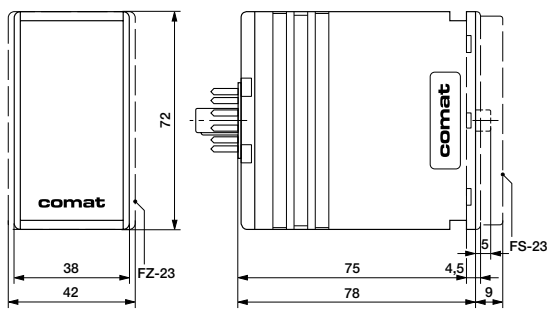
Timing modes	Code	Diagram	Description
On and off delay	F		After driving by S, R energizes according to t_1 and releases according to t_2 after switching out of S.
On delay - single shot (constant or mom. pulse)	G		After driving by S (momentary or continuous) R energizes after t_1 for the set time t_2 .
On delay - single shot (pulse limitation)	H		After driving by S, R energizes after t_1 for the set time t_2 . R falls back again when S switches out prematurely.
			S = Drive R = Output circuit

Connection scheme	
	
	
	

Technical data	General
Repeat accuracy ¹⁾	$\pm 0,5\%$ or $\pm 15\text{ms}$
Voltage stability	$\pm 0,5\%$ ²⁾
Temperature stability	$\pm 0,1\%/^{\circ}\text{C}$
Time range tolerance t min.	$-20 \div +0\%$
Time range tolerance t max.	$-0 \div +15\%$
Duty cycle	ED=100%
Reset time during t	70ms
Reset time after time expiry	35ms
Triggering time	$\geq 100\text{ms}$
Triggering delay time	60...100ms
Operating temperature range	$-25 \dots +60^{\circ}\text{C}$
Storage temperature range	$-25 \dots +80^{\circ}\text{C}$
Testing voltage	2 kV, 50Hz, 1min
Specifications	CE, VDE 0435/0110 Gr.C
Protection/case material	IP 40/Noryl SE 1 to UL 94V-1
Weight incl. packing	approx. 170g

¹⁾ referred to the set time
²⁾ max. tolerance total

Technical data	Output circuit
Switching current max.	6A
Switching voltage max.	250V~AC 1
Breaking capacity	AC: 1200VA; DC: ...250W
Mechanical life	2×10^7 operations
Contact material	Ag Ni

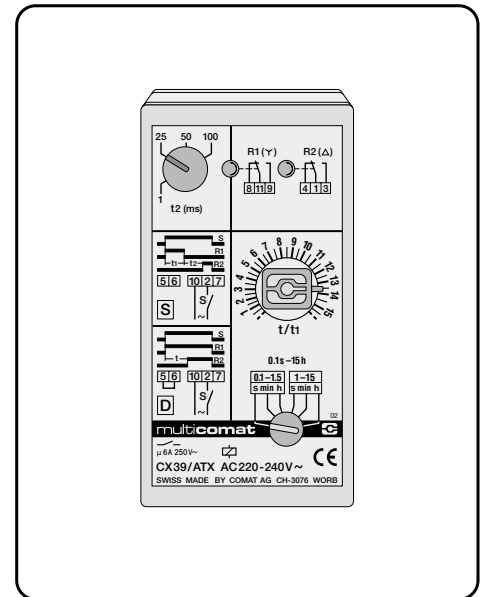
Dimensions	Case S3
	
Front mounting accessory FZ-23 (front panel aperture: $38,5 \times 70 \pm 0,5$ mm, front panel thickness max. 3mm). Transparent front cover FS-23 (part of the scope of delivery).	

Data at $T_{amb.} = 25^{\circ}C$ and V_{nom} .

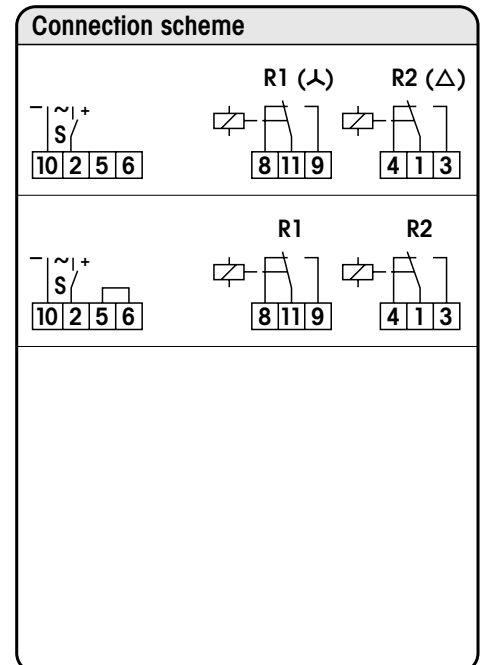
Type	Time range	Partial range			
CX 39	0,1 s – 15 h (t/t1)	0,1–1,5 s	0,1–1,5 min	0,1–1,5 h	
		1–15 s	1–15 min	1–15 h	
(Star-delta function)	1–100 ms (t2)	1 ms	25 ms	50 ms	100 ms

The partial ranges are programmable at the range switch

Voltages		Current consumption		
Designation		Tolerances	I max. AC	I max. DC
ATX: 220–240V~	AC 50/60 Hz	-15/+10%	17 mA	
ANP: 110–120V~	AC 50/60 Hz	-15/+15%	35 mA	
UFK: 24–48V≈	AC 40/60 Hz or DC	-20/+25%	80 mA	40 mA
DNX: 110–240V=	DC	-15/+10%		25 mA
UCB: 12V≈	AC 40/60 Hz or DC	-20/+25%	350 mA	450 mA



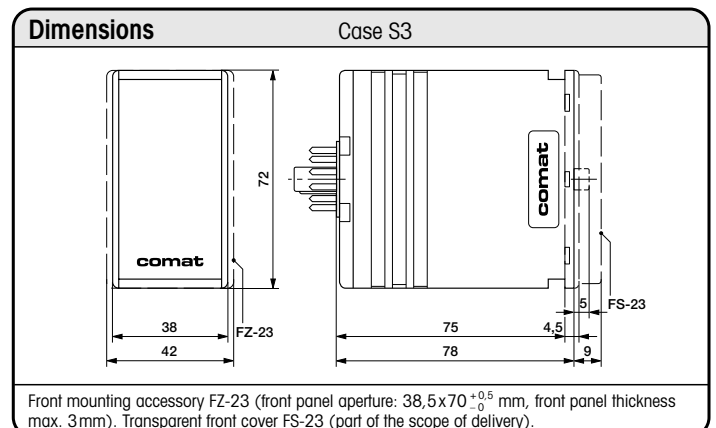
Timing modes	Code	Diagram	Description
On delay with one shot leading edge contact (Star-delta function)	S		After driving by S, R1 energizes according to t1 and R2 after t2 when R2 falls back. (Star-delta function). R1 and R2 fall back when S switches out prematurely.
On delay with instantaneous contact	D		After driving by S, R1 energizes immediately and R2 according to t. R1 and R2 fall back when S switches out prematurely.
			S = Drive R = Output circuit



Technical Data	General
Repeat accuracy ¹⁾	±0,5 % or ±15 ms
Voltage stability	±0,5 % ²⁾
Temperature stability	±0,1 %/°C
Time range tolerance t min.	-20 ÷ +0 %
Time range tolerance t max.	-0 ÷ +15 %
Duty cycle	ED = 100 %
Reset time during t	70 ms
Reset time after time expiry	35 ms
Operating temperature range	-25 ... +60°C
Storage temperature range	-25 ... +80°C
Testing voltage	2 kV, 50Hz, 1 min
Specifications	CE, VDE 0435/0110 Gr. C
Protection/case material	IP 40/Noryl SE 1 to UL 94V-1
Weight incl. packing	approx. 230 g

¹⁾ referred to the set time
²⁾ max. tolerance total

Technical data	Output circuit
Switching current max.	6A
Switching voltage max.	250V~ AC 1
Breaking capacity	AC: 1200VA; DC: ...250W
Mechanical life	2x10 ⁷ operations
Contact material	Ag Ni



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

Technical drawing of the C11A relay socket. The front view shows a 38mm wide socket with 12 terminals (6 on each side) and a central screw. Labels include '1 2 3 4 5', 'S+S, wiefand', 'LH-1', 'L-16', 'comat', 'M3 FOR M4', 'A2-CONNECTOR', 'FOR PLUG-IN MODULES', 'SC-3', 'SD-1', '10A', 'C-A2', and 'FOR PLUG-IN MODULES'. Dimensions include 38mm width, 75mm height, max 40mm depth, 16mm terminal height, 4mm mounting hole offset, and 20mm base width.

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

Technical drawing of the EC-11 relay socket. The front view shows a 38mm wide socket with 12 terminals (6 on each side) and a central screw. Labels include 'comat', '10A 400V', '10A 300V Listed', 'for M4', 'for M3', 'A2', 'A1', '31', '32', '24', '22', '11', '12', '10', '11', '6', '1', '2', '10', '11', '6', '1', '2'. Dimensions include 38mm width, 62mm height, 24.2mm terminal height, 8mm terminal offset, 6mm mounting hole offset, 18mm base width, 4mm mounting hole offset, and 22mm base width.

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

Technical drawing of the CS-11 relay socket. The front view shows a 38mm wide socket with 12 terminals (6 on each side) and a central screw. Labels include 'TEST', 'comat', 'CS-11', '3,2', '68', '29,5', 'CODING CA-11', 'LABEL SL-36', '34 A2 31 11 A1 14', '9 10 11 1 2 3'. Dimensions include 38mm width, 68mm height, 3.2mm terminal offset, 6mm terminal offset, 29.5mm terminal height, 15mm mounting hole offset, 3mm mounting hole offset, 4mm mounting hole offset, and 20mm base width.

11 PGF Relay socket for fasten connectors (2x2,8x0,8 DIN 46247)

Technical drawing of the 11 PGF relay socket. The front view shows a 38mm wide socket with 6 terminals (3 on each side). Labels include 'comat', 'Faston 2,8x0,8 (2x)'. Dimensions include 38mm width, 39mm height, 27mm terminal height, 4.5mm terminal offset, 3.5mm terminal offset, 1.5mm terminal offset, 4mm mounting hole offset, 6.5mm base width, 15mm mounting hole offset, and 10mm base width.

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

Technical drawing of the RG-23 surface mounting case. The front view shows a 50mm wide case with 6 terminals (3 on each side). Labels include 'comat', 'RG-23', '38x72', '4,5', '31', '32', '24', '22', '11', '12', '10', '11', '6', '1', '2'. Dimensions include 50mm width, 126mm height, 38mm terminal height, 4.5mm terminal offset, 31mm terminal offset, 32mm terminal offset, 24mm terminal offset, 22mm terminal offset, 11mm terminal offset, 12mm terminal offset, 10mm terminal offset, 6mm mounting hole offset, 24mm mounting hole offset, 67mm base width, and 97mm base width.

Blank technical drawing area.

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

Technical drawing of the 11 PGL relay socket. The front view shows a 38mm wide socket with 6 terminals (3 on each side). Labels include 'comat', 'Faston 3,8x0,8 (2x)'. Dimensions include 38mm width, 39mm height, 27mm terminal height, 4.5mm terminal offset, 3.5mm terminal offset, 1.5mm terminal offset, 4mm mounting hole offset, 6.5mm base width, 11mm mounting hole offset, and 10mm base width.

HF-24 Retaining clip for cases S2, S3, S4, suitable for all relay sockets

Technical drawing of the HF-24 retaining clip. Dimensions include 46mm length, 14mm width, 0.6mm thickness, and 35mm base width.

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

3D perspective drawing of the FS-23 transparent cover, showing its rectangular shape and mounting points.

Blank technical drawing area.

Blank technical drawing area.

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

Technical drawing of the FZ-23 front of panel mounting accessory. It shows the assembly of two front frame parts (1) and two retaining clips (2) onto a panel. Labels include 'Gehäuse case, boîtier S3', '38,5^{+0,5}', '70^{+0,5}', 'min. 48', '1...3', '2', '3', '1', '2', '3'. Dimensions include 38.5mm width, 70mm height, and a minimum 48mm mounting hole offset.