

**CT2****Single function | multivoltage****Time data**

Timing functions	fig. 1 1: E, B 2: A, K 3: W
Timing range	0.2 s ... 3 s / 2 s ... 30 s / 0.2 min ... 3 min / 2 min ... 30 min
Timing scale	3 s / 30 s / 3 min / 30 min

**Control circuit**

Nominal voltage	9,5 ... 18 V UC	20 ... 65 V UC
Operating voltage range	9,5 ... 17 V UC	20 ... 65 V UC
Power consumption AC / DC	0.2 VA / 0.4 W	0.4 VA / 0.4 W
Current consumption on supply A1-A2 AC / DC	12 mA / 12 mA	6 mA / 6 mA
Current consumption on input control B1 AC / DC	- / 0.2 mA	0.2 mA / 0.2 mA
Threshold voltage on input control B1 AC / DC	9 V / 9 V	18 V / 18 V
Rated frequency	DC	0; 40 ... 60 Hz

**Control circuit**

Nominal voltage	90 ... 150 V UC	180 ... 265 V UC
Operating voltage range	80 ... 150 V UC	150 ... 265 V UC
Power consumption AC / DC	0.3 VA / 0.4 W	0.5 VA / 0.5 W
Current consumption on supply A1-A2 AC / DC	2 mA / 2 mA	2 mA / 2 mA
Current consumption on input control B1 AC / DC	0.2 mA / 0.2 mA	0.2 mA / 0.2 mA
Threshold voltage on input control B1 AC / DC	75 V / 75 V	140 V / 140 V
Rated frequency	0; 40 ... 60 Hz	0; 40 ... 60 Hz

**Control circuit**

Nominal voltage	90 ... 265 V UC
Operating voltage range	90 ... 265 V UC
Power consumption AC / DC	0.5 VA / 0.5 W
Current consumption on supply A1-A2 AC / DC	2 mA / 2 mA
Current consumption on input control B1 AC / DC	0.2 mA / 0.2 mA
Threshold voltage on input control B1 AC / DC	75 V / 75 V
Rated frequency	0; 40 ... 60 Hz

**General data**

Ambient temperature storage (no ice)	-40 ... 85 °C
Ambient temperature operation	-25 ... 60 °C
Conductor cross section	2.5 mm <sup>2</sup>
Nominal screw torque	0.5 Nm
Dimensions	fig. 2
Weight	35 g
Protection degree	IP 20
Housing material	PC

**Product reference**

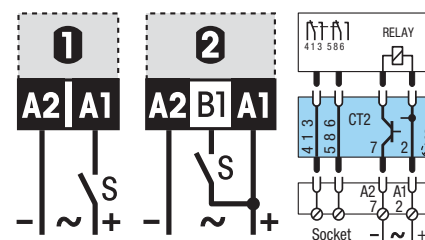
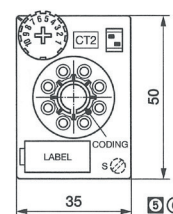
Description	Type	S DC9.5-18	L UC20-65	M 90-150	U 180-265	H 90-265
Off delay	CT2-A30/...V	✓	✓	✓	✓	
Blinker	CT2-B30/...V	✓	✓			✓
On delay	CT2-E30/...V	✓	✓			✓
Pulse shaping, one shot	CT2-K30/...V	✓	✓	✓	✓	

Other voltages on request. Please contact [support@comatreleco.com](mailto:support@comatreleco.com).

«...» list control circuit voltage to complete product references.

**Accessories**

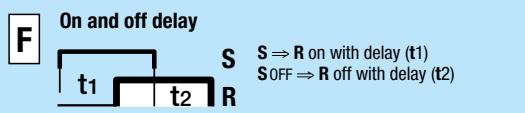
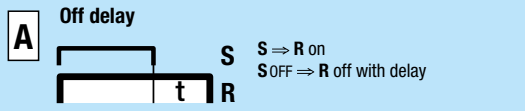
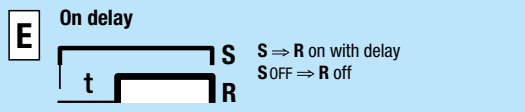
Socket	S2-B, S2-P0
Retaining clip	HF-33

**fig. 1. Wiring diagram****fig. 2. Dimensions (mm)****Standards and approvals**

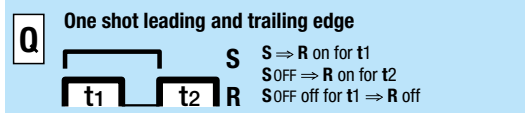
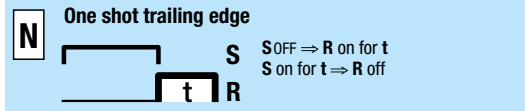
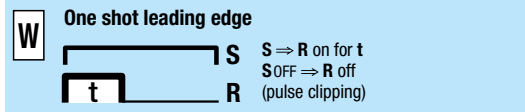
Standards IEC/EN 60947

Approvals

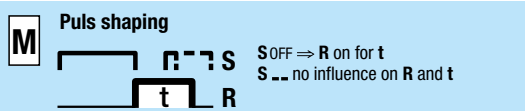
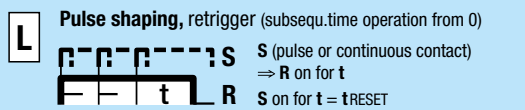
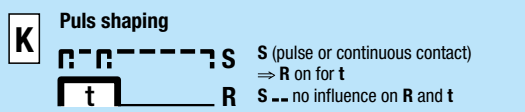
## Delay functions



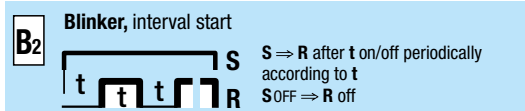
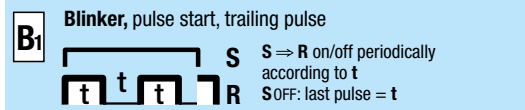
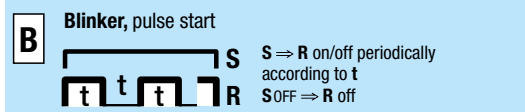
## Shot timing modes



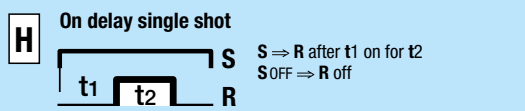
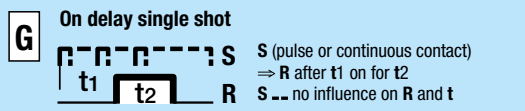
## Puls shaping



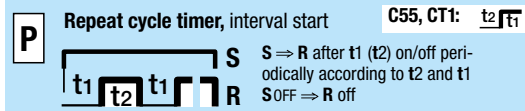
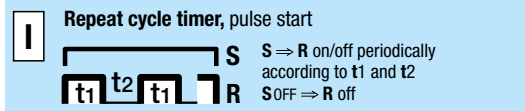
## Blinker functions



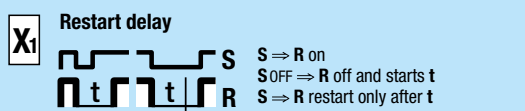
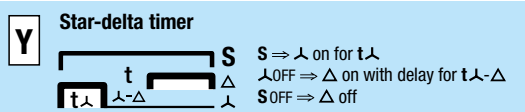
## Delayed pulse



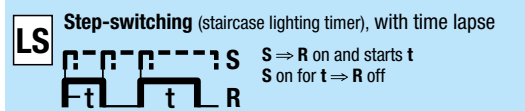
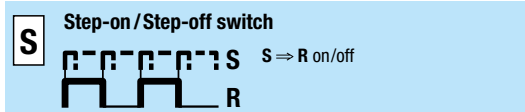
## Repeat cycle timer



## Special functions



## Special functions



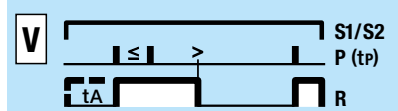
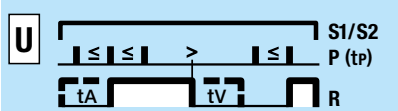
## Stop / Reset



S = Triggering  
R = Output circuit  
⇒ = switches...



## Pulse sequence monitoring



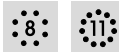
S1/S2 = Monitoring start  
P = Pulse sequence  
tp = Pulse separation

≤: Pulse separation is **smaller** than the time tp  
>: Pulse separation is **larger** than the time tp

Start with S1 = **without** start-up short-out tA  
Start with S2 = start-up short-out tA

tv = settable alarm delay  
delay (tA = tv)

### Time Cubes



Type	Function																	t-Stop	t-Reset	Ext. Poti	t max.																
	E	A	F	W	N	Q	K	L	M	B	B <sub>1</sub>	B <sub>2</sub>	G	H	I	P	S				LS	X <sub>1</sub>	U	V	sec	min	h	d	Page								
CT...E 30	●																															30				229	
CT...A 30	●	●																															30				229
CT...K 30					●					●																							30				229
CT...B 30											●																						30				229

### Modular plug-in Time Relays (CT-System)



Type	Function																	t-Stop	t-Reset	Ext. Poti	t max.																
	E	A	F	W	N	Q	K	L	M	B	B <sub>1</sub>	B <sub>2</sub>	G	H	I	P	S				LS	X <sub>1</sub>	U	V	sec	min	h	d	Page								
CT32...	●	●			●	●				●																						60*					233
CT33...	●	●	△		●	●	△			●	●			▲	▲																			60*			234
CT36...															●	●																		60*			235

### Plug-in Time Relays



Type	Function																	t-Stop	t-Reset	Ext. Poti	t max.																
	E	A	F	W	N	Q	K	L	M	B	B <sub>1</sub>	B <sub>2</sub>	G	H	I	P	S				LS	X <sub>1</sub>	U	V	sec	min	h	d	Page								
C55	●	●	●	●	●	●		●		●				●	●	●	●					●	●	●	●											60	210
C55.3	●	●	●	●	●	●		●		●				●	●	●	●					●	●	●	●											60	211
C55.4	●	●	●	●	●	●		●		●				●	●	●	●					●	●	●	●											60	212
C56	●	●	●	●	●	●		●		●				●	●	●	●					●	●	●	●											60	213
C64	■																																20				214
CS2					●	●				●		●														●										60*	217
CS3	●	●			●	●				●		●																								60*	218
RS 41-M	●	●			●					●																							15				219

### Plug-in Time Relays



Type	Function																	t-Stop	t-Reset	Ext. Poti	t max.																
	E	A	F	W	N	Q	K	L	M	B	B <sub>1</sub>	B <sub>2</sub>	G	H	I	P	S				LS	X <sub>1</sub>	U	V	sec	min	h	d	Page								
C83	●	●	△		●	●	△			●	●			▲	▲																					60*	215
C85				●				●							●	●	●	●																		60*	216

### DIN Time Relays



Type	Function																	t-Stop	t-Reset	Ext. Poti	t max.																
	E	A	F	W	N	Q	K	L	M	B	B <sub>1</sub>	B <sub>2</sub>	G	H	I	P	S				LS	Y	U	V	sec	min	h	d	Page								
AA2 - AA2M	●																															1,5/12					170
AE2 - AE2M	●																															1,5/12					171
AL1								●																													195
AL3								●										●	●														60				196
AL4								●										●	●														60				197
AL5																		●																			198
AM1	●				●					●		●																								60	199
AM2	●	●			●			●																												60	200
AM3 <sup>1)</sup>	●	●			●			●																												60	201
CM2	●	●			●			●																													202
CM3	●	●			●	●				●		●																								60*	203
CMD11 A	●																																				168
CMD11 E	●																																				169
CIM1	●	●			●	●				●	●							●	●																	60*	176
CIM12	●	●			●	●				●	●							●	●																	60*	178
CIM13	●	●			●	●				●	●							●	●																	60*	180
CIM14	●	●			●	●				●	●							●	●																	60*	182
CIM2	●	●						●					●	●																						60*	183
CIM22	●	●						●					●	●																						60*	185
CIM23	●	●						●					●	●																						60*	187
CIM3			●			●								●	●		●	●																		60*	189
CIM32			●			●								●	●		●	●																		60*	191
CIM33			●			●								●	●		●	●																		60*	193
CRV4	●	●	△		●	●	△			●	●	●		●	●			●	●							●										60*	205
CSV4	●	●	△		●	●	△			●	●	●		●	●			●	●							●										10*	206
CPF11					●					●	●																				0.6						204
CY1																								●													208

### \* TF-60 Setting of long times

The TF60 time setting method permits short examination of long delay time settings. Elapsing times of hours can be monitored in the sec. range.

Example for a delay time of 38h:

1. Set range switch to 60sec
2. Set 38sec on the potentiometer (e.g. check 38sec by chronometer)
3. Set range switch to 60h

The delay time now amounts to 38h.

- <sup>1)</sup> alternatively with instantaneous contact
- without auxiliary voltage (relay bistable)
- without auxiliary voltage (relay monostable)
- △ t<sub>2</sub> = t<sub>1</sub>
- ▲ t<sub>2</sub> = 0.5s