comat

Delay functions

E On delay

S ⇒ R on with delay
SOFF ⇒ R off

A Off delay

S ⇒ R on
SOFF ⇒ R off with delay

F On and off delay

S ⇒ R on with delay (t1)
SOFF ⇒ R off with delay (t2)

Pulse shaping

K Pulse shaping

S (pulse or continuous contact)
⇒ R on for t
S ▬ no influence on R and t

L Pulse shaping, retrigger. (subsequ. time operation from 0)

S (pulse or continuous contact)
⇒ R on for t
S on for t = tRESET

M Pulse shaping

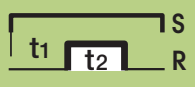
SOFF ⇒ R on for t
S ▬ no influence on R and t

Delayed pulse

G On delay single shot

S (pulse or continuous contact)
⇒ R after t1 on for t2
S ▬ no influence on R and t

H On delay single shot



S ⇒ R after t1 on for t2
SOFF ⇒ R off

Special functions

Y Star-delta timer

S ⇒ λ on for tλ
λOFF ⇒ Δ on with delay for tλ-Δ
SOFF ⇒ Δ off

X1 Restart delay

S ⇒ R on.
SOFF ⇒ R off and starts t.
S ⇒ R restart only after t.

Shot timing modes

W One shot leading edge

S ⇒ R on for t
SOFF ⇒ R off
(pulse clipping)

N One shot trailing edge

SOFF ⇒ R on for t
S on for t ⇒ R off

Q One shot leading and trailing edge

S ⇒ R on for t1
SOFF ⇒ R on for t2
SOFF off for t1 ⇒ R off

Blinker functions

B Blinker, pulse start

S ⇒ R on/off periodically
according to t
SOFF ⇒ R off

B1 Blinker, pulse start, trailing pulse

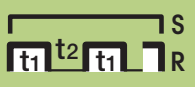
S ⇒ R on/off periodically
according to t
SOFF: last pulse = t

B2 Blinker, interval start

S ⇒ R after t on/off periodically
according to t
SOFF ⇒ R off

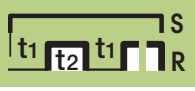
Repeat cycle timer

I Repeat cycle timer, pulse start



S ⇒ R on/off periodically
according to t1 and t2
SOFF ⇒ R off

P Repeat cycle timer, interval start C55, CT1: t2/t1



S ⇒ R after t1 (t2) on/off periodically according to t2 and t1
SOFF ⇒ R off

Special functions

S Step-on/Step-off switch

S ⇒ R on/off

LS Step-switching (staircase lighting timer), with time lapse

S ⇒ R on and starts t.
S on for t ⇒ R off.

Stop/Reset

tSTOP SSTOP interrupts t (t-addition)

T t is stopped ⇒ R on/off

tRESET SRESET resets t
t restarts immediately

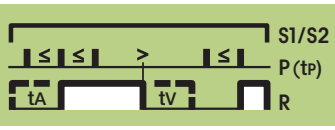
T Test

S = Triggering
R = Output circuit
⇒ = switches…

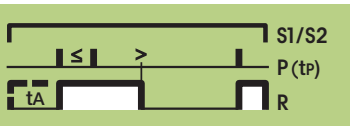
ON OFF

Pulse sequence monitoring

U



V



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 = **with** start-up short-out tA

tV = settable alarm delay (tA = tV)

comat

Plug-in Time Cubes and Time Modules pour Industrial Relays

Type	Function E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S	LS	X1	U	V	t-Stop	t-Reset	Ext. Poti	t max. sec	min	hrs	day	Page
CT..-E 30	●	△	▲																							30			61
CT..-A 30		●																								30			61
CT..-K 30				●			●																			30			61
CT..-W 30				●																						30			61
CT..-B 30										●																30			61
CT30 1)	●			●						●																30			63
CT32 1)	●	●		●	●		●			●	●															60*			63
CT33 1)	●	●	△	●	●	△	●	●		●	●		▲	▲													60*		63
CT36 1)															●	●											60*		63
C81	●											●														30			67
C82	●	●		●			●																			60			67
C83	●	●	△	●	●	△	●	●		●	●		▲	▲													60*		67
C84		■			■																					20			67
C85			●			●							●	●	●	●											60*		67
CS1	●			●						●		●													●		60*			68
CS2	●	●		●	●		●			●		●													●			60*		68
CS3	●	●		●	●		●			●		●																60*		68
C63	●	●		●	●		●			●		●																60*		68
C64		■			■																					20			69
C65																			□							6			69
C66																			□							6			69
C52	●	●																								60			70
C53	●	●	●	●	●	●	●			●				●	●												60		70
C55	●	●	●	●	●	●	●		●	●			●	●	●	●					●	●	●	●				60	70
C56	●	●	●	●	●	●	●		●	●			●	●	●	●					●	●	●	●				60	70

Plug-in Time Delay Relays

Type	Function E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S	LS	Y	U	V	t-Stop	t-Reset	Ext. Poti	t max. sec	min	hrs	day	Page
RS 121	●	●		●	●		●																				100		74
RS 121.P	●	●		●	●		●																	●			100		74
RS 121.R	●	●		●	●		●															●	●				100		74
RS 122-M															●	●										2x30			75
RS 122-MH															●	●										30	30		75
RS 122-H															●	●											2x30		75
RS 321	●	●		●	●		●																				99,9		76
RS 521	●	●		●	●		●															●					99,9		76
RS 41	●	●		●			●			●																15			76
CPX-519	●	●		●	●		●																			999			77
CTI-519															●											2x999			77
CEA-226	●	●																							990				77
CPX-129	●	●		●	●		●																			15			78
CFG-126			●										●	●												2x15			78
CTI-129															●											2x15			78
CEA-126	●	●																								15			79
CWR-102				●	●	△																			1,5				79
CX 38			●										●	●													15		80
CX 39 1)	●																		●						0,1		15		80
CNS-4	●		●																							30			90
CN 135	●	●																						●		30			90

DIN Time Delay Relays

DIN

Type	Function E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S	LS	Y	U	V	t-Stop	t-Reset	Ext. Poti	t max. sec	min	hrs	day	Page
CRE1	●																									30			82
CRA1		●																								30*			82
AE2	●																									1,5			82
AE2M	●																									12			82
AA2		●																								1,5			82
AA2M		●																								12			82
CY1																			●						60/0,1				82
CRV1	●			●						●																30			83
CRV2	●	●		●	●		●																				60*		83
CSV2	●	●		●	●		●																	●			10*		83
CRV3			●			●																					2x60*		83
CRT3															●	●											2x60*		83
AM1	●			●						●		●														60			84
AM2	●	●		●			●																			60			84
AM3 1)	●	●		●			●																			60			84
CIM1	●	●		●	●		●			●	●						●	●									60		84
CM1	●	●		●			●																			100			85
CM1L	●	●		●			●																				12		85
CM2	●	●		●			●															●	●	●			12		85
CM3	●	●		●	●		●			●	●																60		85
CNR1		■			■																					12			86
CT1															●	●										12/60			86
CT1L															●	●										60	30		86
ECO31	●			●						●																20			87
ECO32	●	●		●	●		●			●																	12*		87
CPF11		●		●			●	●																	0,6				94
CPF22		●					●																		0,2				94

*** TF-60**

The TF60 time setting methode 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.

1) alternatively with instantaneous contact
■ without auxiliary voltage (relay bistable)
□ without auxiliary voltage (relay monostable)
△ t2 = t1
▲ t2 = 0,5s

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 or visit our Website: www.kuehn-controls.de