

FZ-50L

Front panel mounting set | Socket S3-L | Retaining clip

General data

Ambient temperature storage	-40 ... 85 °C
Ambient temperature operation	-25 ... 60 °C
Module width	fig. 1
Weight	40 g
Housing material	PC

Product references

Types	Product reference
Front panel mounting set	FZ-50L

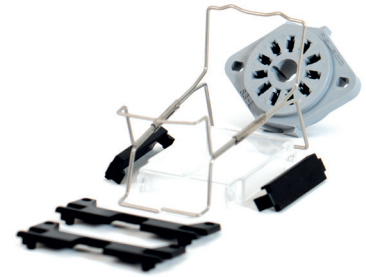
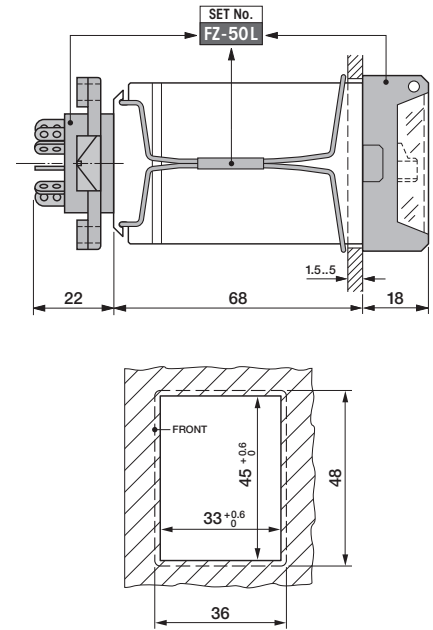


fig. 1. Dimensions (mm)



Delay functions

E On delay

S ⇒ R on with delay
S_{OFF} ⇒ R off

A Off delay

S ⇒ R on
S_{OFF} ⇒ R off with delay

F On and off delay

S ⇒ R on with delay (t1)
S_{OFF} ⇒ R off with delay (t2)

Shot timing modes

W One shot leading edge

S ⇒ R on for t
S_{OFF} ⇒ R off (pulse clipping)

N One shot trailing edge

S_{OFF} ⇒ R on for t
S on for t ⇒ R off

Q One shot leading and trailing edge

S ⇒ R on for t1
S_{OFF} ⇒ R on for t2
S_{OFF} off for t1 ⇒ R off

Puls shaping

K Puls 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 = t_{RESET}

M Puls shaping

S_{OFF} ⇒ R on for t
S₋₋₋ no influence on R and t

Blinker functions

B Blinker, pulse start

S ⇒ R on/off periodically according to t
S_{OFF} ⇒ R off

B1 Blinker, pulse start, trailing pulse

S ⇒ R on/off periodically according to t
S_{OFF}: last pulse = t

B2 Blinker, interval start

S ⇒ R after t on/off periodically according to t
S_{OFF} ⇒ R off

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
S_{OFF} ⇒ R off

Repeat cycle timer

I Repeat cycle timer, pulse start

S ⇒ R on/off periodically according to t1 and t2
S_{OFF} ⇒ R off

P Repeat cycle timer, interval start C55, CT1: $\frac{t_2}{t_1}$

S ⇒ R after t1 (t2) on/off periodically according to t2 and t1
S_{OFF} ⇒ R off

Special functions

Y Star-delta timer

S ⇒ Δ on for t
 Δ _{OFF} ⇒ Δ on with delay for t Δ
S_{OFF} ⇒ Δ off

X1 Restart delay

S ⇒ R on
S_{OFF} ⇒ R off and starts t
S ⇒ R restart only after t

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
tRESET SRESET reset t t restarts immediately	T Test

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



Pulse sequence monitoring

U

S1/S2
P (tp)
R

V

S1/S2
P (tp)
R

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. Pol.	t max.				Page							
	E	A	F	W	N	Q	K	L	M	B	B ₁	B ₂	G	H	I	P	S				LS	X ₁	U	V		sec	min	h	d			
CT...E 30	●																										30				203	
CT...A 30	●																											30				203
CT...K 30				●			●																					30				203
CT...B 30										●																		30				203

Modular plug-in Time Relays (CT-System)



Type	Function																	t-Stop	t-Reset	Ext. Pol.	t max.				Page							
	E	A	F	W	N	Q	K	L	M	B	B ₁	B ₂	G	H	I	P	S				LS	X ₁	U	V		sec	min	h	d			
CT32...	●	●			●	●					●	●																			60*	209
CT33...	●	●	△		●	△	●	●			●	●	▲	▲																	60*	210
CT36...	●	●												●	●																60*	211

Plug-in Time Relays



Type	Function																	t-Stop	t-Reset	Ext. Pol.	t max.				Page							
	E	A	F	W	N	Q	K	L	M	B	B ₁	B ₂	G	H	I	P	S				LS	X ₁	U	V		sec	min	h	d			
C55	●	●	●	●	●	●	●	●					●	●	●	●						●	●	●	●	●					60	186
C55.3	●	●	●	●	●	●	●	●					●	●	●	●						●	●	●	●	●					60	187
C55.4	●	●	●	●	●	●	●	●					●	●	●	●						●	●	●	●	●					60	188
C56	●	●	●	●	●	●	●	●					●	●	●	●						●	●	●	●	●					60	189
C64		■				■																									20	190
CS2	●	●			●	●					●	●																			60*	193
CS3	●	●			●	●					●	●																			60*	194

Plug-in Time Relays



Type	Function																	t-Stop	t-Reset	Ext. Pol.	t max.				Page								
	E	A	F	W	N	Q	K	L	M	B	B ₁	B ₂	G	H	I	P	S				LS	X ₁	U	V		sec	min	h	d				
C83	●	●	△		●	△	●	●			●	●	▲	▲																	60*	191	
C85		●			●									●	●	●																60*	192

DIN Time Relays



Type	Function																	t-Stop	t-Reset	Ext. Pol.	t max.				Page								
	E	A	F	W	N	Q	K	L	M	B	B ₁	B ₂	G	H	I	P	S				LS	Y	U	V		sec	min	h	d				
AA2 - AA2M	●																														1,5/12	154	
AE2 - AE2M	●																															1,5/12	155
AL1								●																								170	170
AL3								●									●	●														60	171
AL4								●									●	●														60	172
AL5																	●															173	173
AM1	●			●						●	●																					60	174
AM2	●	●		●				●																								60	175
AM3 ¹⁾	●	●		●				●																							60	176	
CM2	●	●		●				●																								12	177
CM3	●	●		●				●			●	●																				60*	178
CMD11 A	●																															152	152
CMD11 E	●																															153	153
CIM1	●	●		●	●			●			●	●							●	●												60*	160
CIM12	●	●		●	●			●			●	●							●	●												60*	161
CIM13	●	●		●	●			●			●	●							●	●												60*	162
CIM14	●	●		●	●			●			●	●							●	●												60*	163
CIM2	●	●						●	●				●	●	●																	60*	164
CIM22	●	●						●	●				●	●	●																	60*	165
CIM23	●	●						●	●				●	●	●																	60*	166
CIM3		●				●							●	●	●	●																60*	167
CIM32		●				●							●	●	●	●																60*	168
CIM33		●				●							●	●	●	●																60*	169
CRV4	●	●	△		●	△		●	●	●	●	●	●	●	●					●	●										●	10*	180
CSV4	●	●	△		●	△		●	●	●	●	●	●	●	●					●	●										●	10*	181
CPF11	●							●	●																							0.6	179
CY1																							●									184	184

* 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.

- ¹⁾ alternatively with instantaneous contact
 ■ without auxiliary voltage (relay bistable)
 □ without auxiliary voltage (relay monostable)

- △ t₂ = t₁
 ▲ t₂ = 0.5s