

HF-32

Retaining clip | Steel

General data

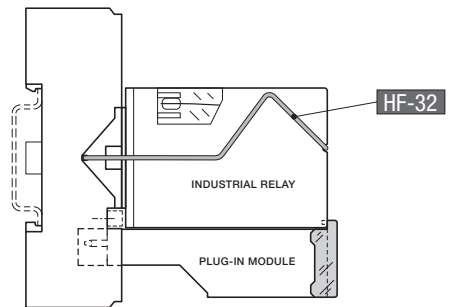
Ambient temperature storage	-40 ... 85 °C
Ambient temperature operation	-25 ... 60 °C
Module width	fig. 1
Weight	2 g
Housing material	Steel

Product references

Types	Product reference
Retaining clip	HF-32



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 tΔ-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 ⇒ R on/off
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.												
	E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S				LS	X1	U	V	sec	min	h	d	Page				
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.													
	E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S				LS	X1	U	V	sec	min	h	d	Page					
CT32...	●	●			●	●				●	●																					60*		209
CT33...	●		△	●	●	△	●	●		●	●		▲	▲																60*			210	
CT36...														●	●														60*			211		

Plug-in Time Relays


Type	Function																	t-Stop	t-Reset	Ext. Pol.	t max.											
	E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S				LS	X1	U	V	sec	min	h	d	Page			
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.											
	E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S				LS	X1	U	V	sec	min	h	d	Page			
C83	●	●	△	●	●	△	●	●		●	●		▲	▲																60*		191
C85		●				●							●	●	●	●														60*		192

DIN Time Relays


Type	Function																	t-Stop	t-Reset	Ext. Pol.	t max.														
	E	A	F	W	N	Q	K	L	M	B	B1	B2	G	H	I	P	S				LS	Y	U	V	sec	min	h	d	Page						
AA2 - AA2M	●																															1,5/12		154	
AE2 - AE2M	●																																1,5/12		155
AL1								●																										170	
AL3								●									●	●												60				171	
AL4								●									●	●												60				172	
AL5								●									●																	173	
AM1	●			●					●	●																				60				174	
AM2	●	●		●			●																							60				175	
AM3 ¹⁾	●	●		●			●																						60				176		
CM2	●	●		●			●															●	●	●							12			177	
CM3	●	●		●	●		●			●	●																			60*				178	
CMD11 A	●																																152		
CMD11 E	●																																153		
CIM1	●	●		●	●		●			●	●						●	●														60*		160	
CIM12	●	●		●	●		●			●	●						●	●																161	
CIM13	●	●		●	●		●			●	●						●	●																162	
CIM14	●	●		●	●		●			●	●						●	●																163	
CIM2	●	●		●			●	●					●	●	●																			164	
CIM22	●	●		●			●	●					●	●	●																			165	
CIM23	●	●		●			●	●					●	●	●																			166	
CIM3		●		●		●							●	●	●	●																		167	
CIM32		●		●		●							●	●	●	●																		168	
CIM33		●		●		●							●	●	●	●																		169	
CRV4	●	●	△	●	●	△	●	●	●	●	●	●	●	●	●		●	●												●				180	
CSV4	●	●	△	●	●	△	●	●	●	●	●	●	●	●	●		●	●												●				181	
CPF11		●					●	●																						0.6				179	
CY1																							●											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