

HF-33

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-33

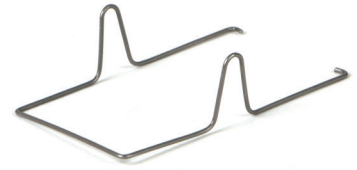
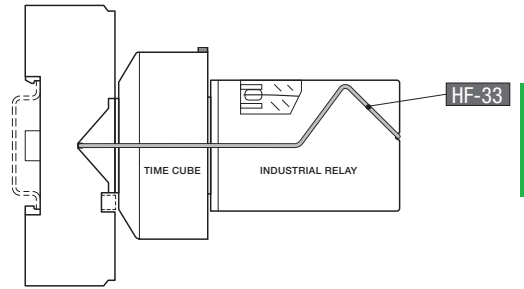
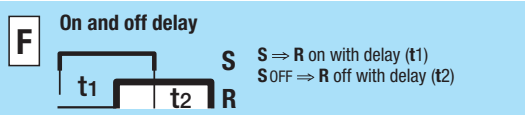
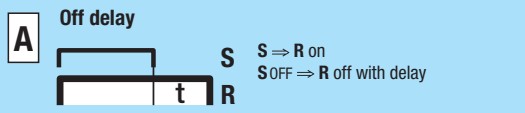
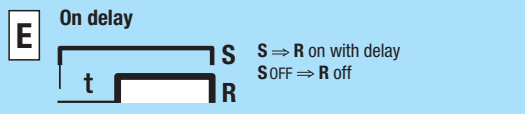


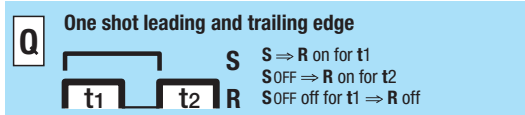
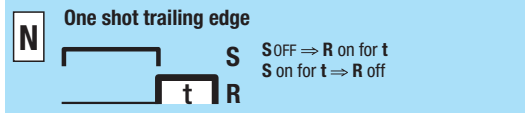
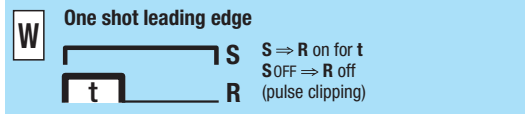
fig. 1. Dimensions (mm)



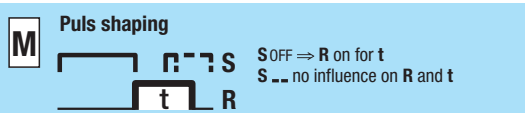
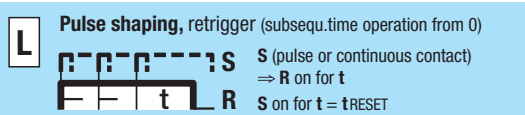
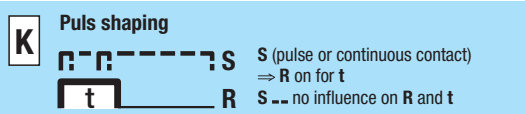
Delay functions



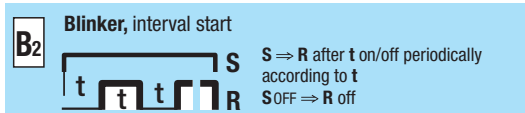
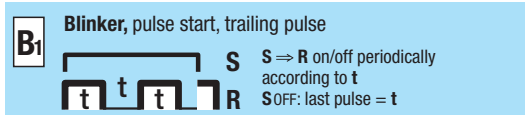
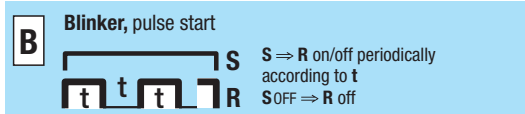
Shot timing modes



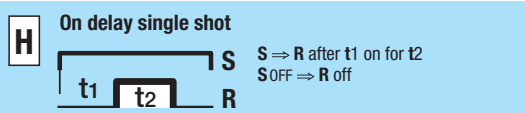
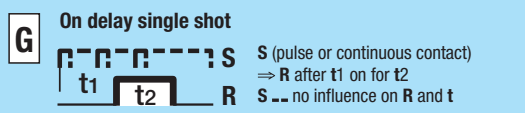
Puls shaping



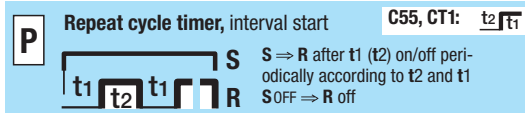
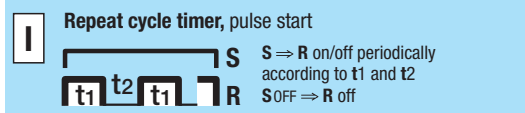
Blinker functions



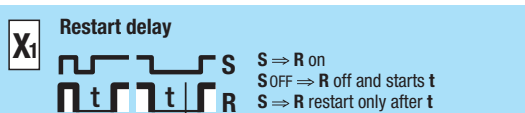
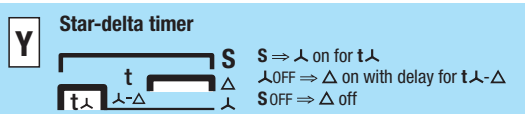
Delayed pulse



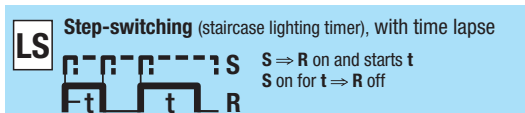
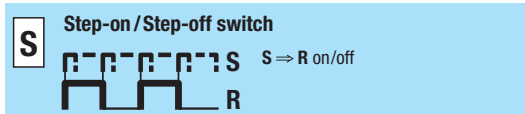
Repeat cycle timer



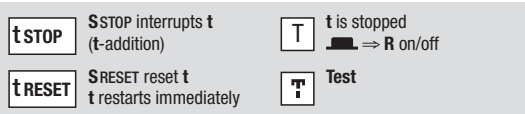
Special functions



Special functions



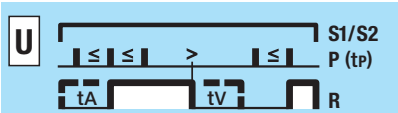
Stop/Reset



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																			I-Stop	I-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
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																			I-Stop	I-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
CT32...	●	●		●	●		●	●																60*				209
CT33...	●	●	△	●	●	△	●	●					▲	▲												60*		210
CT36...															●	●									60*			211

Plug-in Time Relays



Type	Function																			I-Stop	I-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
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																			I-Stop	I-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
C83	●	●	△	●	●	△	●	●					▲	▲												60*		191
C85		●			●								●	●	●	●										60*		192

DIN Time Relays



Type	Function																			I-Stop	I-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	
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	●	●		●	●		●			●	●						●	●							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	●	●	△	●	●	△	●	●	●	●	●	●	●	●	●	●	●	●						●		60*	180
CSV4	●	●	△	●	●	△	●	●	●	●	●	●	●	●	●	●	●	●						●		10*	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