



EPH ELECTRONICS AG

Time Relays



TZMP

- 6 Programmable functions
- 6 Time ranges
- Linear time adjustment

Description

Funktionen

- A = On-delay
- B = Off-delay
- D = Interval delay
- Fh = Flashing (pulse starting)
- Fd = Flashing (pause starting)
- C = Breaking-pulse

Time Ranges

- 0,1 – 1s
- 1 – 10s
- 10 – 100s
- 1 – 10m
- 10 – 100m
- 1 – 10h

Power Supply

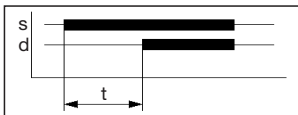
- 24–48VAC/DC
- 115VAC (Transformer)
- 230VAC (Transformer)
- U1 (12– 72VAC/DC)
- U2 (80–240VAC/DC)

Control Methods

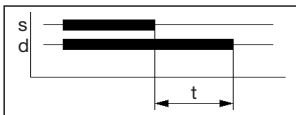
- Power supply
- Potential-free contact

Voltage controlled

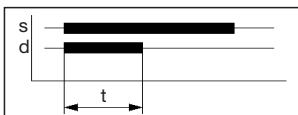
Function



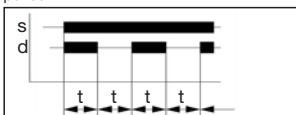
A-Function: When "s" closes "d" is energised after completion of the time period "t" and is de-energised instantaneously when "s" opens.



B-Function: When "s" closes "d" is energised instantaneously and when "s" opens "d" is de-energised after completion of the time period "t".



D-Function: When "s" closes "d" is energised instantaneously and is de-energised after completion of the time period "t".



Fh-Function: When "s" closes "d" is energised instantaneously and is de-energised after completion of the time period "t" and remains de-energised for the time period "t".

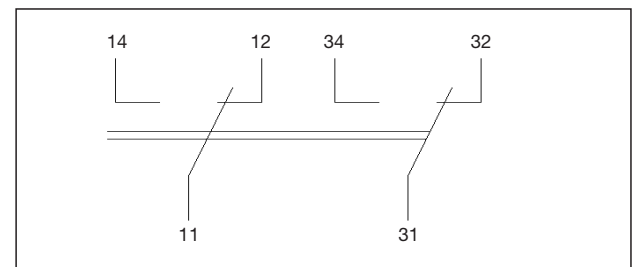


Fd-Function: When "s" closes "d" is energised after completion of the time period "t" and remains energised for the time period "t". This cycle repeats itself until "s" opens.

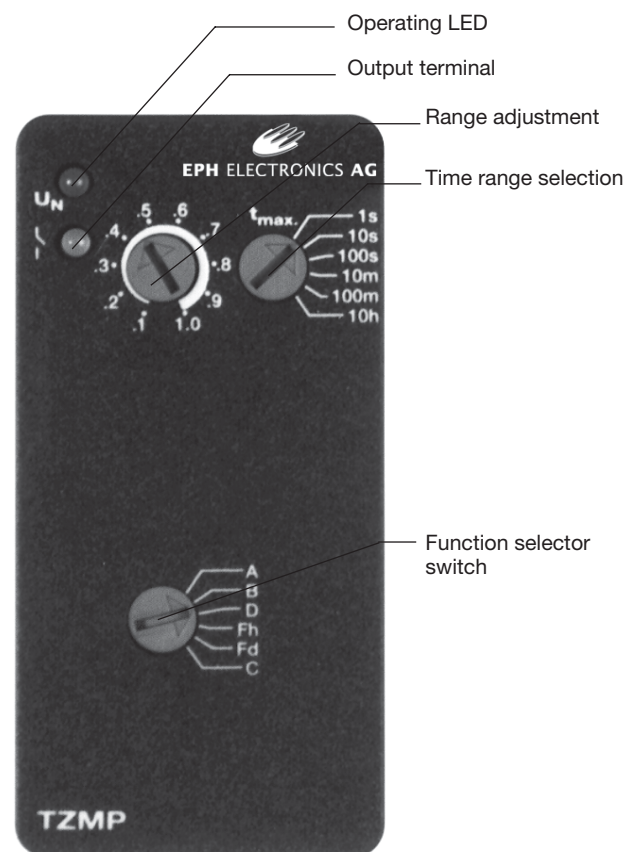


C-Function: When "s" opens "d" is energised instantaneously and is de-energised after completion of the time period "t".

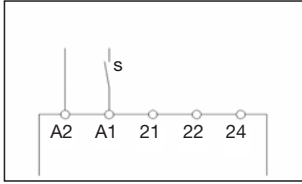
Terminal Designations



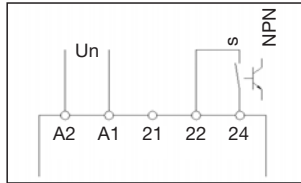
Programming



Control Methods

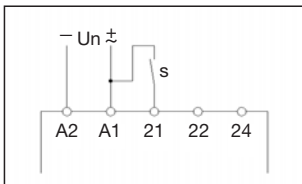


Controlled by power supply for functions A, D, Fh, Fd



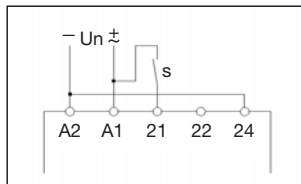
Controlled by potential-free contact for functions B, C
Semi-conductor (proximity switch with 3 leads)

Voltage controlled
24-48VACDC



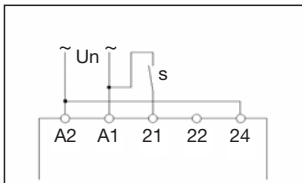
Controlled by voltage for functions B, C

U1/U2



Controlled by voltage for functions B, C

230/115VAC



Controlled by voltage for functions B, C

Technical Data

Timing Characteristics

Range accuracy	+10%
Time adjustment	analogue
Adjustability	linear
Repeat accuracy	±0,2% or 10ms
Temperature stability	±0,02%/°C ±10ms
Voltage stability	±0,2% or 20ms

Voltage Characteristics

Voltage variation	±20%
<100V	–20%/+10%
>100V	50/60Hz
Frequency	>100V and U1/U2
Galvanic isolation	

Control

Recovery time	>60ms
Resetting time	>50ms
Min. activating time	>40ms
Cable impedance	<100 Ohm

Output

Type	Relay 2 C/O
Load capacity	250VAC; 6A ohmic
Display	LED yellow

Operation

Display	LED green
Operating temperature	–20°C to +60°C
Storage temperature	–20°C to +80°C
Power consumption	max. 4VA

Order Information

TZMP 24-48ACDC
TZMP 115AC
TZMP 230AC
 TZMP 240AC
 TZMP-U1
 TZMP-U2