

Analogue settable time relays



RVZ/AVZ/TGI/EAW12DX

**Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!**

Temperature at mounting location:

-20°C up to +50°C.

Storage temperature: -25°C up to +70°C.

Relative humidity:

annual average value &lt;75%.

1 CO contact potential free 10A/250V AC.

Incandescent lamps 2000W\*.

Standby loss 0.02-0.4 watt only.

Modular devices for DIN-EN 60715 TH35 rail mounting. 1 module = 18mm wide, 58mm deep.

These digital settable time relays are

identical to the MFZ12DX-UC, except that they have one function only.

**On type TGI12DX-UC t1 and t2 can be set separately by a second multiplier while the time base remains the same.**

On type MFZ12DX-UC different functions can be selected by a rotary switch: fleeting NO contact (EW), fleeting NC contact (AW) or fleeting NO contact and fleeting NC contact (EAW).

**With the Eltako Duplex technology (DX) the normally potential-free contacts can still switch in zero passage when switching 230V AC 50Hz and therefore drastically reduce wear. Simply connect the neutral conductor to the terminal (N) and L to 15 (L) for this. This gives an additional standby consumption of only 0.1 Watt.**

**Universal control voltage 8 to 230V UC.**

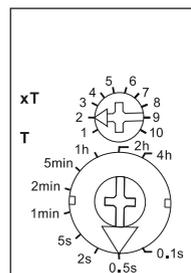
Supply voltage same as the control voltage.

Time setting between 0.1 seconds and 40 hours.

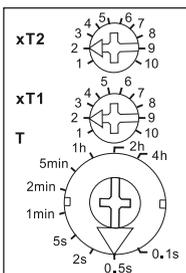
**By using a bistable relay coil power loss and heating is avoided even in the on mode.**

The switched consumer may not be connected to the mains before the short automatic synchronisation after installation has terminated.

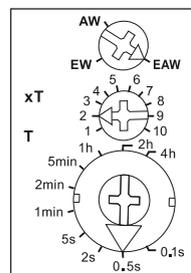
### Function rotary switches



RVZ12/AVZ12DX-UC



TGI12DX-UC



EAW12DX-UC

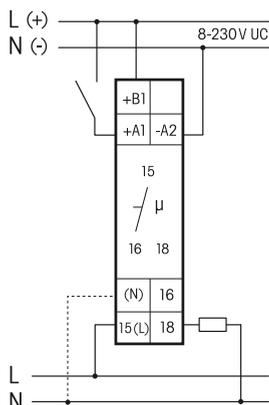
**The LED** below the big rotary switch indicates the contact position while time-out is in progress. It blinks while the relay contact 15-18 is open (15-16 closed), and is continuously ON as long as the relay contact 15-18 is closed (15-16 open).

**The time base T** is selected by means of the middle, latching rotary switch T. Time-base figures available are 0.1 seconds, 0.5 seconds, 2 seconds, 5 seconds, 1 minute, 2 minutes, 5 minutes, 1 hour, 2 hours and 4 hours. The total time is obtained by multiplying the timebase by the multiplier.

**The multiplier xT** is set on the upper, latching rotary switch xT and is in the range from 1 to 10. Thus, time settings can be selected in the range from 0.1 seconds (time base 0.1 seconds and multiplier 1) and 40 hours (time base 4 hours and multiplier 10).

\* The maximum load can be used starting at a delay time or clock cycle of 5 minutes. The maximum load will be reduced for shorter times as follows:  
up to 2 seconds 15%, up to 2 minutes 30%, up to 5 minutes 60%.

### Typical connection



If N is connected, the zero passage switching is active.

### Functions

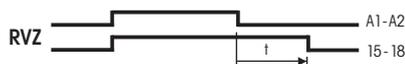
RVZ = off delay

AVZ = operate delay

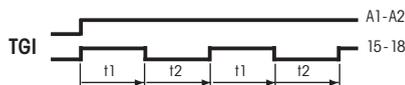
TGI = clock generator starting with impulse

EAW = fleeting NO contact and fleeting NC contact

### Description of functions



When the control voltage is applied the relay contact switches to 15-18. When the control voltage is interrupted the timing period is started; on time-out the relay contact returns to normal position. Resettable during the timing period.



When the control voltage is applied the timing period is started; on time-out the relay contact changes to 15-18. After an interruption, the timing period is restarted.



As long as the control voltage is applied the relay contact opens and closes. t1 and t2 can be set separately (identical time base, but additional multiplier). When the control voltage is applied the relay contact immediately changes to 15-18.



When the control voltage is applied or interrupted the relay contact changes to 15-18 and reverts after the set wiping time.

### Technical Data

Supply voltage and control voltage AC	8..253 V
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Supply voltage and control voltage DC	10..230 V
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Rated switching capacity	10A/250V AC
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The strain relief clamps of the terminals must be closed, that means the screws must be tightened for testing the function of the device. The terminals are open ex works.

### Must be kept for later use!

We recommend the housing for operating instructions GBA12.

### Eltako GmbH

D-70736 Fellbach

+49 711 94350000

www.eltako.com