



23 001 005 - 1

Eltako

Analogue settable multifunction time relay MFZ12DX-UC with 18 functions

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 <75%.

**1 CO contact potential free 10 A/250 V AC.
Incandescent lamps 2000W*.**

Standby loss 0.02-0.6 watt only.

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

**With the Eltako Duplex technology (DX)
the normally potential-free contacts can
still switch in zero passage when switch-
ing 230 V 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.**

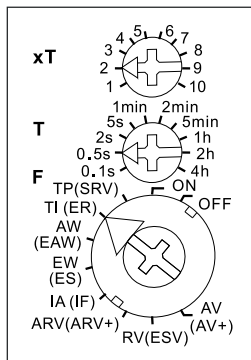
Universal control voltage 12 to 230 V UC.

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 con-
nected to the mains before the short auto-
matic synchronisation after installation has
terminated.

Function rotary switches



The LED below the big rotary switch indicates the contact position while timeout 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**. Timebase 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, latch-
ing 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%.

According to the connection of the power
supply to the terminals B1-A2 or B2-A2 **two
different levels of settings** can be selected.

Functions F with connection of the power supply to B1-A2

(Standby loss 0.02-0.4 W)

- RV** = off delay
- AV** = operate delay
- TI** = clock generator starting with impulse
- TP** = clock generator starting with pause
- IA** = impulse controlled pickup delay
(e.g. automatic door opener)

EW = fleeting NO contact

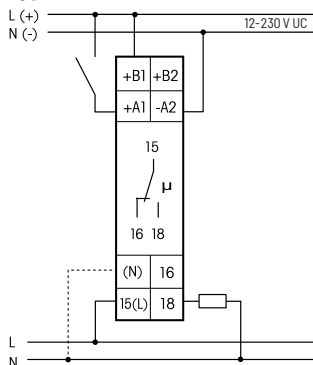
AW = fleeting NC contact

ARV = operate and release delay

ON = permanent ON

OFF = permanent OFF

Typical connection



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

Functions (F) with connection of the power supply to B2-A2

(Standby loss 0.02-0.6 watt))

SRV = release-delay impulse switch

ER = relay

EAW = fleeting NO contact and fleeting
NC contact

ES = impulse switch

IF = pulse shaper

ARV+ = additive operate and release delay

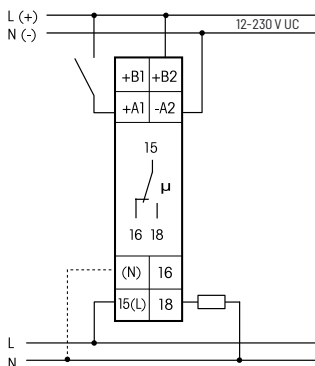
ESV = impulse switch with release delay
and switch-off early- warning
function

AV+ = additive operate delay

ON = permanent ON

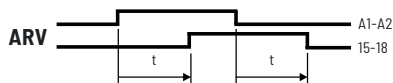
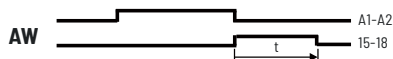
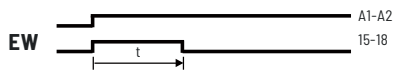
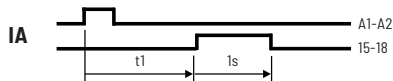
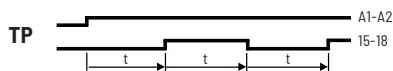
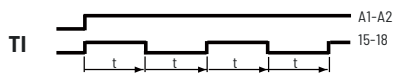
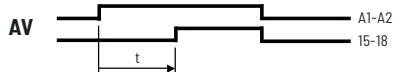
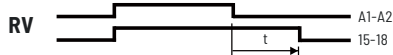
OFF = permanent OFF

Typical connection



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

Description of functions

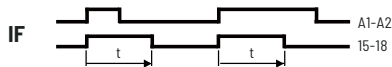


SRV = With control impulses from 50 ms the make contact switches to and fro. In the contact position 15-18, the device switches automatically to the rest position 15-16 on delay time-out.

ER = As long as the control contact is closed the make contact reverts from 15-16 to 15-18.



ES = With control impulses from 50ms the make contact switches to and fro.



ARV+ = Same function as ARV, but after an interruption of the operate delay the elapsed time is stored.

ESV = Function like SRV. Additionally with switch-off early warning: starting approx. 30 seconds before the timer expires, the lighting flickers 3 times at increasingly shorter intervals. The delay time is restarted with a control pulse from the first switch-off warning.

AV+ = Function same as AV. However, after an interruption the elapsed time is stored.

Technical data

Supply voltage and control voltage UC 12-230 V

Rated switching capacity 10 A/250 V AC

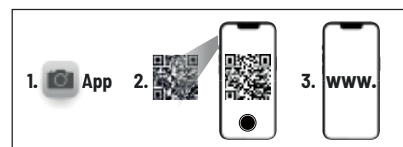


The strain relief clamps of the terminals must be closed, that means the screws must be tightened for testing the function of the device. The terminals are open ex works.

Manuals and documents in further languages:



<https://eltako.com/redirect/MFZ12DX-UC>



Must be kept for later use!

We recommend the housing for operating instructions GBA14.

ELTAKO GmbH

D-70736 Fellbach

Technical Support English:

+49 711 943 500 25

technical-support@eltako.de

eltako.com

09/2024 Subject to change without notice.