



23 001 004 - 1



Digital settable multifunction time relay

MFZ12DDX-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 2000 W*. Standby loss 0.05-0.5 watt only.

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

With the Eltako Duplex technology the normally potential-free contacts can still switch in zero passage when switching 230 V AC 50 Hz 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.

Both functions and times are entered at the touch of a key and indicated digitally on an LC display. Only two keys are required for this purpose.

When setting the time all values can be entered within preset time ranges (0.1 to 9.9 or 1 to 99 seconds, minutes or hours).

The longest possible setting is 99 hours. 600 settings are possible. The time setting is continuously displayed digitally.

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.

Functions

RV = off delay

AV = operate delay

AV+ = operate delay additive

TI = clock generator starting with impulse

TP = clock generator starting with pause

IA = impulse controlled pickup delay (e.g. automatic door opener)

IF = pulse shaper

EW = fleeting NO contact

AW = fleeting NC contact

EAW = fleeting NO contact and fleeting NC contact

ARV = operate and release delay

ARV+ = operate and release delay additive

ES = impulse switch

SRV = release-delay impulse switch

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

ER = relay

ON = permanent ON

OFF = permanent OFF

With TI, TP, IA, EAW, ARV and ARV+ functions, a different second time can be entered also with different time ranges.

Setting the times and functions:

The LCD component to be changed is selected by pressing the MODE key. The component accessed flashes. Press the SET key to change the component accessed. This may be the function, the time ranges, time T1 or time T2 (on TI, TP, IA, EAW, ARV and ARV+ only). Pressing the MODE key terminates each input.

Once the time has been set with MODE, no more components are flashing. The timing relay is now ready to operate. Press the MODE key again to restart the input cycle. All the entered parameters are retained if they are not changed using SET. 25 sec. after the last operation and if the component still flashes the input cycle is automatically terminated and the previously made changes lapse.

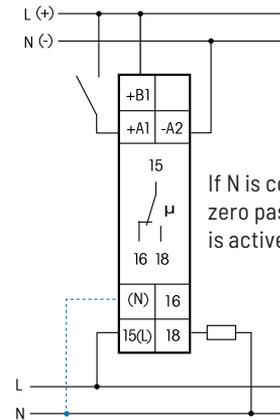
Functions of the LC display:

If the ON or OFF function was selected, no time is displayed, only ON and OFF and a contact symbol in the correct position. On all other functions, the set time, the function code and the contact symbol are shown in the correct position (open or closed). The clock symbol flashes while the set time is elapsing and the remaining time is shown.

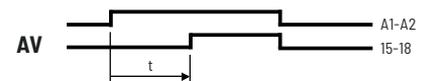
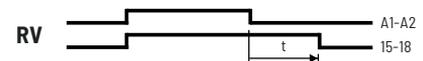
Safety in the event of a power failure:

The set parameters are stored in an EEPROM and are therefore immediately available again when the power supply is restored after a power failure.

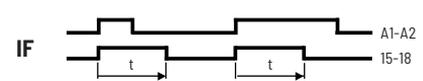
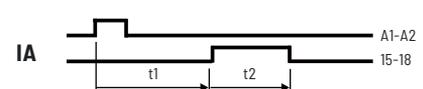
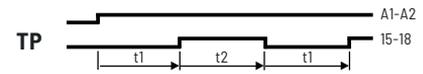
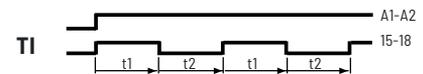
Typical connection

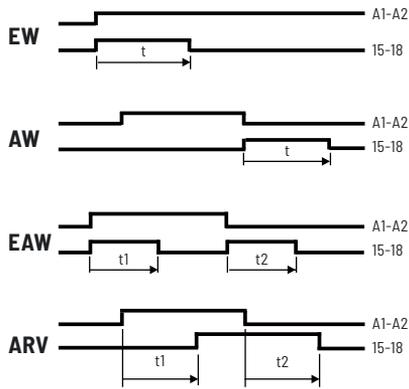


Description of functions



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





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

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

SRV = With control impulses from 50ms 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.

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.

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

* 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%.

Program flow chart MFZ12DDX-UC:



Technical data

Supply voltage and control voltage UC	12..230 V
Rated switching capacity	10 A/250 V AC

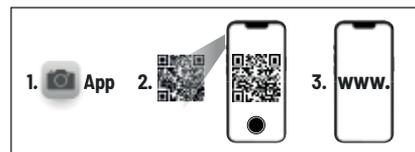


The strain relief clamps of the terminals must be closed, that means the screws must be tightened for testing the function of the device. The terminals are open ex works.

Manuals and documents in further languages:



<https://eltako.com/redirect/MFZ12DDX-UC>



Must be kept for later use!

We recommend the housing for operating instructions GBA14.

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