Manuals+ — User Manuals Simplified.

Eltako MFZ12DBT-UC Digital Settable Multifunction Time Relay with Display and Bluetooth Instruction Manual

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Contents

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Only skilled electricians may install this electrical equipment otherwise there is the risk of fi re 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%.
Eltako Connect app download:

Digital settable multifunction time relay with display and Bluetooth with Eltako Connect app. With 18 functions. 1 CO contact potential free 10 A/250 V AC. 230 V LED lamps up to 200 W, incandescent lamps 2000 W*. With display lighting. Standby loss 0.1-0.3 watt only. Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide, 58 mm deep. With the patented Eltako Duplex technology (DX) the normally potential-free contacts can still switch in zero passage when switching 230 V AC 50 Hz and therefore drastically reduce wear. Simply con- nect 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..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 biostable 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 synchronization 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.

The time relay is set either via Bluetooth with the app or with the MODE and SET but- tons, a button lock is possible. The display lighting is switched on by pressing MODE or SET for the first time.

20 seconds after you last press MODE or SET, the program returns automatically to normal display and the display illumination goes off.

Connect the time relay to the app: Press SET, the display shows BLE (Bluetooth) and the ID of the time relay. The connection to the app can now be established (delivery state PIN 123123). Scan the QR code on the operating instructions, the app guides you through the learning process. After the connection to the app has been established, BLE+ appears in the display. The MODE and SET buttons are now locked. After 20 minutes without interacting with the time relay, the connection is automatically disconnected.

Change PIN: The PIN for the Bluetooth connection can be changed in the app under the Device PIN entry.

Bluetooth reset (delete any changed PIN): The connection to the app must be disconnected. Press MODE and SET simultaneously for 2 seconds, RES fl ashes in the display. Now press SET for 2 seconds, bleb appears in the display. If you confirm with SET, the BLE reset is carried out, the PIN is deleted and the delivery status is restored.

Set the time relay with the MODE and SET buttons: Pressing the MODE button selects the LCD element to be changed. The element currently being accessed fl ashes. Pressing the SET button changes the element being accessed. This can be the function, time frame, time T1 or time T2 (TI, TP, IA, EAW, ARV and ARV+ only). Each entry is terminated with the MODE key. After setting the time with MODE, no element fl ashes anymore – the time relay is ready for operation. 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 fl ashes 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 dis played, 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 fl ashes 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.
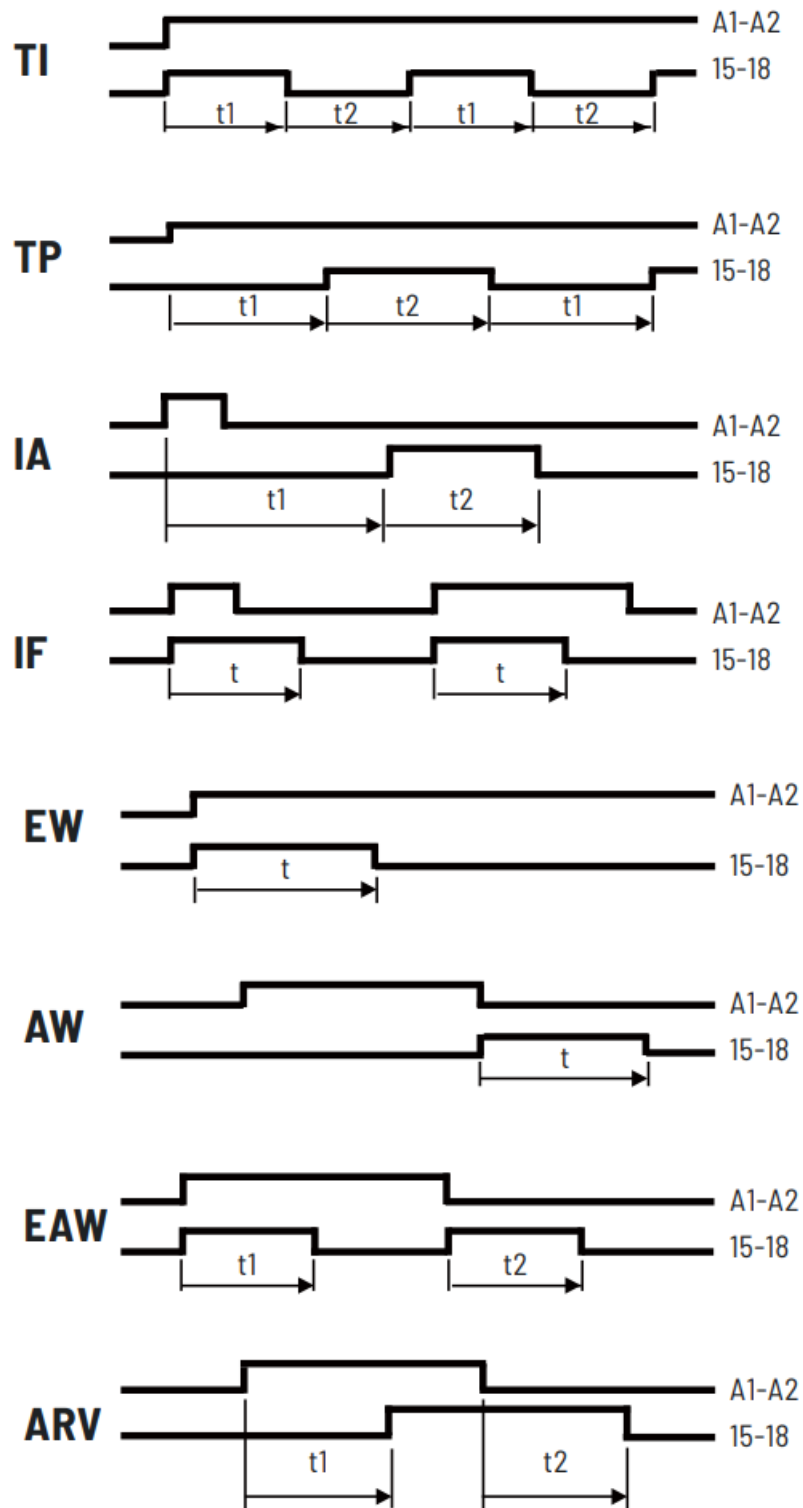
Typical connection
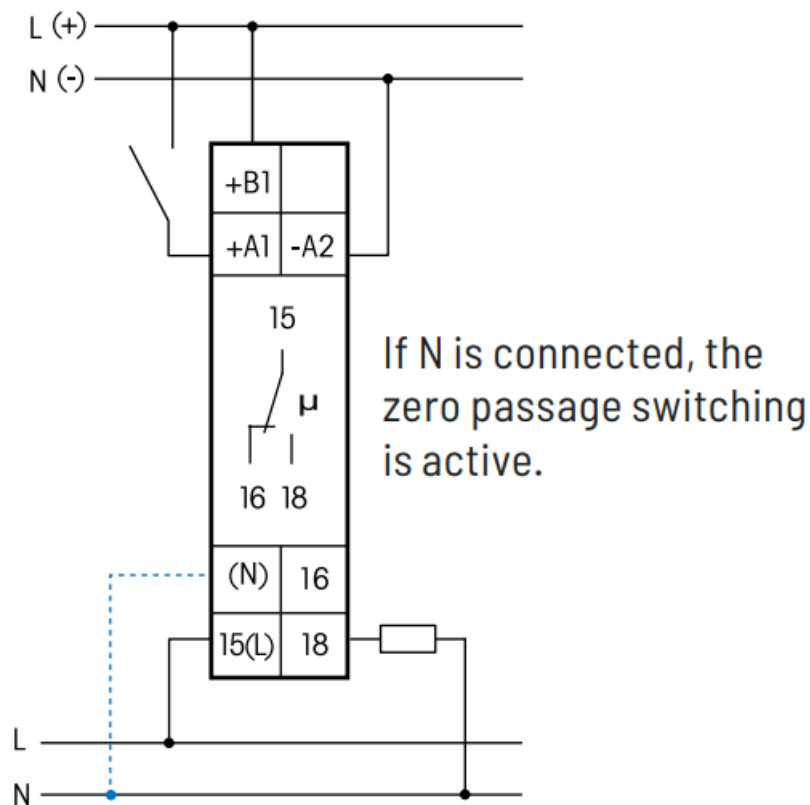
Description of functions

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

TI

A1-A2	
15-18	

t1 t2 t1 t2

TP

A1-A2
15-18

t1 t2 t1

IA

A1-A2
15-18

t1 t2

IF

A1-A2
15-18

t t

EW

A1-A2
15-18

t

AW

A1-A2
15-18

t

EAW

A1-A2
15-18

t1 t2

ARV

A1-A2
15-18

t1 t2

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 same as SRV. Additionally with switch-off early warning: approx. 30 sec. before time-out the lighting starts flickering 3 times at gradually shorter time intervals.

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%.

Technical data

Supply voltage and control voltage DC	12..230 V UC
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:

http://eltako.com/redirect/MFZ12DBT-UC

Frequency	2,4 GHz
Transmit power	max. 1 mW

Hereby, Eltako GmbH declares that the radio equipment type MFZ12DBT-UC is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity can be accessed via the QR code or the internet address under 'Documents'.
Must be kept for later use!
We recommend the housing for operating instructions GBA14.

Documents / Resources

[Eltako MFZ12DBT-UC Digital Settable Multifunction Time Relay with Display and Bluetooth](#) [pdf] Instruction Manual
MFZ12DBT-UC Digital Settable Multifunction Time Relay with Display and Bluetooth,
MFZ12DBT-UC, Digital Settable Multifunction Time Relay with Display and Bluetooth, Settable
Multifunction Time Relay with Display and Bluetooth, Multifunction Time Relay with Display and
Bluetooth, Display and Bluetooth, Bluetooth

References

- **[User Manual](#)**