Functions of the MFS and MBS series timetron® timers

Delay on operate (AV)

⊠ = Delay on operate

Supply   A1/A2
Control contact   Y1-Z2
SPDT contact 1   15/18-15/16
SPDT contact 2   25/28-25/26
SPDT contact 2   21/24
(instant. contact)   21/22
LED green
Control contact   X1-Z2
(Timer stop)

t = set delay time
ts = storing time; t = t1 + t2
t = t1 + t2
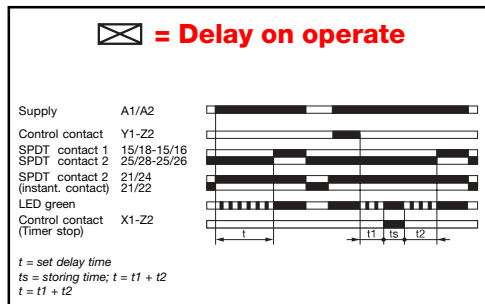
Timer is started when the supply voltage is applied, control contact **Y1/Z2** being open.
The green LED flashes while timing. The output relay is energized and the flashing light turns steady after the set delay time has elapsed.
If the supply is disconnected, the output relay resets and the elapsed time is reset.
Timing can also be started opening control contact Y1/Z2 with the supply being applied.
If the control contact Y1/Z2 closes after the supply voltage has been applied, all the internal functions are reset.
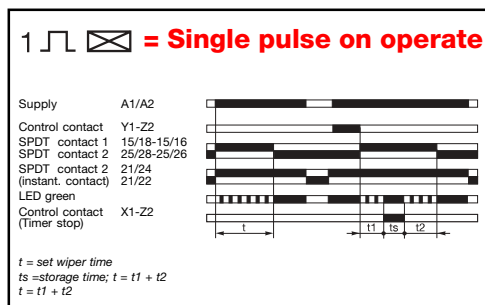By closing the control contact **X1/Z2,** the timer can be stopped. The elapsed time is stored. Timing continues by opening the contact. This can be repeated as often as required.

By setting the slide switch to position Inst., the 2nd SPDT contact is operated without delay when the supply voltage is disconnected.
Both SPDT contacts reset if the supply is disconnected.
By connecting a remote potentiometer at the **Z1/Z2** terminals, the time can be set externally. When connecting an external potentiometer, the internal potentiometer is automatically disabled.
This function is found in the units **MFS, MBS** and **ERS**.

Single pulse on operate (EW)

1 ⊓ ⊠ = Single pulse on operate

Supply   A1/A2
Control contact   Y1-Z2
SPDT contact 1   15/18-15/16
SPDT contact 2   25/28-25/26
SPDT contact 2   21/24
(instant. contact)   21/22
LED green
Control contact   X1-Z2
(Timer stop)

t = set wiper time
ts =storage time; t = t1 + t2
t = t1 + t2

The output relay is energized without delay when the supply voltage is applied to the **A1** and **A2** terminals and is de-energized after the set pulse time has elapsed.
The green LED flashes while timing. The flashing light turns steady as soon as the set pulse time has elapsed. Timing can also be started by opening control contact **Y1/Z2** with the supply being applied.
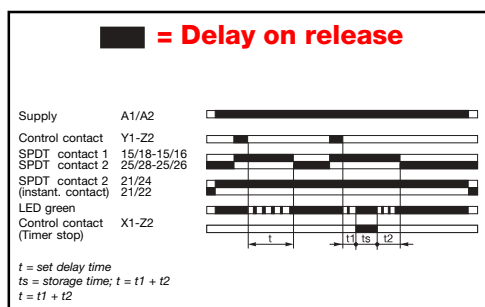By closing the control contact **X1/Z2** the timer can be stopped. The elapsed time is stored. Timing continues by opening the contact. This can be repeated as often as required.

By setting the slide switch to position Inst., the 2nd SPDT contact is operated without delay when the supply voltage is connected and the set delay time starts to elapse. The 2nd SPDT contact resets if the supply is disconnected.
By connecting a remote potentiometer at the **Z1/Z2** terminals, the time can be set externally. When connecting an external potentiometer, the internal potentiometer is automatically disabled.
This function is found in the units **MFS, MBS** and **VWS**.

Delay on release (RV)

■ = Delay on release

Supply   A1/A2
Control contact   Y1-Z2
SPDT contact 1   15/18-15/16
SPDT contact 2   25/28-25/26
SPDT contact 2   21/24
(instant. contact)   21/22
LED green
Control contact   X1-Z2
(Timer stop)

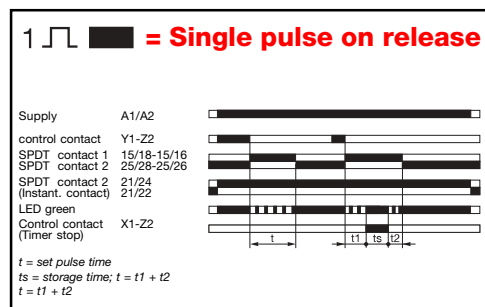t = set delay time
ts = storage time; t = t1 + t2
t = t1 + t2

The "RV" function needs a permanent supply at the **A1/A2** terminals for timing.
Timing is controlled by a potential-free contact at the Y1/Z2 terminals. If the contact is closed, the output relay is energized. If the contact is opened, the set time starts to elapse (control pulse length 20 ms min.). The green LED flashes while timing. The LED turns steady and the output relay is opened if the timer has elapsed.
By closing the control contact **X1/Z2** the timer can be stopped. The elapsed time is stored. Timing continues by opening the contact. This can be repeated as often as required.

By connecting a remote potentiometer at the **Z1/Z2** terminals, the time can be set externally. When connecting an external potentiometer, the internal potentiometer is automatically disabled.
This function is found in the units **MFS, MBS, AHS** and **APS**.

Single pulse on release (AW)

1 ⊓ ■ = Single pulse on release

Supply   A1/A2
control contact   Y1-Z2
SPDT contact 1   15/18-15/16
SPDT contact 2   25/28-25/26
SPDT contact 2   21/24
(instant. contact)   21/22
LED green
Control contact   X1-Z2
(Timer stop)

t = set pulse time
ts = storage time; t = t1 + t2
t = t1 + t2

The supply voltage must be applied continuously. By opening control contact **Y1/Z2** the output relay is energized immediately and timing starts. The green LED flashes while timing. The flashing light turns steady and the output relay resets after the set pulse time has elapsed.
Timing can be stopped by closing control contact **X1/Z2**. The elapsed time is stored. Timing continues by opening the contact.
This function can be repeated as often as required.
If the slide switch is set to Inst. position, the 2nd SPDT contact is energized immediately.

When disconnecting the supply, it will be de-energized.
By connecting a remote potentiometer at the **Z1/Z2** terminals the time can be set externally. When connecting an external potentiometer the built-in one is automatically disabled.
This function is found in the units **MFS, MBS** and **AWS**.