Functions of the MFS and MBS series timetron® timers

Flasher, starting with "OFF" (Bp)

⊓⊔ ▬▬ **= Flasher, starting with "OFF"**

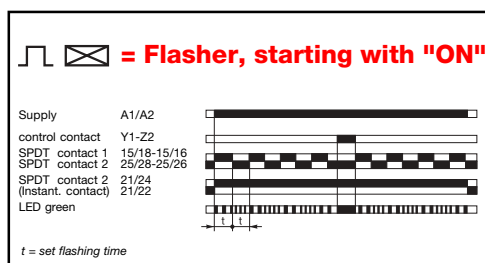|	
Supply	A1/A2
control contact	Y1-Z2
SPDT contact 1	15/18-15/16
SPDT contact 2	25/28-25/26
SPDT contact 2 (Instant. contact)	21/24 21/22
LED green	

t = set flashing time
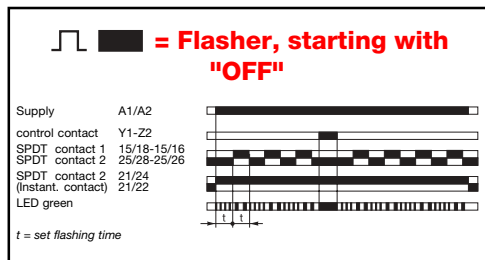
After applying the supply power to the **A1** and **A2** terminals, the timer will start to pulse in a symmetrical OFF/ON cycle. This cycle will be displayed by the flashing green LED which flashes twice as fast in the OFF cycle.

When closing the control contact **Y1/Z2** while supply voltage is applied, the output relay will be de-energized. By opening the control contact again the relay will start to flash in the preset cycle.

If the slide switch is set to the Inst. position, the 2nd SPDT contact will be energized immediately after applying the supply. When disconnecting the supply it will be de-energized.
By connecting a remote potentiometer at the **Z1/Z2** terminals the timer can be set externally, the built-in potentiometer is automatically disabled. This function is found in the units **MFS, MBS** and **EBS**.

Flasher, starting with "ON" (Bi)

⊓⊔ ⊠ **= Flasher, starting with "ON"**

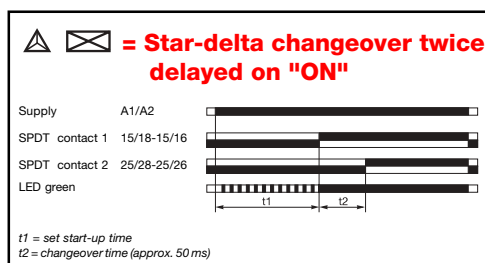|	
Supply	A1/A2
control contact	Y1-Z2
SPDT contact 1	15/18-15/16
SPDT contact 2	25/28-25/26
SPDT contact 2 (Instant. contact)	21/24 21/22
LED green	

t = set flashing time

After connecting the supply power to the **A1** and **A2,** the timer will start to pulse in a symmetrical OFF/ON cycle. This cycle will be displayed by the flashing green LED, which flashes twice as fast in the OFF cycle. When closing the control contact **Y1/Z2** while supply voltage is applied, the output relay will open.
When opening the control contact again, the relay will start to pulse again in the preset cycle.

If the slide switch is set to the Inst. position, the 2nd SPDT contact is energized immediately. This function is found in the units **MFS, MBS** and **EBS**.
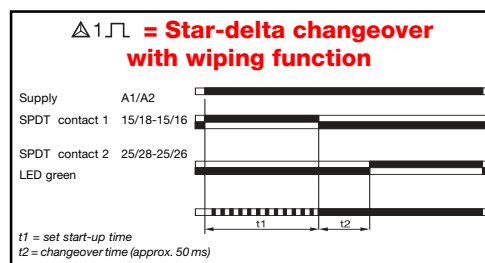
Star-delta changeover twice delayed on "ON" (YDAV)

⚠ ⊠ **= Star-delta changeover twice delayed on "ON"**

Supply	A1/A2
SPDT contact 1	15/18-15/16
SPDT contact 2	25/28-25/26
LED green	

t1 = set start-up time
t2 = changeover time (approx. 50 ms)

YDAV is designed especially for starting-up squirrel cage motors by a star-delta starter.
It uses two separate timing circuits: a variable timing circuit for the changeover from star to delta mode and a fixed timing circuit with 50 ms for the transit time from star contactor to delta contactor.

If the supply is applied to the **A1/A2** terminals, the first output relay will close after the preset time.
The second output relay will close after another 50 ms.
Timing is displayed by the flashing green LED. This function is found in the units **MFS, MBS** and **YDAV.**

Star-delta changeover with wiper function (YDEW)

⚠1⊓ **= Star-delta changeover with wiping function**

Supply	A1/A2
SPDT contact 1	15/18-15/16
SPDT contact 2	25/28-25/26
LED green	

t1 = set start-up time
t2 = changeover time (approx. 50 ms)

YDEW is designed especially for starting-up squirrel cage motors by a star-delta starter.
It uses two separate timing circuits: a variable timing circuit for the changeover from star to delta mode and a fixed timing circuit with 50 ms for the transit time from star contactor to delta contactor. If the supply is applied to the **A1/A2** terminals, the first output relay will close.
After the first output relay has opened, the second timer with 50 ms will start to elapse.

After this timer has elapsed, the second output relay will close and stays closed until a supply is disconnected from the unit.
Timing is displayed by the flashing green LED. This function is found in the units **MFS, MBS** and **YDEW**.