

# TT70

- MULTISCALE AND MULTIFUNCTION TIMER
- UP TO 2 OUTPUTS
- WITH MEMORY



## FEATURES

DISPLAY	TT70
Single	3-digit, 7-segment LED and LED bar for time indication
OUTPUTS	
Up to 2	OUT1 and OUT2: Relay 16A AC1
FUNCTIONAL	
Programmable functions	4 different schemes with various functions each (see FUNCTIONS section on the next page)
Programmable full scale times	Base 3: 30s - 3m - 30m - 30h Base 6: 6s - 6m - 60m - 60h Base 120: 12s - 120s - 120m - 12h
Full scale accuracy	± 1%
Counting mode	UP (increase) or DOWN (decrease)
Display resolution	According to the scale used: Hours - Minutes - Seconds
Buzzer	On board
Programming	Using the side minidip it is possible to: <ul style="list-style-type: none"> <li>- choose the status of the relays with the knob at OFF or 000 according to the function;</li> <li>- choose one of the 4 full scale times;</li> <li>- choose the function;</li> <li>- enable the memory;</li> <li>- enable the buzzer at the end of the time.</li> </ul>
GENERAL	
Power supply	24 Vac/Vdc, 115 Vac, 230 Vac
Power consumption	24 Vdc -> 2.5 W / 24 Vac -> 3.7 VA approx. 115 Vac -> 13 VA 230 Vac -> 25.5 VA
Dimensions / Weight	72 x 72 mm - depth 91.4 mm / 160 g approx.
Connections	Undecal socket (diagram 166) or octal socket (diagrams 857, 602A, 703)
Mounting	Flush in panel 60 x 65 mm
Front protection	IP 54
Operating / storage temperature	-10... 55°C (14... 131°F) / -25... 65°C (-13... 149°F)
Ambient / operating humidity	Below 95 RH% non-condensing / 30 to 95 RH% non-condensing
Compliance	CE

## HOW TO ORDER

To compose the part number, pls. choose one of the option for each variable

TT70	CODE
<b>ELECTRIC DIAGRAM</b>	
Diagram 166 (8 functions)	66
Diagram 857 (2 functions)	57
Diagram 602A (3 functions)	2A
Diagram 703 (3 functions)	03
<b>TIME BASE</b>	
30s - 3m - 30m - 30 h	03B
6s - 6m - 60m - 60h	06B
12s - 120s - 120m - 12h	12B
<b>POWER SUPPLY</b>	
24 Vac/Vdc	24
115 Vac	A5
230 Vac	A3

## FUNCTIONS

	CODE
<b>DIAGRAM 166</b>	
Closing the START command, relay 1 (AR1) is energized, the count decreases and at the end of the time relay 2 (AR2) is energized. Opening the START command, the count stops, otherwise the count decreases again. Opening the RESET command, at any time, resets the count and turns off the relays. When the knob is in the OFF position, if the time-zero relay is active, AR1 is energized, in this condition the RESET does not deactivate the relay. Closing the STOP command, the count stops.	S
Closing the START command, the count decreases and at the end of the time relay 1 (AR1) and relay 2 (AR2) are energized. Opening the START command, the count stops, otherwise the count decreases again. Opening the RESET command, at any time, reset the count and turns off the relays. When the knob is in the OFF position, if the time-zero relay is active, AR1 is energized, in this condition the RESET does not deactivate the relay. Closing the STOP command the counting stops.	U
Closing the START command, relay 1 (AR1) is energized, the count decreases and, after a good time, relay 2 (AR2) is energized for 2 seconds. Opening the START command, the count stops, otherwise the count decreases again. Opening the RESET command, at any time, resets the count and turns off the relays. When the knob is in the OFF position, if the time-zero in this condition the RESET does not deactivate the relay. Closing the STOP command the counting stops.	T
Closing the START command, the count decreases and at the end of the time relay 1 (AR1) and relay 2 (AR2) are energized for 2 seconds. Opening the START command, the count stops, otherwise the count decreases again. Opening the RESET command, at any time, resets the count and turns off the relays. When the knob is in the OFF position, if the time-zero relay is active, AR1 is energized, in this condition the RESET does not deactivate the relay. Closing the STOP command the counting stops.	V
Closing the START command, relay 1 (AR1) is energized, the count decreases and at the end of the time relay 2 (AR2) is energized. Opening the START command during the count, time stops and restarts when the START command is closed again. At the end of the time, by opening the START command, the relays are deactivated after 0,5 sec. Opening the RESET command, at any time, resets the count and turns off the relays. When the knob is in the OFF position, if the time-zero relay is active both relays are energized, in this condition the RESET does not deactivate the relays. Closing the STOP command the counting stops.	KE
Powering the timer, relay 1 (AR1) is instantly energized. Closing the START command, the count decreases and relay 2 (AR2) is energized at the end of the time. In this condition, it is necessary to press RESET to remove the power supply to restart a new cycle. Opening the START command, during the count, the count stops and if closed again the count decreases again.	AM
Closing the RESET command, at any time, resets the count and turns off the relays. When the knob is in the OFF position, if the time-zero relay is active both relays are energized, in this condition the RESET does not deactivate the relays. Closing the STOP command the counting stops.	A
Powering the timer, relay 1 (AR1) is instantly energized. Closing the START command, the count decreases and at the end of the time relay 2 (AR2) is energized. The STARTs during the count are not considered. Closing the RESET command, at any time, resets the count and turns off the relays. Closing the STOP command the counting stops.	C

	CODE
<b>DIAGRAM 857</b>	
By powering the timer, relay 1 (AR1) is instantly energized and the count decreases and at the end of the time relay 2 (AR2) is energized. To start a new cycle, the timer must be switched off and on again.	01
Powering the timer, both relays are instantly energized, the count decreases and at the end of the time both relays de-energized. To start a new cycle, the timer must be switched off and on once again.	02
<b>DIAGRAM 602A</b>	
Powering the timer, relay 1 (AR1) is instantly energized. Closing the START command, the count decreases and relay 2 (AR2) is energized at the end of the time. Opening the START command, during the count, the count stops and if closed again the count decreases again. Disconnect and restore power to resume a new cycle.	AM
Powering the timer, relay 1 (AR1) is instantly energized. Closing the START command, the count decreases and at the end of the time relay 2 (AR2) is energized. The STARTs during the count are not considered.	A
Closing the START command energizes both relays, the count decreases and at the end of the time both relays are de-energized. The STARTs during the count are not considered.	C
<b>DIAGRAM 703</b>	
Closing the START command the count decreases and at the end of the time relay 1 (AR1) and relay 2 (AR2) are energized. Opening the START command, during the count, the count stops and if closed again the count decreases again. Disconnect and restore power to resume a new cycle.	CM
Closing the START command, the count decreases and at the end of the time both relays are de-energized. During the count the STARTs are not considered.	B
Closing the START command energizes both relays, the count decreases and at the end of the time relay 1 (AR1) and relay 2 (AR2) are de-energized. The STARTs during the count are not considered.	C

## CONNECTIONS

TT70

## DIMENSIONS

TT70
The dimensions are expressed in mm