



Timer TE48S-S

3 YEAR WARRANTY

The timer is manufactured under the most modern technology CMOS with a quartz minicontroller which makes it precise, qualitative and reliable. The timer is modulated to be mounted on the front panel of boards. The direction of operation is adjusted – direct or reverse. It represents two separate operating channels, each of which can operate independently with time range adjustment from 1 second to 99 minutes. Possibility for correction of the set values during operation. First, select the time unit (seconds or minutes) and then set the time. Depending on the timer coupling, it can be used as a cyclic timer relay, i.e. it initially counts the first time set, then counts the second time set, then starts counting over the first time again, etc. until a stop signal is received. In another mode, the timer can count the set time and stop until a new signal is received to count the next cycle. Indication on LCD display with high resolution and showing the time in hours, minutes and seconds.

Type	Packing/Box (pcs)	Catalogue number
TE48S-S	84	50105

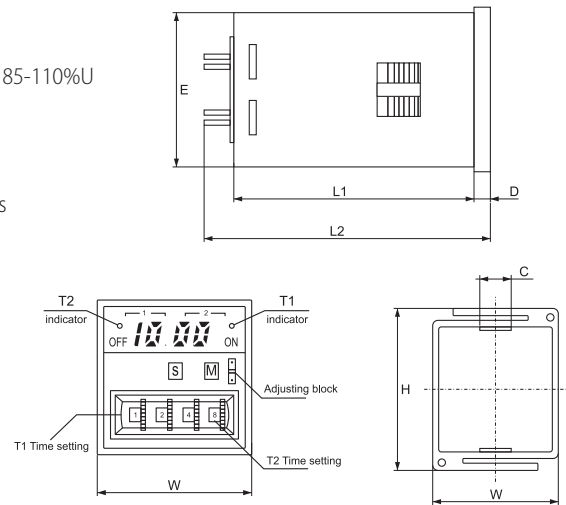
Dimensions (mm)			
D	E	L1	L2
5	44.8	74	95
C	H	W	
15	58	48	

Technical data:

- Power supply voltage: 230V; 50Hz
- Admissible variation of the input voltage: 85-110%U
- Possibility for choice of operating range:
 - from 1 to 99 seconds
 - from 1 minute to 99 minutes
- Error: <math> <0.01\% \pm 0.05s </math>
- Minimal duration of the input pulse: 20ms
- Power consumption: <math> <5VA </math>
- Electrical wear resistance: 10^7 cycles
- Mechanical wear resistance: 10^5 cycles
- Operating temperature: $-10 \div +65^{\circ}C$
- Temperature of storage: up to $70^{\circ}C$
- Humidity: 45 – 85%RH
- Commutating capacity at load: 3A
- Weight: 300g

Mounting:

- on the front panel of the board



Timer TE 19M

3 YEAR WARRANTY

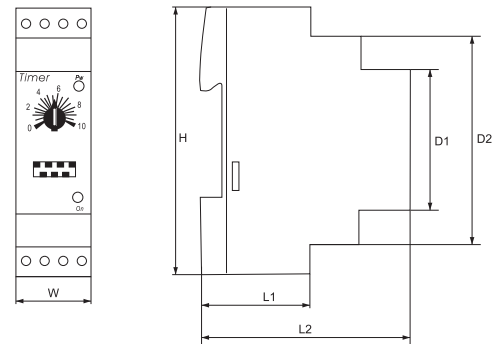
Timer is developed using modern technologies from quality and reliable materials and is adapted for mounting on DIN rail. It is used for providing time intervals in eight time programs, which are assigned by combinations of the keys. There is an option for it to operate in time ranges (assigned by the keys K4, K5, K6): seconds, minutes or hours depending on the necessity of the user. Power contact up to 3A.

Technical characteristics:

- Input voltage: 230V; 50Hz
- Range of setting: from 0.6 sec to 100 hours
- Accuracy of setting: $\pm 5\%$ from the whole scale
- Time for nullifying: <math> <0.5 </math> seconds
- Consumed capacity: <math> <5VA </math>
- Electrical endurance (number of cycles): 100 000 cycles
- Mechanical endurance (number of cycles): 1 000 000 cycles
- Operation temperature: $-10 \div +65^{\circ}C$
- Humidity: 45 - 85%RH
- Computing option: up to 5A
- Indication:
 - on power supply: red indication
 - on operational output relay: green indication
- Weight: 150 gr.
- Time functions: according to the programming guide

Mounting method:

- DIN rail



Type	Packing/Box (pcs)	Catalogue number
TE 19M	1 / 200	50102M

Dimensions (mm)					
H	W	H1	H2	L1	L2
85	24	45	60	34	66