

MOTOR TIMER, TYPE TM

The Fuji Electric motor timer Type RsF 130 is very popular with all users because of its ultra-compactness, high performance and efficiency, long life span and low cost. In order to improve the equipment performance even further, the internal units and mechanism have been changed, centering upon the gear unit. The resultant new models, TM-10 (10 seconds) and TM-20 (20 seconds), are now available on the market.

The Type TM timer, in particular, has been simplified as much as possible from the conventional timer. A 16-pole hysteresis motor, a Fuji special micro-switch and resin moulded gear of oilless type and minimum wear used for the most vital parts of the timer make it truly a new type of motor timer. The maximum time limits available are 10 and 20 seconds, with the time adjusting scale of double type, 50 and 60 cps, suitable for a wide range of applications.

Features

1) Ultra-compactness

It is light and compact in design, requiring less installation space than an ordinary name card (55 × 90 mm) and weighing only 270 g.

2) High precision

The repeating precision is as good as within ± 0.1 sec for high accuracy.

3) Long life span

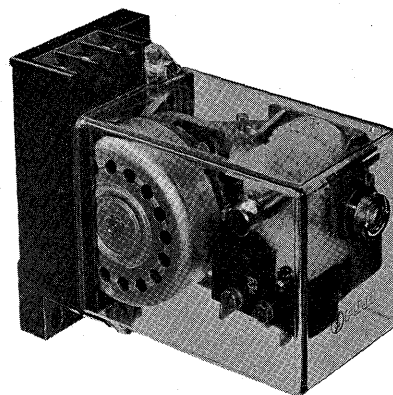
The reduction gears are all made of synthetic resin, thus minimizing possible wear of moving parts. For the contact, a Fuji microswitch is used, so that the equipment is superior in both performance and life span.

4) Accurate operation

With the high-performance Fuji clutchequipped hysteresis motor used, the construction of equipment is sturdy and the operation is completely safe and accurate.

5) Simple control of time-limit setting

This requires only turning the dial located at the front side of the cover by a screw driver.



6) Minimum power consumption

The power consumption is very low, less than 4.5 w.

7) 50 and 60 cps commonly used

The operating power supply frequency may be either 50 or 60 cps, so that there need be no concern over local differences.

8) Elegant external appearance

Both the case and cover are made of synthetic resin for elegant style. Rubber packing is applied to the joined portion of the case and cover and also to the dial adjusting scale portion, serving to protect the equipment from dust penetration.

Model and Time Regulation

Model	TM-10	TM-20
Time Regulation	(50 cps 1 to 12 sec) (60 cps 1 to 10 sec)	(50 cps 2 to 24 sec) (60 cps 2 to 20 sec)
Contact	1C (changeover contact)	
Rated Voltage and Frequency	Ac 100 v 50/60 cps 110 v 60 cps or Ac 200 v 50/60 cps 220 v 60 cps	

Switching Capacity and Continuous Current

Continuous Current			5 amp
Rated Making Capacity			6 amp
Rated Breaking Capacity	Ac $\cos\phi=0.3\sim 1$	Voltage 110 v 220 v	Capacity 110 va 220 va
	Dc	Non-inductive Load Voltage 110 v 220 v	Capacity 22 w 22 w
		Inductive Load Voltage 110 v 220 v	Capacity 15 w 15 w

Specifications and Performance

Repeating accuracy: Within ± 0.1 sec
Restoration time: Within 10% of set time limit
Operation voltage: Operation in the range of 85 to 110% of the rated voltage
Power consumption: Approx. 4.5 w (6.5 va)
Frequency of operations: 1800 operations per hour
Electrical life span: } More than 500,000 times
Mechanical life span: }



CSA-APPROVED COOLANT OIL PUMPS

Existing at present for the Fuji Electric CSA-approved coolant oil pumps are Models aWOP-7A and aDWP-7A (output of both models being 125w) which are now widely used with satisfactory results. Introduced below, however, are four additional pump types. Models WOP-7B and DWP-7B (output 150w) models WOP-8D and DWP-8D (output 250 w) which have been approved according to the CSA requirements, dated Aug. 16, 1966.

These oil pumps have been manufactured for many years, based on Fuji Electric's rich experience and superior techniques. They are extensively used in business circles for the circulation of oil and water of machinery, with satisfactory results. Since these types recently approved by the CSA have outputs from 150 w to 250 w, the customer can select from a wide range of types with respect to oil delivery rate and head. It is expected that these types will be exported in large quantities to America and Canada for their machinery.

Features

- 1) External appearance fully harmonized with newly designed machinery.

The pumps have been made modern in design in order to fully harmonize with the ever-progressing machinery. Its smart appearance never detracts from but enhances the appearance of the machinery with which it is used.

- 2) Totally enclosed type minimizing trouble occurrence

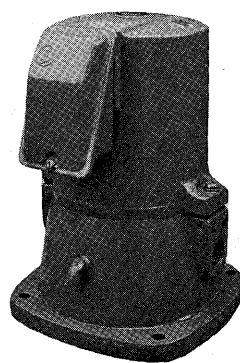
Since the motor and the pump chamber are both compactly accommodated, and both totally enclosed in construction, there need be no concern over penetration of liquid and dust into the equipment.

- 3) Mechanical seal is used for bearing system

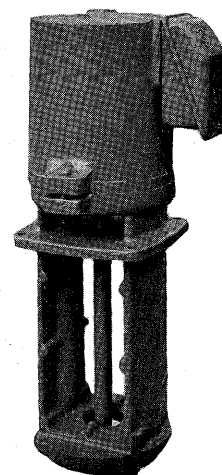
For the air tightness of the pump chamber, mechanical seal is used to provide much longer life span than the oil seal and gland packing regarding

Use

For star delta motor starting, such machinery as press machines, injection moulding machines, high frequency baking devices, program control, communication equipment, automatic cleaners, automatic mixers, auxiliary circuit for time control, etc.



Self-priming type



Immersion type

possible mechanical loss and wear.

- 4) Quiet operation for high efficiency

Since an impeller of high efficiency, fully balanced with a high-quality precision-made common shaft, is used for the rotating shaft, vibration and noise are minimized for highly efficient operation.

- 5) Transparent cap permitting observation of rotating direction at a glance.

A transparent screw cap is used for the motor head portion, permitting easy observation and confirmation of the rotating direction.

- 6) Operation available at optimum condition

There are self-priming and immersion types, with outputs widely ranging to a maximum of 250 w, so that the optimum type of equipment can be selected for any purpose.

- 7) Convenient terminal portion

- (1) A 9-terminal type can be manufactured, selectable 220 and 440v, fully meeting the power voltage requirements of America and Canada. For the lead-out wire, the insulated cable used has been approved according to CSA requirements.

- (2) The terminal box is constructed to permit free change of facing direction over 90 degrees to either the left or right, so that it may be installed inside compact machinery for convenience.