

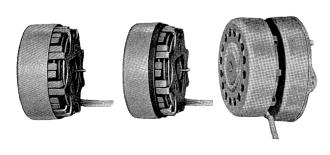
TIMING MOTOR, MODEL FH

Development and application of the numerous types of automatic and time control devices has been remarkable in recent years. The constant-speed hysteresis motor is most suitable and indispensable for use in these devices. The newly developed Fuji Timing Motor (trade name of small synchronous hysteresis motor) is smartly designed, compact, light and highly efficient. It is a sixteen-pole motor which operates quietly with long life and faultless performance truly demonstrating Fuji's rich experience in motor manufacturing. Three models are available to meet practically all load requirements; the motor itself, the motor with a clutch mechanism, and the motor with a reduction mechanism. Each can be used without modification.

Features

1) Constant speed

Since this is a synchronous motor, with a constant



Model FH (Motor unit)

Model FHH with clutch

Model FHG with gear

frequency power supply, the motor will rotate at constant speed regardless of the voltage and load.

2) Powerful torque and uniform rotation

Special magnetic steel in the rotor's magnetic part—the vital part of a hysteresis motor.

Special heat treatment under rigid quality control assures powerful torque and uniform rotation of the rotor, the most vital part of a hysteresis motor.

3) Minimum vibration and noise

This multi-pole (16) motor rotates at a low speed. Each part has been carefully processed and its accuracy of manufacture is fully controlled, reducing vibration and noise to minimum and eliminating variation of quality.

4) Long life

Especially selected insulating material, superior both electrically and thermally, is used throughout. Consequently, this superior motor insulation assures long life. The rotor will not burn even though it should become locked during operation.

5) Compact and light

The design is completely functional: compact, light and easily adaptable to all types of equipment.

6) Timing motor with clutch mechanism

In the clutch mechanism, the rotor is attracted or released magnetically with a swift and sure action. The moving distance of the rotor is approximately 2 mm.

7) Timing motor with gear (precision) reduction mechanism

Precision made reduction mechanism practically eliminates gear damage and noise generation. It also has excellent wear-resistant characteristics.

Applications

Motor Model	Application Examples		
Fuji Timing Motor (Motor Unit)	Clocks (for time indication of electric clocks and time limit action of time meters)		
	Timers (for control of washing cycles of electric washers, defrosting of electric refrigerators, for timers of electric cookers)		
	Control devices, transmission of copies or photographs, recording devices		
	Recording and reproducing devices, scientific and medical instruments		

Motor Model	Application Examples	
Fuji Timing Motor with Clutch	For motor timers other than listed above	
Fuji Timing Motor with Gears	Besides the uses listed above, it may be used in various other clock and timing device applications	

Specifications

Name	Fuji Timing Motor (Motor Unit)	Fuji Timing Motor with Clutch	Fuji Timing Motor with Gears
Model	FH 47	FHH 47	FHG 47
Rated Voltage	Ac 100 v, 200 v	Ac 100 v, 200 v	Ac 100 v, 200 v
Frequency	50 c/s, 60 c/s	50 c/s, 60 c/s	50 c/s, 60 c/s
Pole Number	16	16	16
Revolution	375 rpm (50 c/s) 450 rpm (60 c/s)	375 rpm (50 c/s) 450 rpm (60 c/s)	1 rpm, 1 rph
Rotating Direction	Clockwise as seen from shaft end	Counterclockwise as seen from shaft end	Counterclockwise as seen from shaft end
Power Consumption	Less than 4 w (w/o load)	Less than 5 w (w/o load)	Less than 4 w (w/o load)
Weight	85 g	105 g	165 g

(By I. Ichikawa, Standard Electric Machine and Apparatus Dept.)

MICRO SWITCH, MODEL FV10

Micro switch, model FV 10 is the sister product to model FZ 15 already introduced in our Fuji Electric Review Vol. 10 No. 3 1964. This new switch with its unique snap action device has been well received by its users. It features accuracy, durability, and an especially low price. In an average month more than a million switches are manufactured throughout Japan, more than half of which are FV 10 type. The FV 10 Micro Switch serves, with vitality and great dependability, both industrial machines and household appliances equally well.

Features

1) It is one third the size and weight of a standard FZ 15 model with no sacrifice in capacity or sturdy construction.

- 2) Unique snap action device—The moving spring always operates under a constant force with a minimum of vibration. Excessive force on the actuator will not affect the life of the switch.
- 3) Superior performance and durability—The Fuji Micro Switch FV 10 has a life expectancy of more than 1 million mechanical or 100,000 electrical activations, a rating that is double the JIS (Japan Industrial Standards) C 4505 minimum of 50,000 activations.
- 4) High speed operation—Making and breaking of large current electrical circuits is achieved in hundredths (or thousands) of a second by means of a remarkable bantam snap action device.
- 5) Even when the switch is operated in slow motion, accurate operation is guaranteed by this unique snap action device.