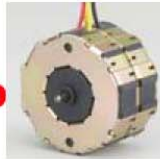


Motor Series **MTR4b**

Reversible Synchronous Motor



Application

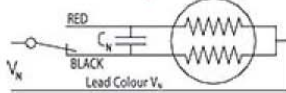
Valve Actuators, Light displays, Textile machinery, Medical equipment, Air conditioning & refrigeration, Dampers, Peristaltic Pumps, Dosing Pumps, Vending machines, CCTV Camera positioning, any positioning Application.

Design

MTR4b reversing synchronous motor is of the permanent magnet type with two stator windings, for single phase AC 50/60 Hz . Phase displacement of the excitation current is achieved by connecting a capacitor in series with one of the stator windings. The sense of rotation is determined by the resulting circular rotating field. Electrical reversal of the sense of rotation is effected by means of a single-pole changeover switch. The 12 pole rotor which has a steel shaft polished to a mirror-finish rotates in sintered bronze bearings.

Motor can be provided with Mounting plate / Screw clip for fixing.

Connection Diagram



Standard data

| | | |
|-------------------------------|---|--|
| Motor type | Reversible synchronous | |
| Ambient temperature operation | °C | -15...+55 |
| Ambient temperature storage | °C | -20...+100 |
| Thermal class | °C | 105 |
| Motor speed | r.p.m | 500 @ 50 Hz |
| Life Expectancy | 3 years in continuous operation | |
| Mounting | any position | |
| Standard motor voltage | V | 24,48,110,220 & 240(others on request) |
| HVT | 1.5 KV (motor voltage>40V) or 1.5 KV (motor voltage<40V); 30sec. | |
| Weight | gm | 200 |
| Rotor Stalling | Motor can be stopped when the voltage is applied, without being overheated. | |
| Rotor Shaft | Hardened steel, ground and polished. | |
| Bearings | Sintered bronze,self lubricating | |
| External Dimensions | dia. 52 x 28.5 mm max. | |

Technical Data

| | | | | | | |
|--|--------|-----------------------------|---------|----------|-----------|-----------|
| Rated Voltage V _N | V | 24 | 48 | 110 | 220 | 240 |
| Operation capacitor (50 Hz) C _N | µF/VAC | 10/50 | 2.2/100 | 0.39/250 | 0.1/400 | 0.1/400 |
| Operation capacitor (60 Hz) C _N | µF/VAC | 8.2/50 | 1.8/100 | 0.33/250 | 0.082/400 | 0.082/400 |
| Lead colour (V _N) | | Blue | Brown | White | Yellow | Yellow |
| Tolerance of voltage | % | -10...+15% of rated voltage | | | | |
| Duty Cycle | % | 100 | | | | |
| Rated Frequency | Hz | 50 | | | 60 | |
| Power output at rated voltage | W | 0.83 | | | 0.87 | |
| Speed | rpm | 500 | | | 600 | |
| Running torque at rated voltage | gm-cm | 160 | | | 150 | |
| Power consumption at rated voltage | W | 3.6 | | | 3.7 | |
| Detent torque | gm-cm | 75 | | | | |

Motor Drawing

