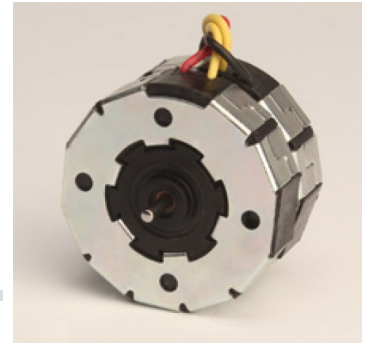




MTR3b



Reversible Synchronous Motor - 500 RPM

Design

MTR3b 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 parallel 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.

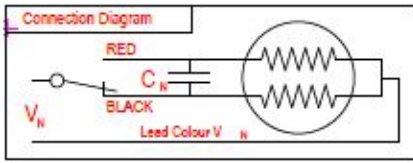
Standard Data

| Parameter | Value | Unit |
|-------------------------------|--|------|
| Motor type | Reversible synchronous | V |
| Ambient temperature operation | -15...+55 | °C |
| Ambient temperature storage | -20...+100 | °C |
| Thermal class | 105 | °C |
| Electrical Enclosure | IP | 40 |
| Connections | Flexible Leads 26 AWG, 200mm length; ends stripped 10 mm | |
| Sense of rotation | Indicated by lead colour (red-CW & black ACW) | |
| Life expectancy | 3 Years in continuous operation | |
| Mounting | any position | |
| HVT | As per standard IEC60034-1 | |
| Weight | 65 | g |
| Rotor stalling | Motor can be stopped when voltage is applied, without being overheated | |
| Rotor shaft | Hardened steel, ground and polished | |
| Bearings | Sintered bronze, self-lubricating | |
| External dimensions | dia.36x21.5 mm | |

Technical Data

| Parameter | Value | Unit |
|------------------------------------|--|--------|
| Standard Motor Voltages(VN) | 12, 24, 48, 110, 230* | V |
| Operation capacitor(50 Hz)Cn | 12V- 15/20 , 24V- 3.9/50, 48V 1.0/100, 110V- 0.22/200 | µF/VAC |
| Operation capacitor(60 Hz)Cn | 12V- 15/20 , 24V- 3.9/50, 48V- 1.0/100, 110V- 0.22/200 | µF/VAC |
| Lead colour (Vn) | 12V- Grey, 24V- Blue, 48V- Brown, 110V- White, 230V- White | |
| Tolerance of voltage | -10...+15% of rated Voltage | % |
| Duty cycle | 100 | % |
| Rated frequency | 50, 60 | Hz |
| Power output at rated voltage | 3.9, 0.45 | W |
| Speed | 500, 600 | Rpm |
| Running torque at rated voltage | 0.65, 0.6 | Ncm |
| Power consumption at rated voltage | 1.5 | W |
| Detent Torque | 0.25 | Ncm |

Connection Diagram



Dimensional Drawing

26AWG Leads length 200mm
10mm ends stripped

