



## MTR2b



### Reversible Synchronous Motor - 500 RPM

#### Design

MTR2b 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. The motor can be provided with the Mounting plate.

#### Features

MTR2b 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. The motor can be provided with the Mounting plate.

#### Application

Recorders, Instrumentation, Diamond machinery, Valve Actuators, Light displays, Medical equipment, Air conditioning & refrigeration, Dosing Pumps, Vending machines CCTV Camera positioning, any timing and positioning Application.

#### Options

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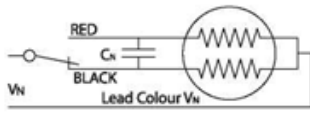
#### Standard Data

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 30AWG, 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	30	g
Rotor stalling	Motor can be stopped when voltage is applied, without being overheated	
Rotor shaft	Hardened steel, ground & polished	
Bearings	Sintered bronze, self lubricating	
External dimensions	dia 20.4 x 17 mm	

#### Technical Data

Parameter	Value	Unit
Standard Motor Voltages	12, 24	V
Operation capacitor (50 Hz) Cn at 12v	10/20	µFA/AC
Operation capacitor (50 Hz) Cn at 24v	2.2/40	µFA/AC
Operation capacitor (60 Hz) Cn at 12v	10/20	µFA/AC
Operation capacitor (60 Hz) Cn at 24v	2.2/40	µFA/AC
Lead colour (Vn) Gray (12v)	Grey	
Lead colour (Vn) Blue (24v)	Blue	
Tolerance of Voltage	-10...+15% of rated voltage	%
Duty Cycle	100	%
Rated Frequency	50, 60	Hz
Power output at rated voltage at (50Hz)	0.08	W
Power output at rated voltage at (60Hz)	0.085	W
Speed at (50Hz)	500	Rpm
Running Torque at rated voltage at (50Hz)	0.15	Ncm
Power Consumption at rated voltage at (50Hz)	1	W
Detent Torque at (50Hz)	0.12	Ncm
Speed at (60Hz)	600	Rpm
Power Consumption at rated voltage at (60Hz)	1	W
Detent Torque at (60Hz)		Ncm
Running Torque at rated voltage at (60Hz)	0.14	Ncm

## Connection Diagram



## Dimensional Drawing

