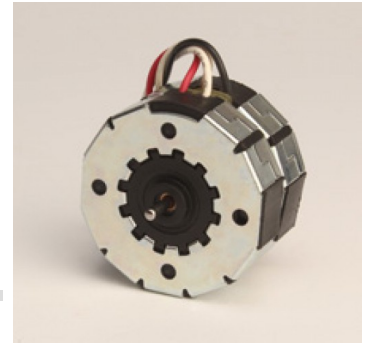




## MTR3a



### Reversible Synchronous Motor - 250 RPM

#### Design

MTR3a 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 24 pole rotor which has a steel shaft polished to a mirror-finish rotates in sintered bronze bearings. The motor can be provided with mounting plate/screw clip for fixing.

#### Application

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

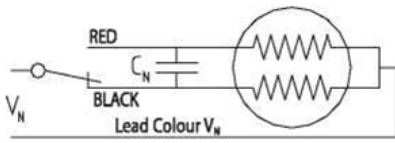
#### Standard Data

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	40	IP
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 1EC60034-1	
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	

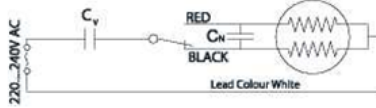
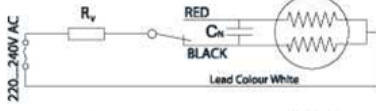
#### Technical Data

Parameter	Value	Unit
Standard Motor Voltages(VN)	12, 24, 48, 110, 230	V
Operation capacitor(50 Hz)Cn at 12v	12V- 10/20, 24V- 3.3/50, 48V- 0.82/100, 110V- 0.15/200	µF/VAC
Operation capacitor(60 Hz)Cn at 230v	12V- 10/20, 24V- 3.3/50, 48V- 0.82/100, 110V- 0.15/200	µF/VAC
Lead colour (Vn) Grey (12v)	12V- Grey, 24V- Blue, 48V- Brown, 110V- White, 230V- Yellow	
Tolerance of voltage	-10...+15% of rated voltage	%
Duty cycle	100	%
Rated frequency	50/60	Hz
Power output at rated voltage	0.2, 0.25	W
Speed	250, 300	Rpm
Running torque at rated voltage	0.8	Ncm
Power consumption at rated voltage	1.5	Ncm
Detent Torque at (50Hz)	0.19	Ncm

## Connection Diagram



220 .... 240 V( $V_N$  motor 110V)



## Dimensional Drawing

26AWG Leads length 200mm  
10mm ends stripped

