

Motor Series MTR4a

Reversible Synchronous Motor - 250 RPM

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.

MECHTEX

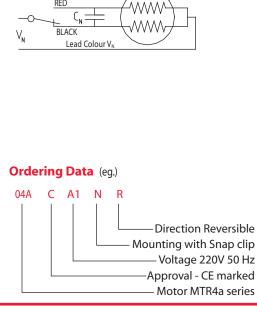
Design

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 series with one of the stator windings. The sense of rotation is determined by the resulting circular rotating field. Electical 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		
Electrical Enclosure	IP	40		
Connections		Flexible Leads 22 AWG, 200mm length; ends stripped		
Sense of rotation		Indicated by lead colour (red-CW & black ACW)		
Life expectancy		3 Years in continuous operation		
Mounting		any position		
HVT		2.0 KV (motor voltage>40V) or 0.6 KV (motor voltage<40V) for 1 min.		
Weight	g	200		
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. 52 x 28.5 mm		

Technical data

Standard Motor Voltages(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 (60Hz) C_N	μF/VAC	8.2/50	1.8/100	0.33/250	0.082/400	0.082/400	
Lead colur (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	0.6		0.63			
Speed	rpm	250		300			
Running torque at rated voltage	N-cm	2.4		2.1			
Power consumption at rated voltage	W	3.1		3.2			
Detent Torque	N-cm	0.6					

Motor Drawing

