

# Motor Series MTR4b

# Reversible Synchronous Motor - 500 RPM



# **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. 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.

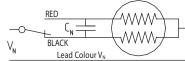
#### **Standard Data**

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	

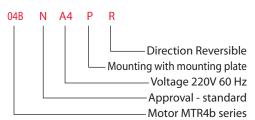
#### **Technical data**

Standard Motor Voltages(V <sub>N</sub> )	V	24	48	110	220	240	
Operation capacitor(50 Hz)C <sub>N</sub> )	μF/VAC	10/50	2.7/100	0.47/250	0.12/400	0.1/400	
Operation capacitor (60Hz) C <sub>N</sub>	μF/VAC	8.2/50	2.2/100	0.39/250	0.1/400	0.082/400	
Lead colour (V <sub>N</sub> )		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		33	0.87		
Speed	rpm	500		00	600		
Running torque at rated voltage	N-cm	1.6		6	1.5		
Power consumption at rated voltage	W	3.6		6	3.7		
Detent Torque	N-cm	0.75					

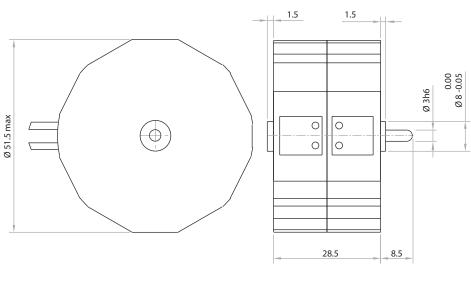
# **Connection Diagram**



# Ordering Data (eg.)



### **Motor Drawing**



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