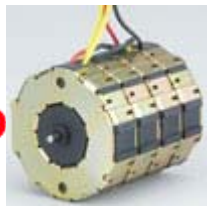
PowerTronic DRIVE SYSTEMS GMBH

QUALITY MOTORS GEARMOTORS AND CONTROLS

Motor Series MTRD4b

Reversible Synchronous Motor



Application

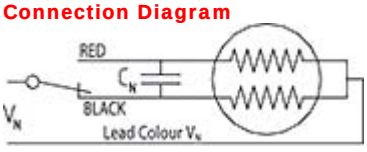
Recorders, Instrumentation, Diamond machinery, Valve Actuators, Light displays, Textile machinery, Medical equipment, Air conditioning & refrigeration, Dampers, Peristaltic Pumps, Dosing Pumps, Vending machines CCTV Camera positioning, any timing and positioning Application.

Design

MTRD4b 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	ºC	-15...+55
Ambient temperature storage	ºC	-20...+100
Thermal class	ºC	105
Motor speed	r.p.m	500 @ 50 Hz
Life Expectancy		3 years in continuous operation
Mounting		any position
Standard motor voltage	V	24,48,110,220 & 240(others on request)
HVT		1.5 KV (motor voltage>40V) or 1.5 KV (motor voltage<40V); 30sec.
Weight	gm	400
Rotor Stalling		Motor can be stopped when the voltage is applied, without being overheated.
Rotor Shaft		Hardened steel, ground and polished.
Bearings		Sintered bronze, self lubricating
External Dimensions		dia. 52 x 57 mm max.

Technical Data

Rated Voltage Vn	V	24	48	110	220	240
Operation capacitor (50 Hz) C_N	µF/VAC	18/50	4.72/100	0.82/250	0.22/400	0.22/400
Operation capacitor (60 Hz) C_N	µF/VAC	15/50	3.9/100	0.68/250	0.18/400	0.18/400
Lead colour (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	1.7			1.7	
Speed	rpm	500			600	
Running torque at rated voltage	gm-cm	300			280	
Power consumption at rated voltage	W	7			7.5	
Detent torque	gm-cm	150				

Motor Drawing