

Datasheet

Reversible Synchronous Motor - 250 RPM

RS Stock No: 9180714
9180802
9180805
9180809
9180811
9180818



Application

Reversible power drive for actuators, pumps, label printing machines, medical and optical equipment, office machines, automatic vending machines, machine automation

Design

The MTR7a reversing synchronous motor with permanent magnet rotor is electrically reversible and due to its unique stator design it is moderately priced. The rotating field is produced with a phase-shift capacitor and double-stator with coils thus ensuring extremely quiet running. Long life is guaranteed by the robust design (sintered bronze bearings; self-centering type). The MTR7a is operated with single-phase AC current.

The same motor version can be used at 50Hz and 60Hz.

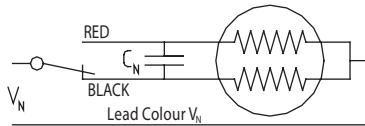
Standard Data

Motor type		Reversible synchronous
Ambient temperature operation	°C	-15...+55
Ambient temperature storage	°C	-20...+100
Thermal Class	°C	105
Motor speed	rpm	250 @ 50 Hz
Life expectancy		3 years in continuous operation
Mounting		any position
Standard motor voltages	V	12,24,48,110,220 & 240
HVT		2.0 KV (motor voltage>40V) or 0.6 KV (motor voltage<40V) for 1 min.
Weight	gm	300
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. 59 x 35 mm

Technical data

Rated voltage V_N	V	12	24	48	110	220	240
Operation capacitor (50 Hz) C_N	$\mu\text{F/VAC}$	56/40	15/50	3.9/100	0.68/250	0.18/400	0.18/400
Operation capacitor (60 Hz) C_N	$\mu\text{F/VAC}$	39/40	10/50	2.7/100	0.47/250	0.12/400	0.12/400
Lead colour (V_N)		Grey	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				2.2	2.1	
Speed	rpm				250	300	
Running torque at rated voltage	gm-cm				600	450	
Power consumption at rated voltage	W				5.8	5.0	
Detent torque	gm-cm	130					

Connection Diagram



Motor Drawing

