Motor Series **MTR7a**

Reversible Synchronous Motor - 250 RPM

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.

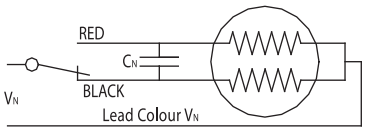
Standard Data

Motor type		Reversible synchronous
Ambient temperature operation	°C	-15...+55
Ambient temperature storage	°C	-20...+100
Thermal class	°C	105
Electrical Enclosure	IP	40
Connections		Flexible Leads 22 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 IEC60034-1
Weight	g	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

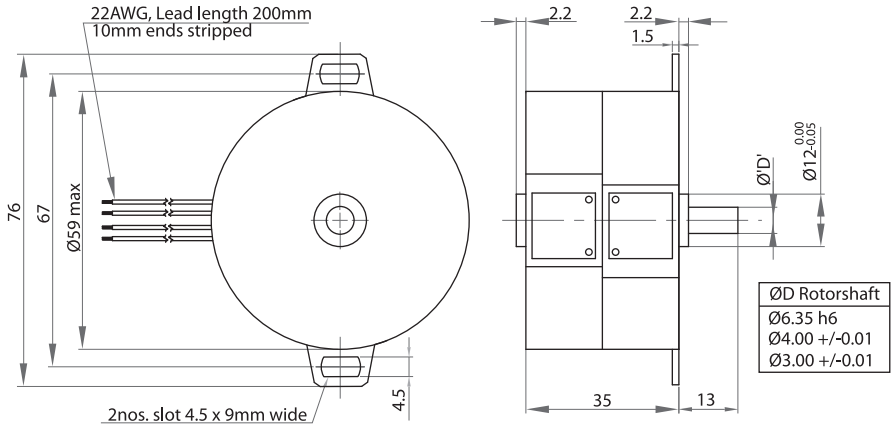
Technical data

Standard Motor voltage (V_N)	V	12	24	48	110	230
Operation capacitor (50 Hz)C_N	µF/VAC	56/40	15/50	3.9/100	0.68/250	0.18/400
Operation capacitor (60 Hz)C_N	µF/VAC	39/40	10/50	2.7/100	0.47/250	0.12/400
Lead colour (V_N)		Grey	Blue	Brown	White	Yellow
Tolerance of voltage	%	-10... +15% of rated voltage				
Duty cycle	%	100				
Rated frequency	**Hz**			**50**		**60**
Power output at rated voltage	W			2.14		1.94
Speed	Rpm			250		300
Running torque at rated voltage	Ncm			7.2		6.2
Power consumption at rated voltage	W			5.8		5
Detent torque	Ncm			1.3		

Connection Diagram



Dimensional Drawing



Ordering Data (eg.)

07A N A1 P R

- R — Direction -Reversible
- P — Mounting -with mounting plate
- A1 — Voltage -220V 50 Hz
- N — Approval - standard
- 07A — Motor -MTR7a series