



# 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.

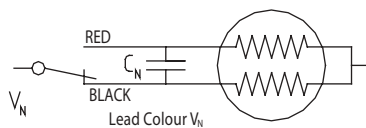
### Standard Data

Motor type		Reversible synchronous
Ambient temperature operation	°C	-15...+55
Ambient temperature storage	°C	-20...+100
Thermal Class	°C	105
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

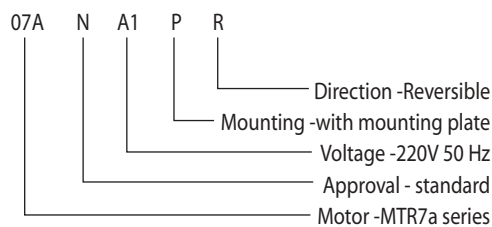
### Technical data

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					
<b>Rated frequency</b>	<b>Hz</b>	<b>50</b>				<b>60</b>	
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



### Ordering Data



### Motor Drawing

