

# Motor Series **MTR8c**

## Reversible Synchronous Motor - 375 RPM



### Application

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

### Design

The MTR8c 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 MTR8c is operated with single-phase AC current.

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

Various windings of motor are available that are tailored to specific requirements. Only some types are listed.

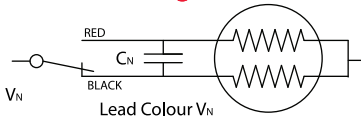
### Standard Data

Motor type		Reversible synchronous
Ambient temperature operation	°C	-15...+55
Ambient temperature storage	°C	-20...+100
Thermal class	°C	130
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	450
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 & self centering
External dimensions		dia. 66.4 x 40.4 mm

### Technical data

Standard Motor voltage ( $V_N$ )	V	24	110	230	
Operation capacitor (50 Hz) $C_N$	$\mu\text{F}/\text{VAC}$	30/63	1.33/250	0.27/500	
Operation capacitor (60 Hz) $C_N$	$\mu\text{F}/\text{VAC}$	30/63	1.33/250	0.27/500	
Lead colour ( $V_N$ )		Blue	White	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>	
Speed	Rpm	375		450	
Power consumption at rated voltage	W	10.5		8.5	
Running torque at rated voltage	Ncm	9.5		9.7	
Intermittent Duty cycle	%	90 (90min)	70 (60 min)	90(90 min)	70 (60min)
Power output at $V_N$	W	4.6	7.3	4.9	8
Power consumption at $V_N$	W	11.5	18	12.5	20
Running torque at rated voltage	Ncm	12	18.5	10.5	17
Detent torque	Ncm	2			

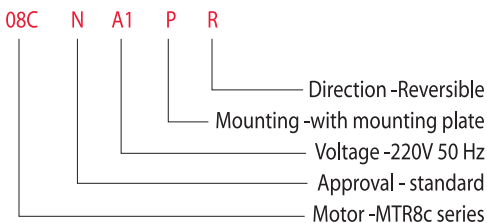
### Connection Diagram



### Technical Data (Strong magnet)

Duty cycle	%	20 (10min)	10 (5min)	20 (10min)	10 (5min)
Power consumption at $V_N$	W	25	32	25	32
Running torque at rated voltage	Ncm	27	34	21	30
Detent torque	Ncm	7.5			
Thermal Protection		Possible @ required voltage +/- 5 °C			

### Ordering Data (eg.)



### Dimensional Drawing

