

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.

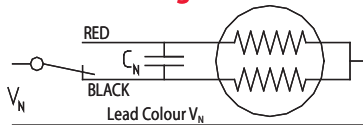
Standard Data

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
Sense of rotation		Indicated by lead colour (red-CW & black ACW)
Life expectancy		3 Years in continuous operation
Mounting		any position
HVT		2.0 KV (motor voltage > 40V) or 0.6 KV (motor voltage < 40V) for 1 min.
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
External dimensions		dia. 66.4 x 40.4 mm

Technical data

Rated voltage V_N	V	24	110	220	240	
Operation capacitor (50 Hz) C_N	$\mu\text{F}/\text{VAC}$	27/50	1.33/250	0.33/500	0.27/500	
Operation capacitor (60 Hz) C_N	$\mu\text{F}/\text{VAC}$	27/50	1.33/250	0.33/500	0.27500	
Lead colour (V_N)		Blue	White	Yellow	Yellow	
Tolerance of voltage	%	-10... +15% of rated voltage				
Duty Cycle	%	100				
Rated frequency	Hz	50			60	
Speed	rpm	375			450	
Power consumption at rated voltage	W	9.5			9.7	
Running torque at rated voltage	N-cm	10.50			8.5	
Intermittent Duty cycle	%	90 (90min)		10 min	90 (90min) 10 min	
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	N-cm	12		18.5	10.5 17	
Detent torque	N-cm	1.8				

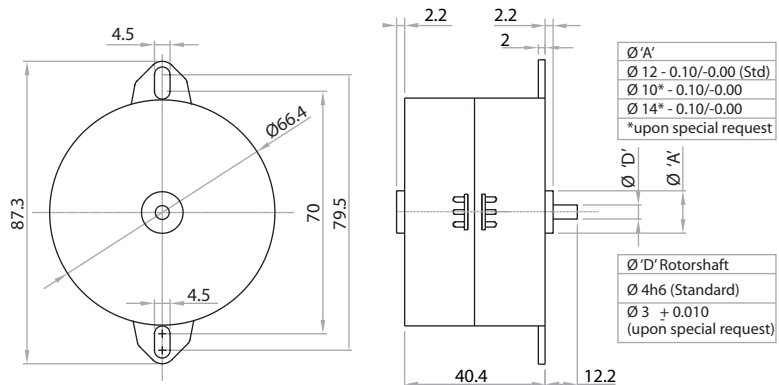
Connection Diagram



Technical Data (Strong magnet)

Duty cycle	%	70	20 (10min)	10 (5min)	70	20 (10min)	10 (5min)
Power consumption at V_N	W	14.5	25	32	15	25	32
Running torque at rated voltage	N-cm	17	27	34	14.5	21	30
Detent torque	N-cm	7.5					

Motor Drawing



Ordering Data (eg.)

