

UCM1/7

Dimensions (mm) \varnothing 28 x 24

Voltage (V) * 12–230

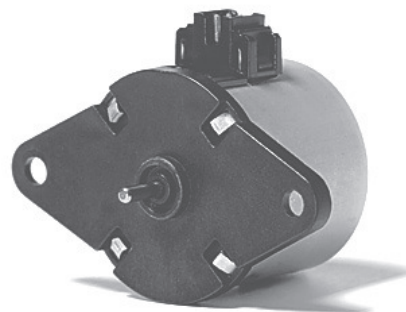
Speed (rpm) 50 Hz 250

Pole number 24

Running torque
(cNm) 50 Hz 1.36–1.98
60 Hz 1.37–1.98

Power output (W)
50 Hz 0.36–0.52
60 Hz 0.43–0.62

Gear combination D, M, B, F



* regard circuit diagram and connector type

Standard Data

Climatic class	„wide-spread“ according to DIN IEC 60721-2-1 : 1992
Ambient temperature operation	°C -15 ... +60
Ambient temperature storage	°C -20 ... +100
Thermal resistance at f=0 R _{therm}	29 K/W
Thermal class	130 (B) according to DIN EN 60085 : 2004
Approval	standard
Mounting	any position
Electrical connection	connector type D or N
Protection	IP30 according to DIN EN 60529 : 2000
Weight	54 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	Sintered bronze, self-lubricating

Order Reference

Type	Synchronous Motor	UCM	1	0	N	B4	R	D	
Configuration	1 standard magnet 7 stronger magnet								
Rotor shaft, mounting	3 centring 8 mm, shaft 2.0 mm, screw plate 4 centring 8 mm, shaft 1.5 mm, screw plate 0 centring 8 mm, shaft 2.0 mm, clip 1 centring 8 mm, shaft 1.5 mm, clip	E	centring 10 mm, shaft 2.0 mm, screw plate	K	centring 10 mm, shaft 1.5 mm, screw plate	A	centring 10 mm, shaft 2.0 mm, clip	C	centring 10 mm, shaft 1.5 mm, clip
Approval	N Approval Standard								
Voltage/Frequency	see next pages								
Direction	R reversible								
Connection	D see next pages „Connection Types“ N								

Technical Data

		UCM1	UCM1	UCM7	UCM7
Rated frequency	Hz	50	60	50	60
Speed n	rpm	250	300	250	300
Detent torque M_s	cNm	0.18	0.18	0.36	0.36
Power consumption	VA	2.2	2.2	2.2	2.2
Rotor inertia J_R	gcm ²	2.2	2.2	2.4	2.4
Tolerance of voltage		standard power supply system +10%/-10%			
Duty cycle		100%			
Winding temperature T_{max}	°C	130			
Direction of rotation		reversible			

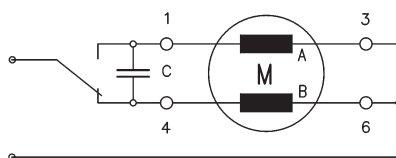
Specific Technical Data Lead Wire Versions

Performance	Running torque	cNm	1.36	1.37	1.71	1.70
	Power output	W	0.36	0.43	0.45	0.53
Capacitors	Rated voltage U_N	V	24	110		
	Duty cycle	%	100	100		
	Resistance R_{20}	Ω	210	5000		
	Capacitor C_{50}	$\mu F/V \pm 10\%$	4.7/40	0.22/200		
	Winding code		B4/G4	C8/H8		

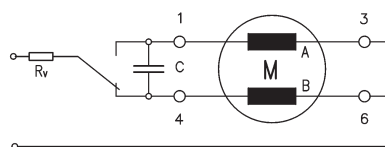
Specific Technical Data Connector Versions

Performance	Running torque	cNm	1.64	1.67	1.98	1.98
	Power output	W	0.43	0.52	0.52	0.62
Capacitors	Rated voltage U_N	V	12	24		
	Duty cycle	%	100	100		
	Resistance R_{20}	Ω	53	210		
	Capacitor C_{50}	$\mu F/V \pm 10\%$	18/20	4.7/40		
	Winding code		B1	B4		

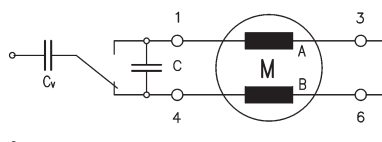
Circuit diagram Parallel circuit 12 V, 24 V, 48 V



Parallel circuit 230 V (only for lead wire versions) with 110 V motor and resistor R_V



Parallel circuit 230 V (only for lead wire versions) with 110 V motor and capacitor C_V



switch to

- 1 clockwise rotation
- 4 counter clockwise rotation
- 6 counter clockwise rotation (for series circuit)

Series resistor $R_V = 5.6 \text{ k}\Omega$, 3 W

Series capacitor $C_V = 0.33 \text{ }\mu\text{F}$, 250 VAC

