

## UCM1/7

Dimensions (mm)  $\varnothing$  28 x 24

Voltage (V) \* 12–230

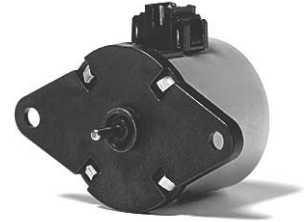
Speed (rpm) 50 Hz 250

Pole number 24

Running torque \*\*  
(cNm) 50 Hz 1.2–1.3  
60 Hz 1.2–1.3

Power output (W) \*\*  
50 Hz 0.31–0.34  
60 Hz 0.38–0.41

Gear combination on request



\* regard circuit diagram and connector type

\*\* values for lead wire version (connection N) / connector versions up to 15 % higher

## Standard Data

Climatic class	„wide-spread“ according to DIN IEC 60721-2-1
Ambient temperature operation	°C -15 ... +60
Ambient temperature storage	°C -20 ... +100
Thermal resistance at f=0 R <sub>therm</sub>	29 K/W
Thermal class	B according to DIN EN 60085
Approval	standard
Mounting	any position
Electrical connection	connector type D or N
Protection	IP 30 according to DIN EN 60529
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	24 V / 50 Hz	R	D
Configuration	1	standard magnet							
	7	stronger magnet							
Rotor shaft, mounting	3	centring 8 mm, shaft 2.0 mm, screw plate	E	centring 10 mm, shaft 2.0 mm, screw plate					
	4	centring 8 mm, shaft 1.5 mm, screw plate	K	centring 10 mm, shaft 1.5 mm, screw plate					
	0	centring 8 mm, shaft 2.0 mm, clip	A	centring 10 mm, shaft 2.0 mm, clip					
	1	centring 8 mm, shaft 1.5 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								

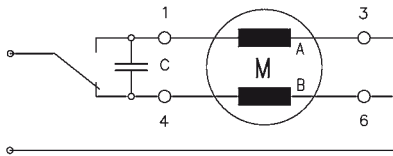
## Technical Data

			UCM 1	UCM 1	UCM 5	UCM 5
bipolar	Rated frequency	Hz	50	60	50	60
	Speed n	rpm	250	300	250	300
	Running torque *	cNm	1.2	1.2	1.3	1.3
	Detent torque $M_S$	cNm	0.18	0.18	0.36	0.36
	Power output *	W	0.31	0.38	0.34	0.41
	Power consumption	VA	2.2	2.2	2.2	2.2
	Rotor inertia $J_R$	gcm <sup>2</sup>	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				

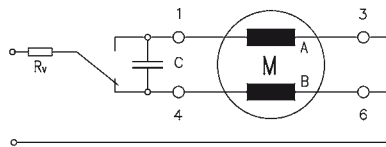
			12	24	110
Capacitors	Rated voltage $U_N$	V	12	24	110
	Operating capacitor $C_{50}$	µF/V~	18/20	4,7/40	0,33/200

\* values for lead wire version (connection N) / connector versions up to 15 % higher

Circuit diagram Parallel circuit 12 V, 24 V, 48 V, 110 V



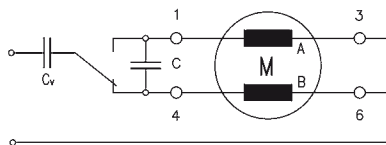
Parallel circuit 230 V (only for connector N) with 110 V motor and resistor  $R_v$



switch to

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

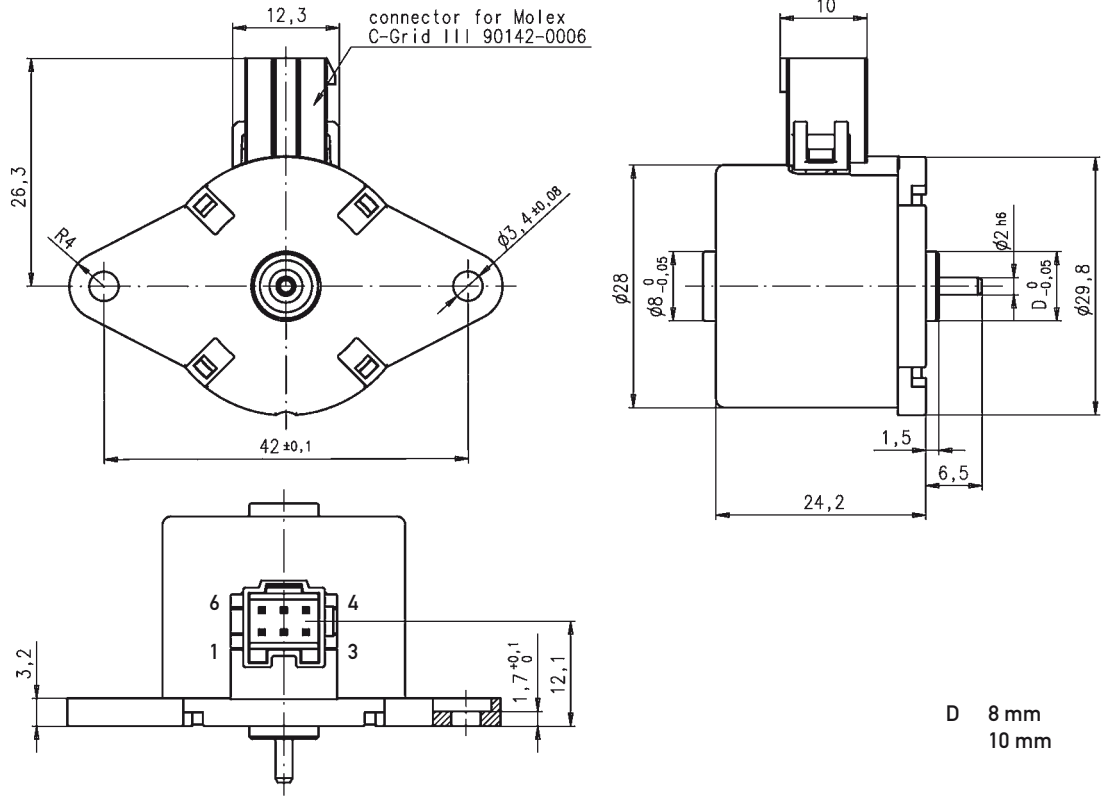
Parallel circuit 230 V (only for connector N) with 110 V motor and capacitor  $C_v$



Series resistor  $R_v = 5,6 \text{ k}\Omega, 3 \text{ W}$

Series capacitor  $C_v = 0,33 \text{ }\mu\text{F}, 250 \text{ VAC}$

Dimensions Version with Connector D



Version with Connector N

