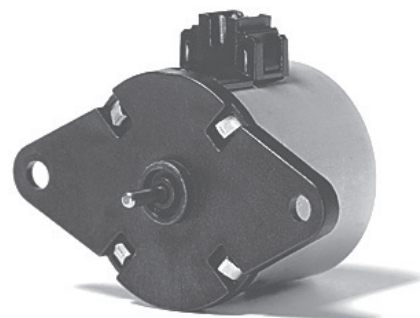


## UCR1/7

Dimensions (mm)	∅ 28 x 24
Voltage (V) *	12–230
Speed (rpm) 50 Hz	500
Pole number	12
Running torque (cNm)	
50 Hz	0.89–1.41
60 Hz	0.85–1.21
Power output (W)	
50 Hz	0.47–0.74
60 Hz	0.53–0.77
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 <sub>therm</sub>	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	UCR	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 K A C						
Approval	N Approval Standard							
Voltage/Frequency	see next pages							
Direction	R reversible							
Connection	D see next pages „Connection Types“ N Cable							

## Technical Data

		UCR1	UCR1	UCR7	UCR7
Rated frequency	Hz	50	60	50	60
Speed n	rpm	500	600	500	600
Detent torque $M_s$	cNm	0.2	0.2	0.45	0.45
Power consumption	VA	2.4	2.5	2.3	2.4
Rotor inertia $J_R$	gcm <sup>2</sup>	2.1	2.1	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			

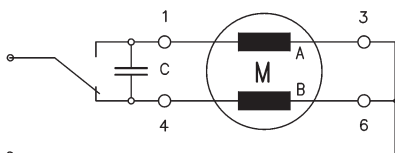
### Specific Technical Data Lead Wire Versions

		UCR1	UCR1	UCR7	UCR7	
Performance	Running torque	cNm	0.89	0.85	1.41	1.23
	Power output	W	0.47	0.53	0.74	0.77
Capacitors	Rated voltage $U_N$	V	12	24	110	
	Duty cycle	%	100	100	100	
	Resistance $R_{20}$	$\Omega$	60	230	5500	
	Capacitor $C_{50}$	$\mu F/V \pm 10\%$	22/20	5.6/40	0.27/200	
	Winding code		B1/G1	B4/G4	C8/H8	

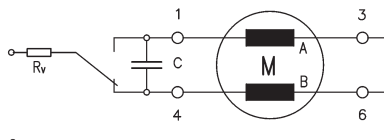
### Specific Technical Data Connector Versions

		UCR1	UCR1	UCR7	UCR7	
Performance	Running torque	cNm	1.1	1.02	1.41	1.23
	Power output	W	0.58	0.64	0.74	0.77
Capacitors	Rated voltage $U_N$	V	12	24		
	Duty cycle	%	100	100		
	Resistance $R_{20}$	$\Omega$	59	230		
	Capacitor $C_{50}$	$\mu F/V \pm 10\%$	22/20	5.6/40		
	Winding code		B1	B4		

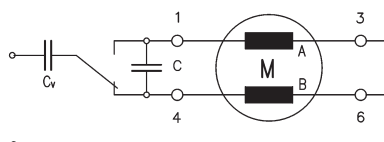
Circuit diagram Parallel circuit 12 V, 24 V, 48 V, 110 V



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  $C_v$



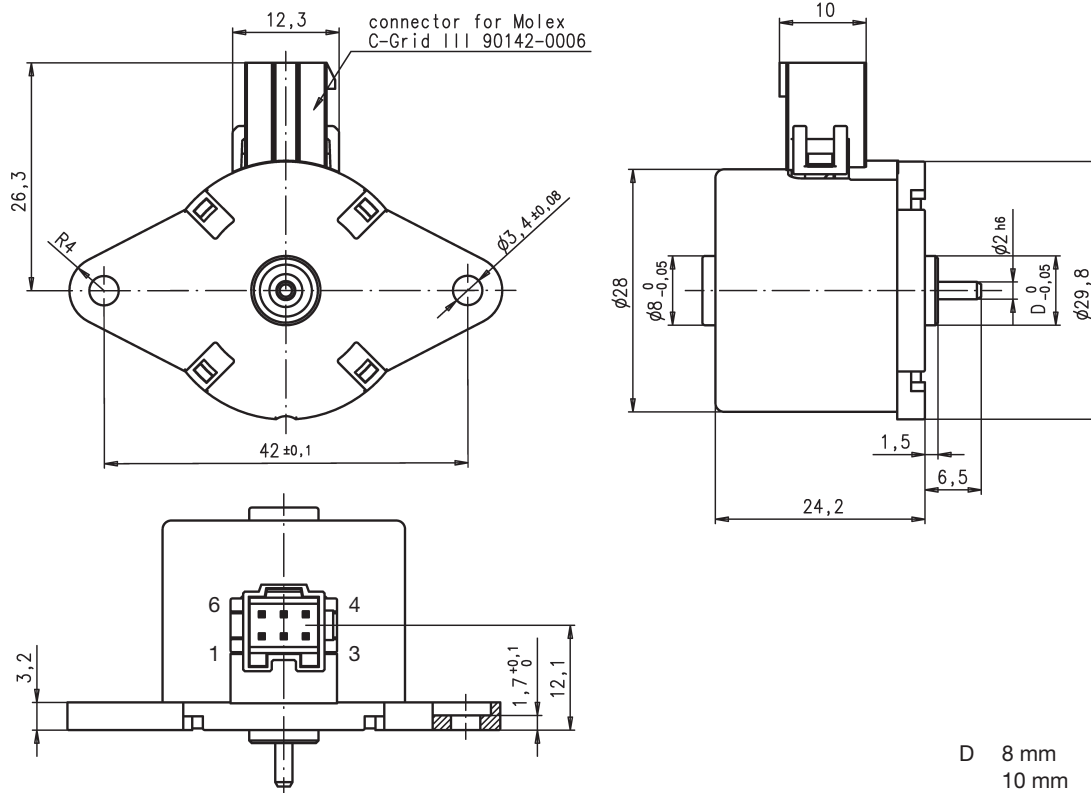
switch to

- 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

Dimensions Version with Connector D



Version with Connector N

