UCM

UCM1/7

Dimensions (mm)	∅ 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_{therm}	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							
Approvel	N	Approval Standard									
Voltage/Frequency		see next pages									
Direction	R	reversible									
Connection	D	see next pages „Connection Types"									
	N										

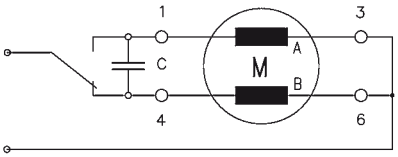
Technical Data

			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	gcm²	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			
Capacitors	Rated voltage U_N	V	12	24	110	
	Operating capacitor C_{50}	µF/V~	18/20	4,7/40	0,33/200	

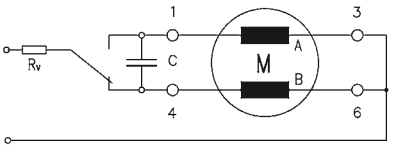
* values for lead wire version (connection N) / connector versions up to 15 % higher

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



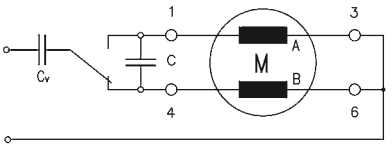
switch to

1 clockwise rotation

4 counter clockwise rotation

6 counter clockwise rotation (for series circuit)

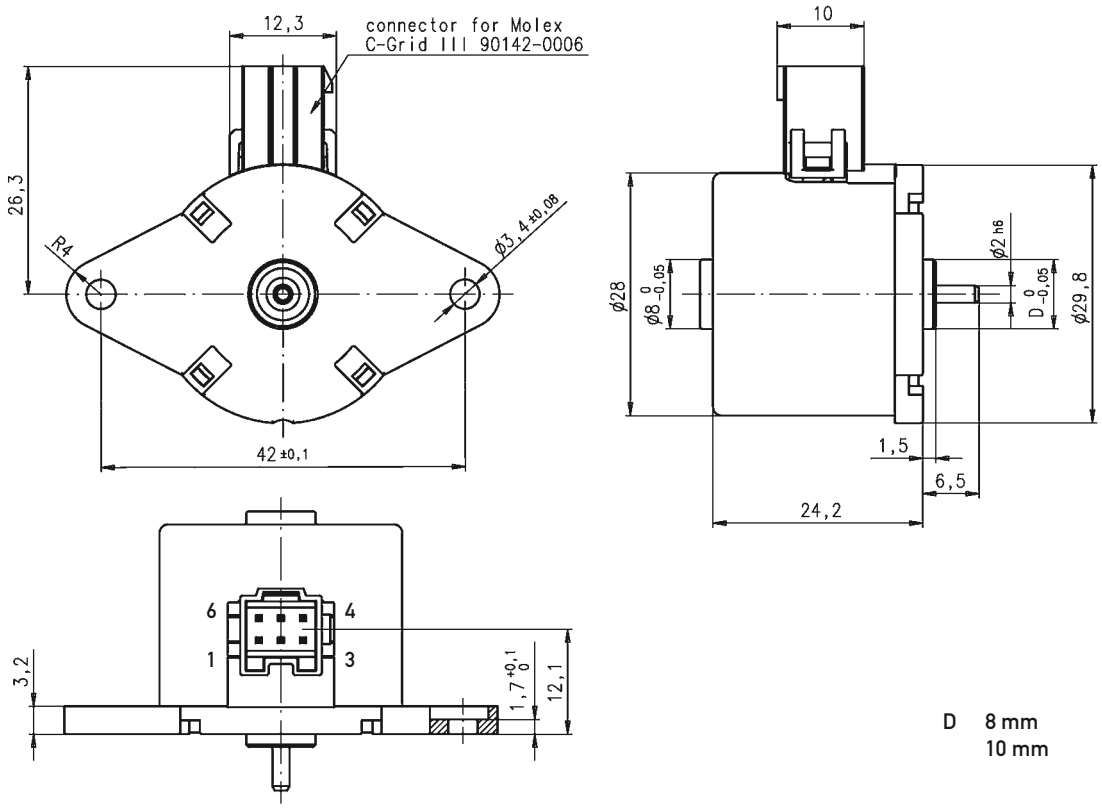
Parallel circuit 230 V (only for connector N) with 110 V motor and capacitor C_V



Series resistor R_V = 5,6 kΩ, 3 W
Series capacitor C_V = 0,33 µF, 250 VAC

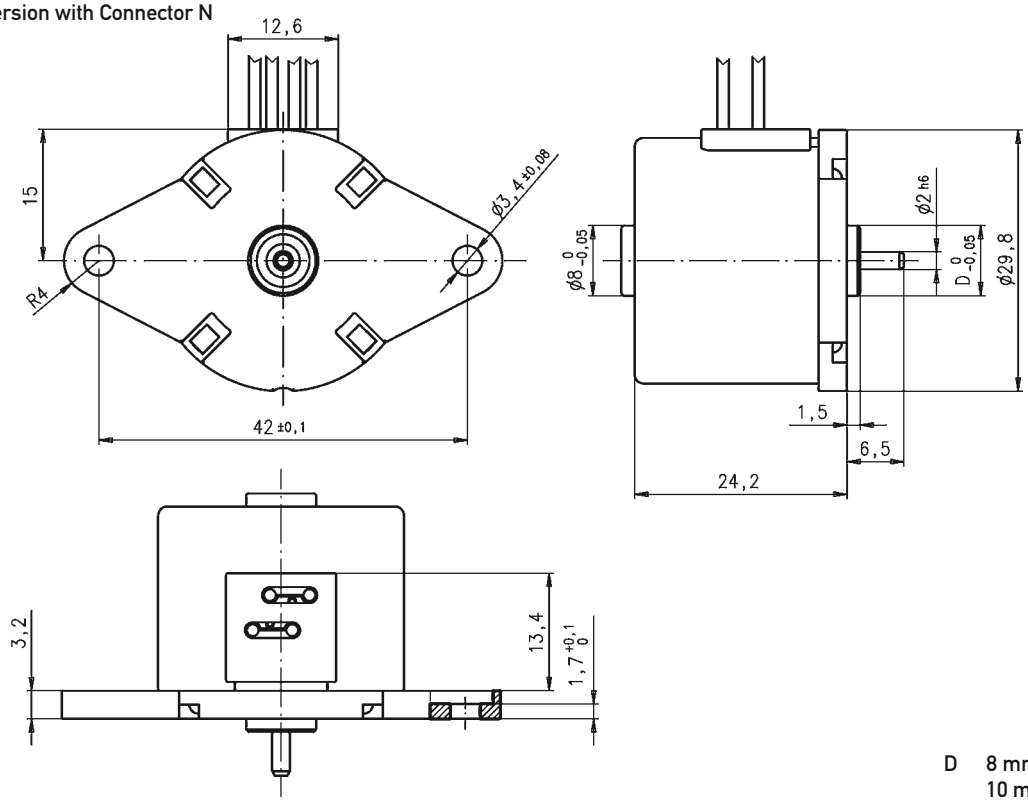
Dimensions

Version with Connector D



D 8 mm
10 mm

Version with Connector N



D 8 mm
10 mm