UDR

Synchronous **Motors**

Rotational

UDR1

Dimensions (mm)	∅ 48 x 24
Voltage (V)	12–230
Speed (rpm) 50 Hz 60 Hz	500 600
Pole number	12
Running torque (cNm) 50 Hz 60 Hz	1,5 1,4
Power output (W) 50 Hz 60 Hz	 0,77 0,87
Gear combination	A, D, M, B, F, V, J

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}	18 K/W
Thermal class	A according to DIN EN 60085
Approval	standard/UL/CSA
Mounting	any position
Electrical connection	cable
Protection	IP 40 according to DIN EN 60529
Weight	132 g
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	sintered bronze, self-lubricating
Electric strength	according to DIN EN 60034-1/DIN EN 60335-1

Order Reference

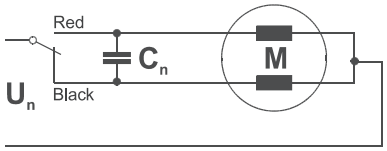
Type	Synchronous Motor		UDR1	0	N	24 V/50 Hz	R	N
Rotor shaft, mounting	0	centring 8 mm, shaft 1,5 mm, clip						
	1	centring 8 mm, shaft 2,0 mm, clip						
Approval	N	Approval Standard						
	U	Approval UL/CSA						
Voltage/Frequency		See next page						
Direction		reversible						
Cable	N	cable 150 mm (other on request)						

Technical Data

Rated frequency		Hz	50	60			
	Speed n	rpm	500	600			
	Power consumption	W	2,1	2,2			
	Power output	W	0,77	0,87			
	Running torque	cNm	1,5	1,4			
	Rotor inertia J_R	gcm^2	6,3				
	Detent torque M_S	cNm	0,35				
	Tolerance of voltage		standard power supply system + 10% / - 10%				
	Duty cycle		100 %				
	Winding temperature T_{max}	°C	105				
	Direction of rotation		reversible				
Capacitors	Rated voltage U_N	V	12	24	48	110	230
	Operation capacitor C_{50}	µF/VAC	27/20	6,8/40	1,5/100	0,27/200	0,068/350
	Operation capacitor C_{60}	µF/VAC	22/20	4,7/40	1,5/100	0,27/200	0,068/350

Circuit diagram

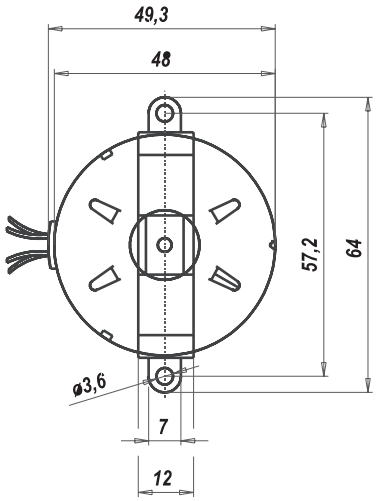
Parallel circuit

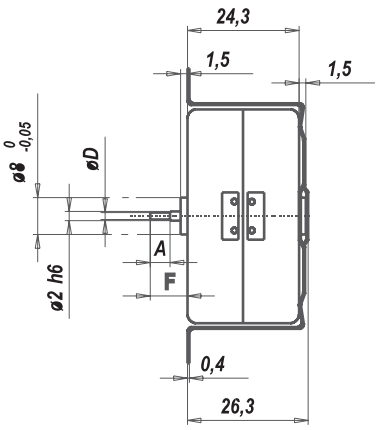


Red = clockwise rotation
Black = counter clockwise rotation

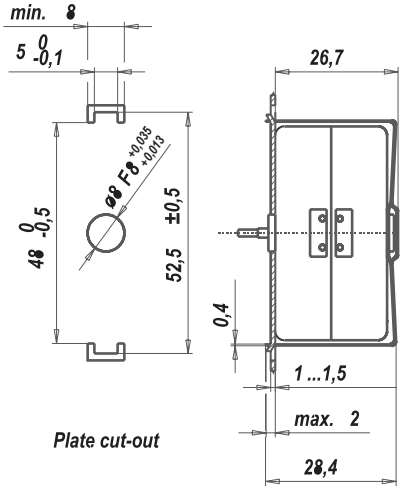
Dimensions

Mounting with screw clip





Mounting with snap-on clip



øD Rotor shaft	
ø 1.5 js8 $^{+0,007}_{-0,007}$	
ø 2 h6 $^{0}_{-0,006}$	
Dimension A	*Dimension F*
4,3	*6,5*
—	*8,2*