

UBR1

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Dimensions (mm) Ø 36 x 21

Voltage (V) 12–230

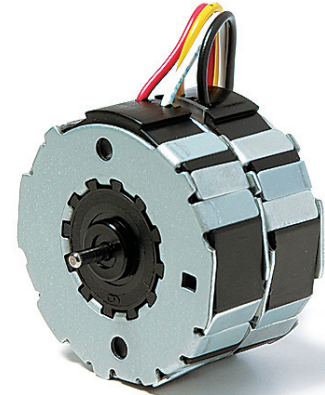
Speed (rpm) 50 Hz 250
60 Hz 300

Pole number 24

Running torque (cNm) 50 Hz 0.77
60 Hz 0.77

Power output (W) 50 Hz 0.20
60 Hz 0.24

Gear combination D, M, B, F, V, J



Note: Running torque = Pull-out torque (starting motor at no load, then torque increase)
Running torque and Power output are minimum values, at rated voltage and motor temperature 23°C

Standard Data

Climatic class	wide-spread according to DIN IEC 60721-2-1 : 2015
Ambient temperature operation	°C -15...+55
Ambient temperature storage	°C -20...+100
Thermal resistance at f=0 R _{therm}	27 K/W
Thermal class	105 (A) according to DIN EN 60085 : 2008
Approval	standard (UL/CSA on request)
Mounting	any position
Electrical connection	cable
Protection	IP40 according to DIN EN 60529 : 2014
Weight	60 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	UBR1	0	N	B4	R	E
Rotor shaft, mounting	0 centring 8 mm, shaft 2.0 mm, clip 1 centring 8 mm, shaft 1.5 mm, clip 3 centring 8 mm, shaft 2.0 mm, screw plate 4 centring 8 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 E centring 10 mm, shaft 2.0 mm, screw plate K centring 10 mm, shaft 1.5 mm, screw plate					
Approval	N Approval Standard						
Voltage/Frequency	See next page						
Direction	reversible						
Cable	E cable 150 mm (other on request)						

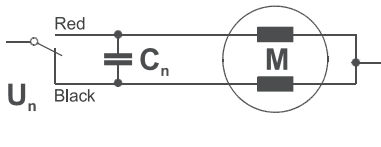
All specifications are representative only and maybe subject to variation. For confirmation of values, please contact Johnson Electric.
Please also read "Saia Motors Important Notes" on catalog or at www.johnsonelectric.com/SaiaMotorsNotes



Technical Data

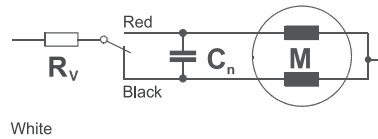
Rated frequency	Hz	50	60			
Speed n	rpm	250	300			
Power consumption	W	1.3	1.3			
Power output	W	0.20	0.24			
Running torque	cNm	0.77	0.77			
Rotor inertia J_R	gcm ²	2.8				
Detent torque M_s	cNm	0.19	0.19			
Tolerance of voltage		standard power supply system + 10% / - 10%				
Winding temperature T_{max}	°C	105				
Direction of rotation		reversible				
Rated voltage U_N	V	12	24	48	110	230
Duty cycle	%	100	100	100	100	100
Resistance R_{20}	Ω	104	385	1580	9160	11800
Capacitor C_n (50Hz, 60Hz)	$\mu F/V \pm 10\%$	12/20	3.3/34	0.82/70	0.15/170	0.22;0.12/170
Winding code	50Hz/60Hz	B1/G1	B4/G4	C1/H1	D1/J1	D5/J5

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

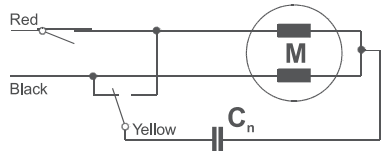


Parallel circuit 230V

$R_v = 12k \Omega$ / 1.5W for motors with resistance $R_{20} = 9160 \Omega$, code D1/J1

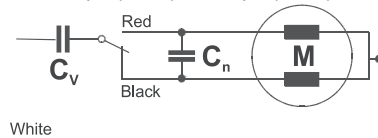


Series circuit 230V (for motors with resistance $R_{20} = 11800 \Omega$)



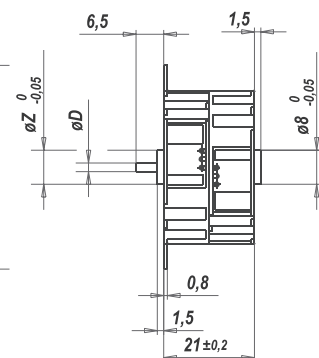
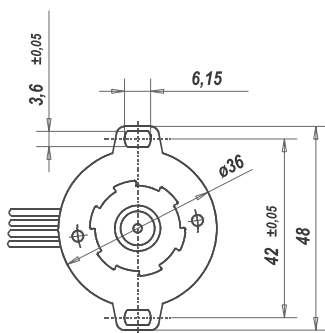
Parallel circuit 230V

$C_v = 0.18 \mu F$ (50Hz) / $0.15 \mu F$ (60Hz) / 200Vac with resistance $R_{20} = 9160 \Omega$

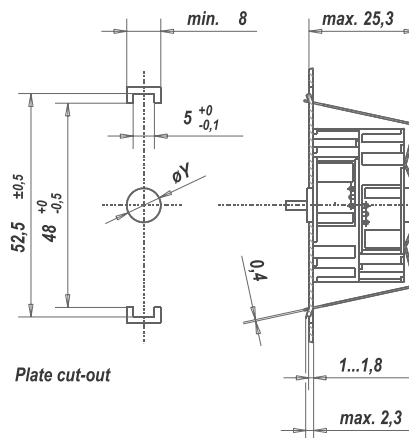


Red = clockwise rotation
Black = counter clockwise rotation

Dimensions Mounting with screw plate



Mounting with snap-on clip
(item no. 4199 48230)



Screw clip: 4199 48450

ϕD Rotor shaft

$\phi 2 h6$

$\phi 1.5 js8$

ϕZ ϕY

8 8F8

10 10F8