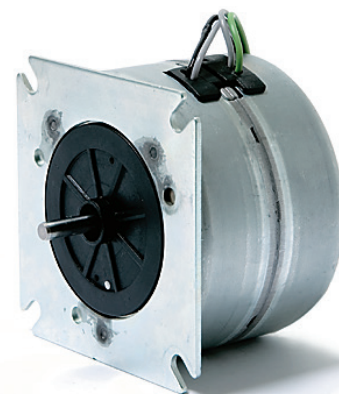


UP (SM6443; SM6444)

Dimensions (mm)	Ø 64 x 43
Voltage (V)	12–230
Speed (rpm) 50 Hz	375
60 Hz	450
Pole number	16
Running torque (cNm) 50 Hz	11.1–15.2 (UPU1); 26.0–30.4 (UPU5)
60 Hz	9.0–14.5 (UPU1); 21–25.5 (UPU5)
Power output (W) 50 Hz	4.4–6.0 (UPU1); 10.2–11.9 (UPU5)
60 Hz	4.2–6.8 (UPU1); 9.9–12.0 (UPU5)
Gear combination	O, P, R



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 ... +40
Ambient temperature storage	°C -20 ... +100
Thermal class	130 (B) according to DIN EN 60085 : 2008
Approval	standard
Mounting	any position
Electrical connection	lead wires AWG22, insulation Ø 1.6 ± 0.1 mm
Protection	IP30 according to DIN EN 60529 : 2014
Weight	500 g (UPU1); 550 g (UPU5)
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	Sintered bronze, self-lubricating

Order Reference

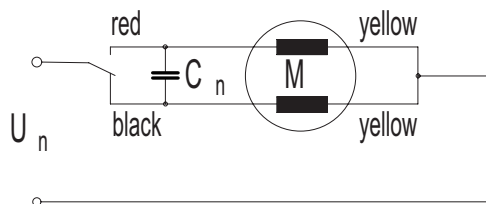
Type	Synchronous Motor	UPU	1	1	N	B4	R	E
Configuration	1 standard magnet							
	5 stronger magnet							
Rotor shaft, mounting	1 centring 10 mm, shaft length 8,1 mm, screw plate							
	2 centring 10 mm, shaft length 15,5 mm, screw plate							
	A centring 14 mm, shaft length 8,1 mm, screw plate							
	C centring 14 mm, shaft length 15,5 mm, screw plate							
Approval	N standard							
Voltage/Frequency	see next page							
Direction	R reversible							
Cable	E 150 mm (other upon 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

UPU1		Standard			S2 version (Z20)	
Rated frequency	Hz	50	60		50	60
Speed	rpm	375	450		375	450
Running torque Mn	cNm	11.1	9.0		15.2	14.5
Power output	W	4.4	4.2		6.0	6.8
Power consumption	VA	10.5	13.4		16.8	19.4
Detent torque MS	cNm	1.7	1.7		1.7	1.7
Winding temperature increase	K	95	100		90 (S2 20 min)	
Weight	g	500	500		500	500
Standard windings						
Rated voltage U_N	V	24	115	230		
Duty cycle	%	100	100	100		
Resistance R_{20}	Ω	26	560	2450		
Capacitor C(50/60 Hz)	$\mu F \pm 10\%/V$	30/63	1,3/250	0,33/500		
Winding code		B4/G4	D0/J0	D5/J5		
UPU5		Special version (Z21)			Standard	
Rated frequency	Hz	50	60		50	60
Speed	rpm	375	450		375	450
Running torque Mn	cNm	26.0	21.0		30.4	25.5
Power output	W	10,2	9,9		11.9	12.0
Power consumption	VA	26	28		26.3	33,5
Detent torque MS	cNm	6	6		6	6
Winding temperature increase	K	85 (S2 6,5 min)	85 (S2 6,5 min)		95 (S2 5 min)	95 (S2 5 min)
Weight	g	550	550		550	550
Standard windings						
Rated voltage U_N	V	24	48	115	230	
Duty cycle	%					
Resistance R_{20}	Ω	9,5	37	230	810	
Capacitor C(50/60 Hz)	$\mu F \pm 10\%/V$	82/63	20/160	3,3/250	0,82/500	
Winding code		B4/G4	C1/H1	D0/J0	D5/J5	

Circuit diagram Clockwise rotation



Dimensions mounting dimensions UP with screw plate

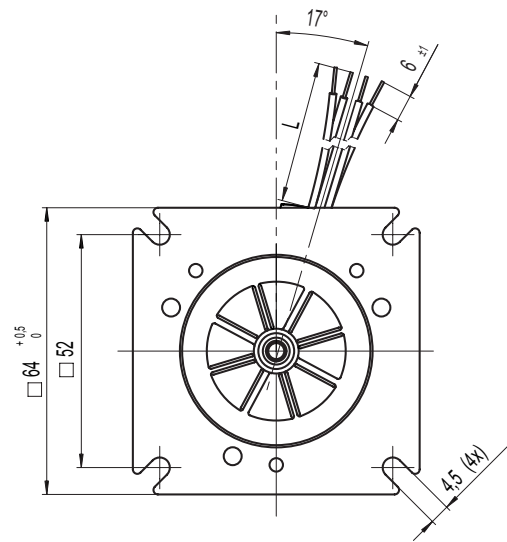
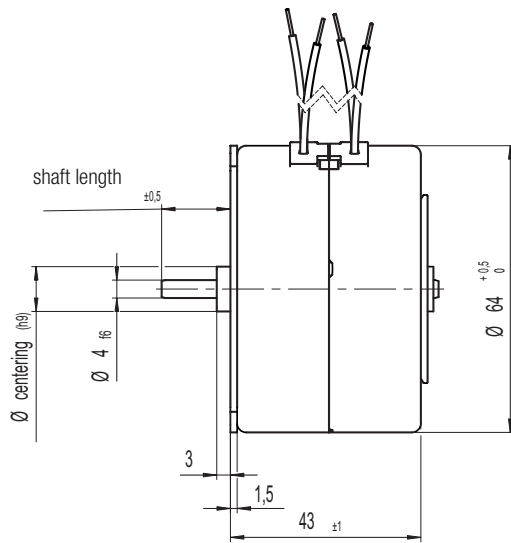
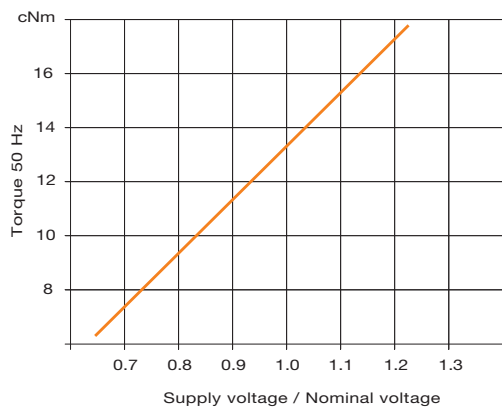


Chart: Torque versus Voltage

UPU1



UPU1 S2 version (Z20)

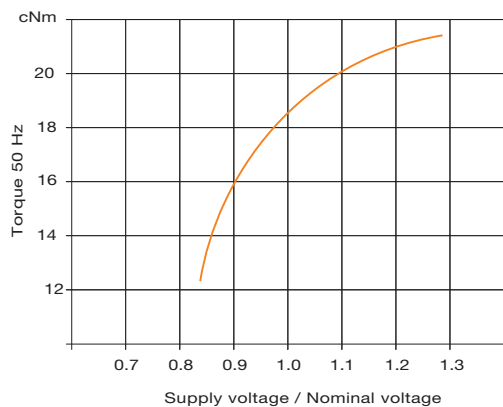
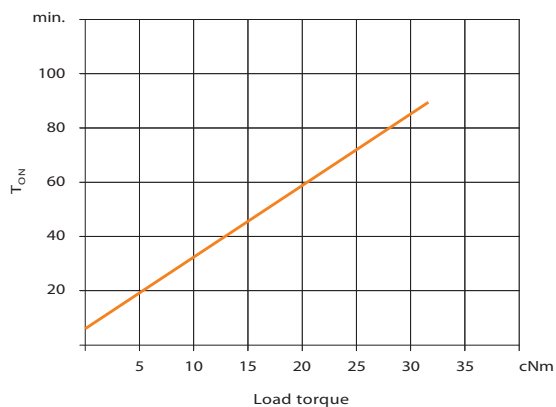


Chart: Possible S2 ON time versus load torque

UPU5 special version (Z21)



UPU5 standard

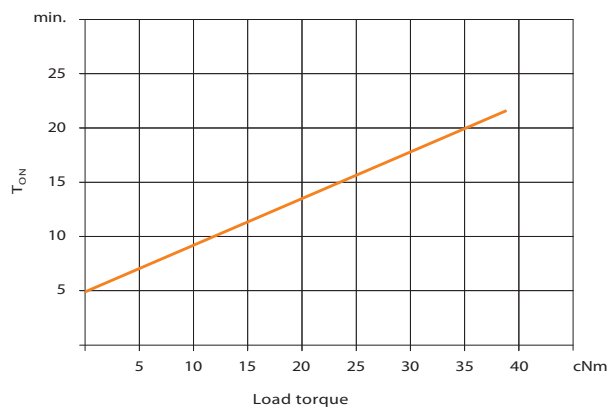
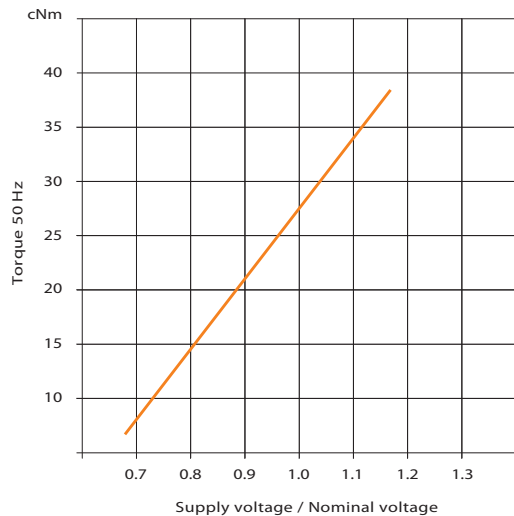


Chart: Torque versus Voltage

UPU5 special version (Z21)



UPU5 standard

