UPU

UP (SM6443; SM6444)

Dimensions (mm)	∅ 64 x 43
Voltage (V)	12–230
Speed (rpm) 50 Hz 60 Hz	375 450
Pole number	16
Running torque (cNm) 50 Hz 60 Hz	11.1–15.2 (UPU1); 26.0–30.4 (UPU5) 9.0–14.5 (UPU1); 21–25.5 (UPU5)
Power output (W) 50 Hz 60 Hz	 4.4–6.0 (UPU1); 10.2–11.9 (UPU5) 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

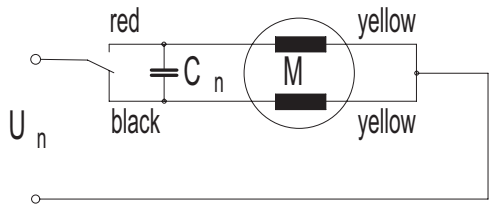
			UPU	1	1	N	B4	R	E
Type	Synchronous Motor								
Configuration	1	standard magnet							
	5	stronger magnet							
Rotor shaft, mounting	1	centring 10 mm, shaft length 8,1 mm, screw plate							
	2	centring 10 mm, shaft length 15,5 mm, screw plate							
	A	centring 14 mm, shaft length 8,1 mm, screw plate							
	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

UPU

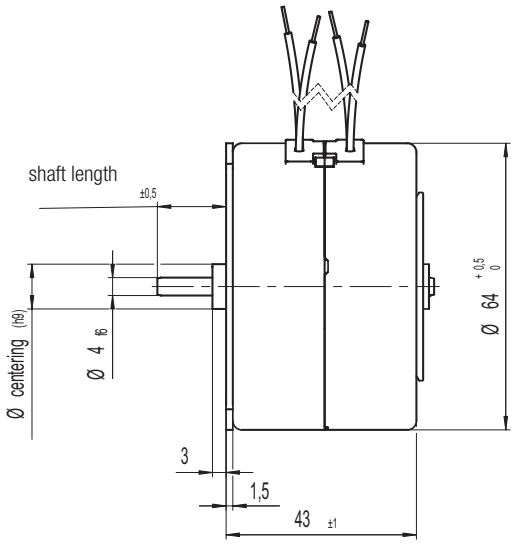
Technical Data

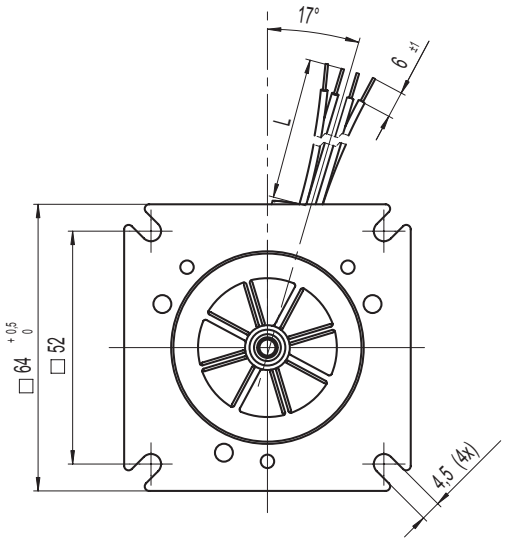
UPU1			Standard				S2 version (Z20)	
	Rated frequency	Hz	50		60		50	60
	Speed	rpm	375		450		375	450
	Running torque Mn	cNm	11.1		9.0		15.2	14.5
	Power output	W	4.4		4.2		6.0	6.8
	Power consumption	VA	10.5		13.4		16.8	19.4
	Detent torque MS	cNm	1.7		1.7		1.7	1.7
	Winding temperature increase	K	95		100		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)	µF ±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)	µF ±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							



UPU

Dimensions mounting dimensions UP with screw plate

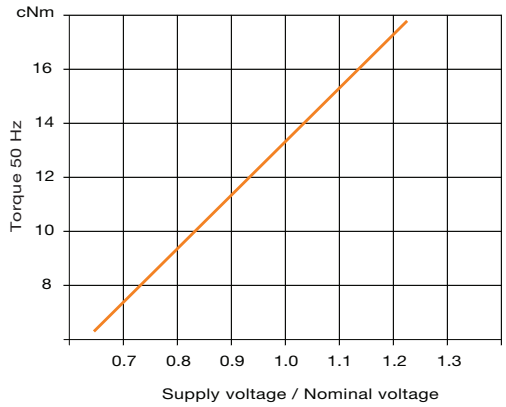




UPU

Chart: Torque versus Voltage

UPU1



UPU1 S2 version (Z20)

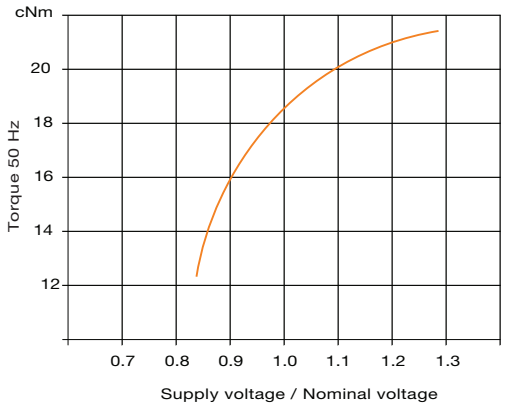
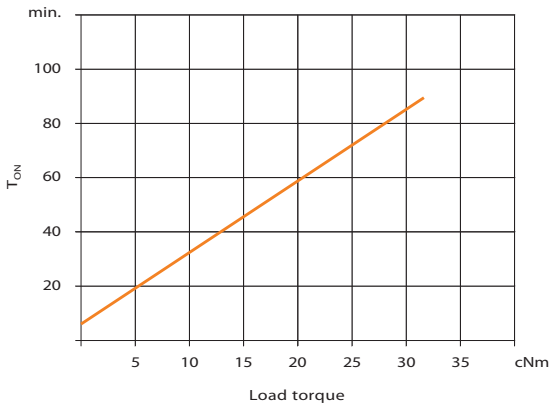


Chart: Possible S2 ON time versus load torque

UPU5 special version (Z21)



UPU5 standard

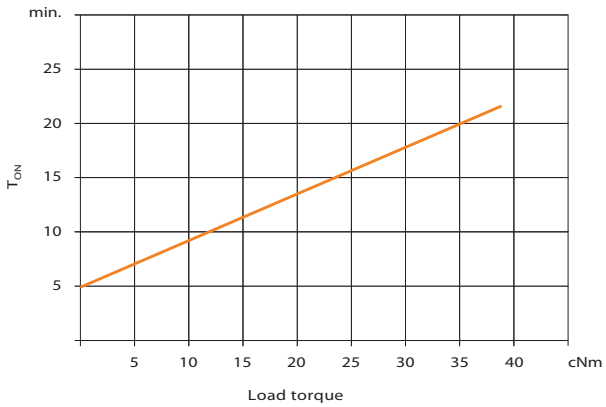
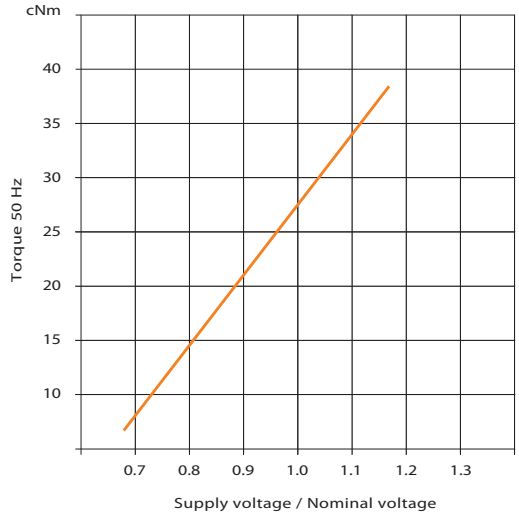


Chart: Torque versus Voltage

UPU5 special version (Z21)



UPU5 standard