



MOTOR SPECIFICATION			
No. of Poles		8	
Rated Voltage	V DC	48	
Current - Rated / Peak	A	10.77	32.31
Resistance Line to Line	$\pm 15\%$ Ω	0.15	$\Delta \Delta \Delta$
Inductance Line to Line (1kHz)	$\pm 20\%$ mH	0.47	$\Delta \Delta \Delta$
Torque - Rated / Peak	Nm	1.4	4.2
Torque Constant	Nm/A	0.13	
Power - Rated	W	440	Δ
Speed - No Load / Rated	$\pm 10\%$ rpm	3500	Δ 3000
Rotor Inertia	kg m ²	160	$\times 10^{-6}$

WIRING DIAGRAM			
	Colour	Function	Lead Gauge
Motor 8 Pol.	Ye	U	AWM3135 AWG16 $\Delta \Delta$
	Rd	V	
	Bk	W	
Hall 24 Impl. per Rev.	Rd	+5V	UL1332 AWG22 Δ
	Bu	H1	
	Wh	H2	
	Gn	H3	
	Bk	GND	

A-Shaft		Preload Spring		B-Shaft	
F_a	F_r				
				a_x	
Max. Axial Force F_a	N	60			
Max. Radial Force F_r ($a_1 = 20$ mm)	N	220			
Axial Play	$F_a = 4.5$ N	mm	0.08		
Radial Play	$F_r = 4.5$ N	mm	0.02		

GENERAL MOTOR SPECIFICATION			ISO 8015	ISO 1302	ISO 2768 cK	ISO 13715	Weight: ~2.6 kg	
Ambient Temperature	$^{\circ}\text{C}$	Min. -10 Max. 50				Date	Name	
Max. Temperature Rise (at standstill - 2 phases energized)	$^{\circ}\text{C}$	80				Drawn	Import	
Max. Ambient Humidity (non condensing)	%	85				Reviewed	Schneid_A	
Insulation Class		B				Released	Schneid_A	
Insulation Resistance	M Ω	100						
Dielectric Strength (for 1 min - coil to case)	V AC	500						
			08	change diameter + tol.	Reith_S			
			07	change induc./resist.		21.06.2018		
			05	change NO-LOAD-SPEED		01.02.2018		
			REV	Rev. Text	Name	Rel. Date		
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State: Released			Rev: 08		CONFIDENTIAL			