



Max. Axial Force F_a	N	147
Max. Radial Force F_r ($a_1 = 10$ mm)	N	392
Axial Play	$F_a = 4$ N	mm 0.08
Radial Play	$F_r = 4$ N	mm 0.02

PIN Assignment Encoder	
Colour	Function
RD	+5V
BK	GND
-	-
BN/BK	H1+
BN	H1-
YE	I+
GN	B+
BU/BK	A+
GY/BK	H3+
WH/BK	H2+
YE/BK	I-
GN/BK	B-
BU	A-
GY	H3-
WH	H2-
-	Shield

BRAKE SPECIFICATION		
Power Consumption	W	11.5
Static Brake Torque	Nm	min. 3.2
Operating Voltage $\pm 10\%$	V DC	24
Max. Backlash	°	≤ 1
Dielectric Strength	V DC	500
Insulation Resistance	MΩ	50

ENCODER SPECIFICATION		
Operating Voltage $\pm 5\%$	V DC	+5 V
Resolution	cpr	2500
Resolution (cpr with quadrature)	ppr	10000
No. of Channels		3
Signal Type		incremental
Index / Line Driver		yes / yes

WIRING DIAGRAM			
	Colour	Function	Lead Gauge
Motor	YE	U	UL758 AWG13
	RD	V	
	BK	W	
Brake	RD	+24VdC	UL758 AWG20
	WH	GND	

MOTOR SPECIFICATION		
No. of Poles		8
Rated Voltage	V DC	48
Current - No Load / Rated / Peak	A	<3 / 30 / 90
Resistance Line to Line	$\pm 10\%$ Ω	0.043
Inductance Line to Line (1kHz)	$\pm 20\%$ mH	0.21
Torque - Rated / Peak	Nm	3.2 / 9.6
Torque Constant	Nm/A	0.107
Speed - No Load / Rated	$\pm 10\%$ rpm	5000 / 3000
Rotor Inertia	kg m ²	170 x10 ⁻⁶

GENERAL MOTOR SPECIFICATION		
Ambient Temperature	°C	-20 ... 55
Max. Temperature Rise (at standstill)	°C	80
Max. Ambient Humidity (non condensing)	%	85
Insulation Class		B
Insulation Resistance	MΩ	100
Dielectric Strength (for 1 min - coil to case)	V AC	500
Protection Class		IP65

ISO 8015	ISO 1302	ISO 2768 cK	ISO 13715
			Date
			Name
03	change NO LOAD CUR.	Reith_S	01.02.2023
02	revise drawing	Schneid_A	24.11.2020
01	revise drawing	Schneid_A	21.04.2020
REV	Rev. Text	Name	Date

Date		Name		<h1>APBA80L048030-EB</h1>
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