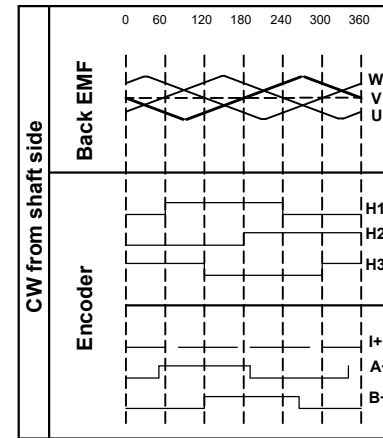
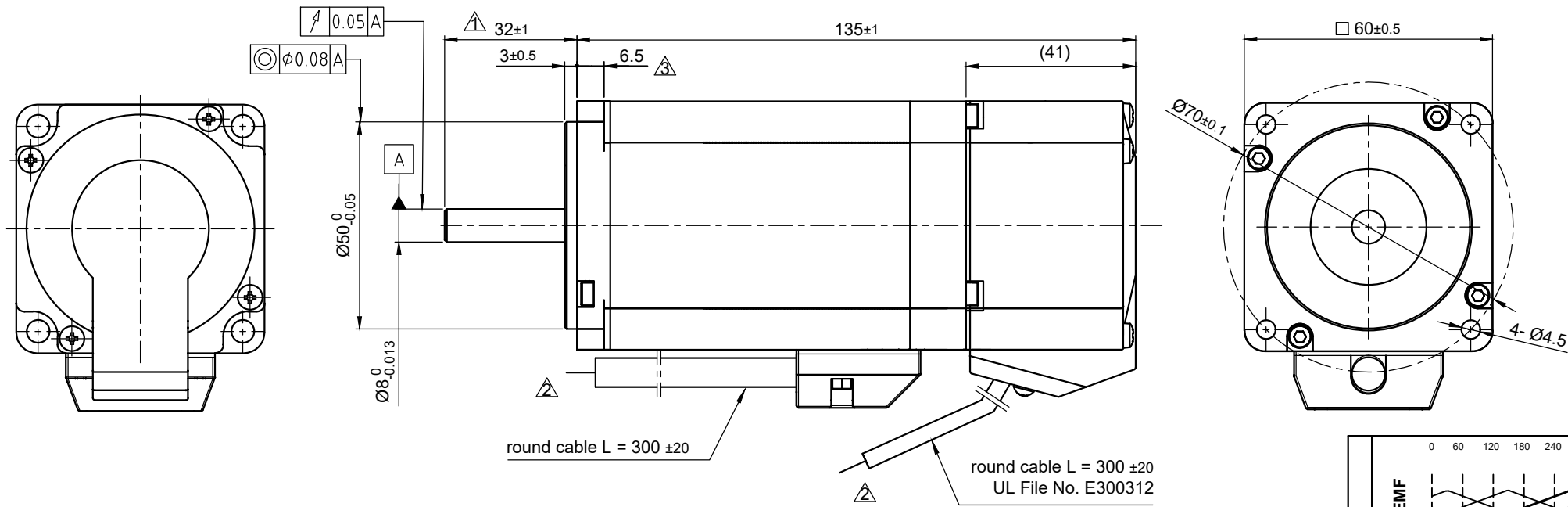




PIN Assignment Encoder	
Colour	Function
RD	+5V
BK	GND
-	-
BN/BK	H1+
BN	H1-
YE	I+
GN	B+
BU/BK	A+
GY/BK	H3+
WH/BK	H2+
YE/BK	I-
GN/BK	B-
BU	A-
GY	H3-
WH	H2-
-	Shield

A-Shaft		Preload Spring		B-Shaft	
Fr		Fa		ax	
Max. Axial Force F_a		N		98	
Max. Radial Force F_r ($a_1 = 10 \text{ mm}$)		N		245	
Axial Play $F_a = 4.0 \text{ N}$		mm		0.08	
Radial Play $F_r = 4.0 \text{ N}$		mm		0.02	

MOTOR SPECIFICATION		
No. of Poles		8
Rated Voltage	V DC	48
Current - No Load / Rated / Peak	A	1.2 / 12 / 36
Resistance Line to Line	$\pm 10\% \Omega$	0.25
Inductance Line to Line (1kHz)	$\pm 20\% \text{ mH}$	0.55
Torque - Rated / Peak	Nm	1.27 / 3.81
Torque Constant	Nm/A	0.107
Rated Power	W	399
Speed - No Load / Rated	$\pm 10\% \text{ rpm}$	4900 / 3000
Rotor Inertia	kg m^2	43 $\times 10^{-6}$

GENERAL MOTOR SPECIFICATION		
Ambient Temperature	$^{\circ}\text{C}$	-20 ... 40
Max. Temperature Rise (at standstill)	$^{\circ}\text{C}$	90
Max. Ambient Humidity (non condensing)	%	90
Insulation Class		B
Insulation Resistance	M Ω	100
Dielectric Strength (for 1 min - coil to case)	V AC	500
Protection Class		IP65

WIRING DIAGRAM			
Motor	Colour	Function	Lead Gauge
1	YE	U	UL758 AWG16
	RD	V	
	BK	W	

ENCODER SPECIFICATION		
Operating Voltage	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	

ISO 8015		ISO 1302		ISO 2768 cK		ISO 13715	
				Date		Name	
03	add. dimension	Schneid_A	20.12.2023	Drawn	02.04.2020	Schneid_A	
02	revise drawing	Schneid_A	24.11.2020	Reviewed	05.01.2024	Reith_S	
01	change A-shaft	Schneid_A	07.05.2020	Released	05.01.2024	Reith_S	
REV	Rev. Text	Name	Date				



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State: Released	Rev: 03	CONFIDENTIAL	