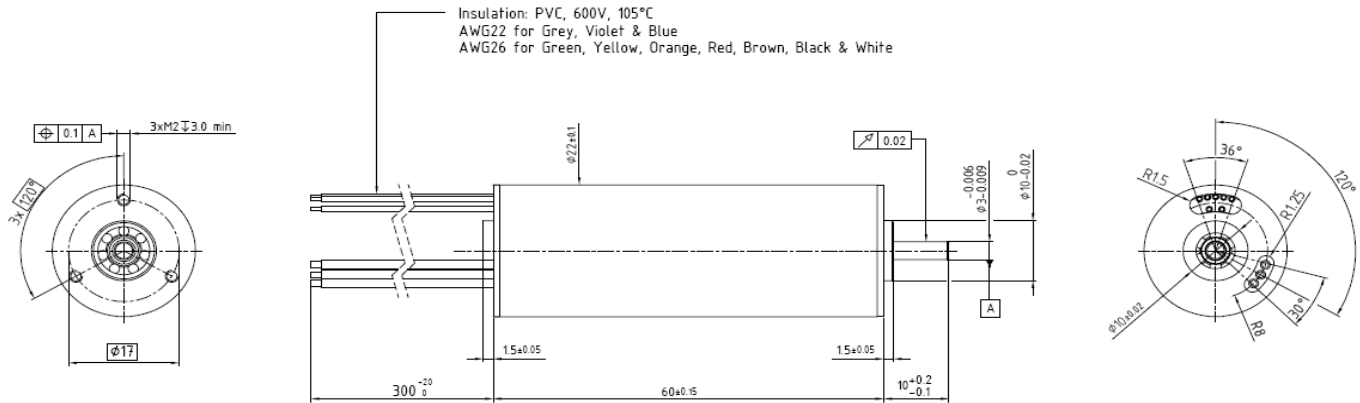


22ECT60 Ultra EC™

4 poles

Ø22mm

86W



22ECT60 10B - **

Electrical Data	**	9	15	21	
1 Nominal Voltage	U_N	24	24	24	Volt
2 Optimization Direction	-	Symmetrical	Symmetrical	Symmetrical	-
3 No-Load Speed	n_0	20,000	12,100	8,650	rpm
4 Typical No-load Current	I_0	320	150	100	mA
5 Max Continuous Mechanical Power (@ 25°C)	P_{max}	86	86	86	W
6 Max Continuous Current	$I_{e max}$	5.9	3.6	2.6	A
7 Max Continuous Torque	$M_{e max}$	65.9 (9.34)	66.9 (9.48)	64.3 (9.11)	mNm (oz-in)
8 Back EMF Constant	K_E	1.16	1.97	2.72	V/1000 rpm
9 Torque Constant	k_M	11.1	18.8	26.0	mNm/A
10 Motor Regulation	R/k^2	1.5	1.5	1.6	$10^3/Nms$
11 Motor Regulation	$k/R^{1/2}$	25.5 (3.6)	26 (3.7)	25 (3.5)	$mNm/W^{1/2}$ (oz-in/ $W^{1/2}$)
12 Internal Resistance - Phase to Phase	R_T	0.19	0.52	1.08	ohms
13 Line To Line Resistance At Connectors	R_L	0.22	0.55	1.11	ohms
14 Inductance Phase To Phase	L	0.02	0.06	0.12	mH
15 Mechanical Time Constant	t_m	1.3	1.3	1.4	ms
16 Electrical Time Constant	t_e	0.12	0.12	0.11	ms

General Data				
17 Maximum Motor Speed	n_{max}		61,000	rpm
18 Ambient Working Temperature Range			-30 to +100 (-22 to +212)	°C (°F)
19 Ambient Storage Temperature Range			-40 to +100 (-40 to +212)	°C (°F)
20 Ball Bearings Preload			6.8	N
21 Axial Static Force Without Shaft Support (max)			45.0	N
22 Maximum Winding Temperature			125 (257)	°C (°F)
23 Thermal Resistance	R_{th1}/R_{th2}		2.0 / 8.8	°C/W
24 Thermal Time Constant	t_w		980	s
25 Weight			123 (4.34)	g (oz)
26 Rotor Inertia	J		8.71	$g.cm^2$
27 Hall Sensor Electrical Phasing			120	Electrical °

22ECT60 - 10B - ** - 01 with hall effect sensors	
Wire	Description
Grey	Phase 1
Violet	Phase 2
Blue	Phase 3
Green	VDC (3.5 to 24V)
Yellow	GND
Orange	Sensor 1
Red	Sensor 2
Brown	Sensor 3
Black	Thermistor (+)
White	Thermistor (-)

