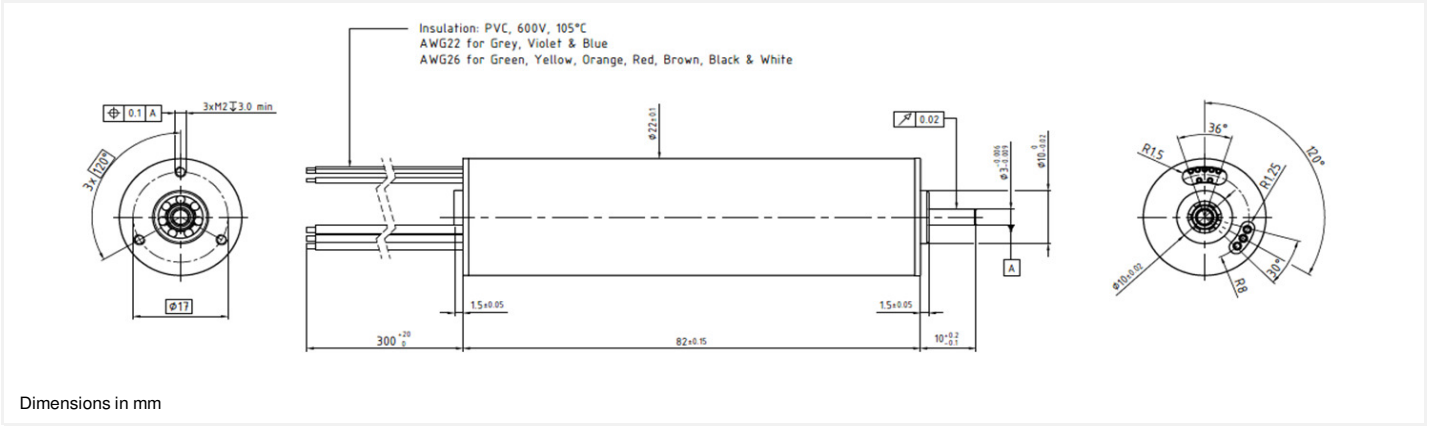
22ECT82 Ultra EC™ 4 pole Ø22mm 104W



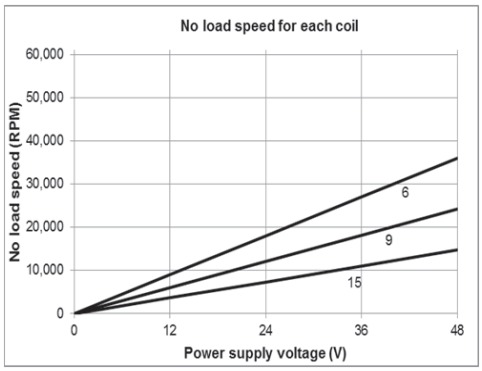
Dimensions in mm

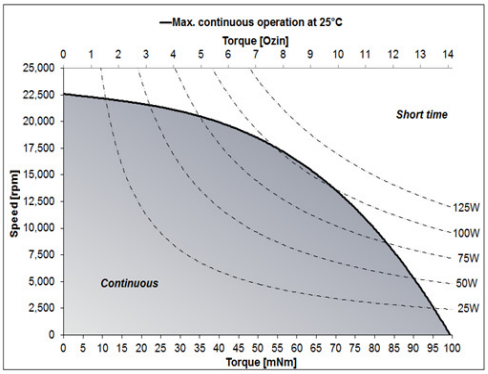
22ECT82 10B - **

Electrical Data	**	6	9	15	
1 Nominal Voltage	U_N	24	24	24	Volt
2 Optimization Direction	-	Symmetrical	Symmetrical	Symmetrical	-
3 No-Load Speed	n_0	18,550	12,390	7,800	rpm
4 Typical No-load Current	I_0	435	250	130	mA
5 Max Continuous Mechanical Power (@25°C)	P_{max}	104	104	104	W
6 Max Continuous Current	$I_{e\,max}$	7.9	5.3	3.2	A
7 Max Continuous Torque	$M_{e\,max}$	98.4 (13.94)	98.8 (14)	98.3 (13.92)	mNm (oz-in)
8 Back EMF Constant	K_E	1.30	1.96	3.22	V/1000 rpm
9 Torque Constant	k_M	12.4	18.7	30.8	mNm/A
10 Motor Regulation	R/k^2	0.8	0.8	0.8	10^3/Nms
11 Motor Regulation	$k/R^{½}$	35.8 (5.1)	35.9 (5.1)	36 (5.1)	mNm/$W^{½}$ (oz-in/$W^{½}$)
12 Internal Resistance - Phase to Phase	R_l	0.13	0.27	0.73	ohms
13 Line To Line Resistance At Connectors	R_L	0.16	0.30	0.76	ohms
14 Inductance Phase To Phase	L	0.02	0.03	0.09	mH
15 Mechanical Time Constant	t_m	1.1	1.0	1.0	ms
16 Electrical Time Constant	t_e	0.12	0.13	0.13	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 w/o Shaft Support (max)		45.0	N
22 Maximum Winding Temperature		125 (257)	°C (°F)
23 Thermal Resistance	R_{th1}/R_{th2}	1.4 / 8.2	°C/W
24 Thermal Time Constant	t_w	1,140	s
25 Weight		174 (6.14)	g (oz)
26 Rotor Inertia	J	13.17	$g.cm^2$
27 Hall Sensor Electrical Phasing		120	Electrical °

with hall effect sensors	
Wire	**Description**
Grey	Phase 1
Violet	Phase 2
Blue	Phase 3
Green	3.5 to 24V
Yellow	GND
Orange	Sensor 1
Red	Sensor 2
Brow n	Sensor 3
Black	Thermistor (+)
White	Thermistor (-)





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