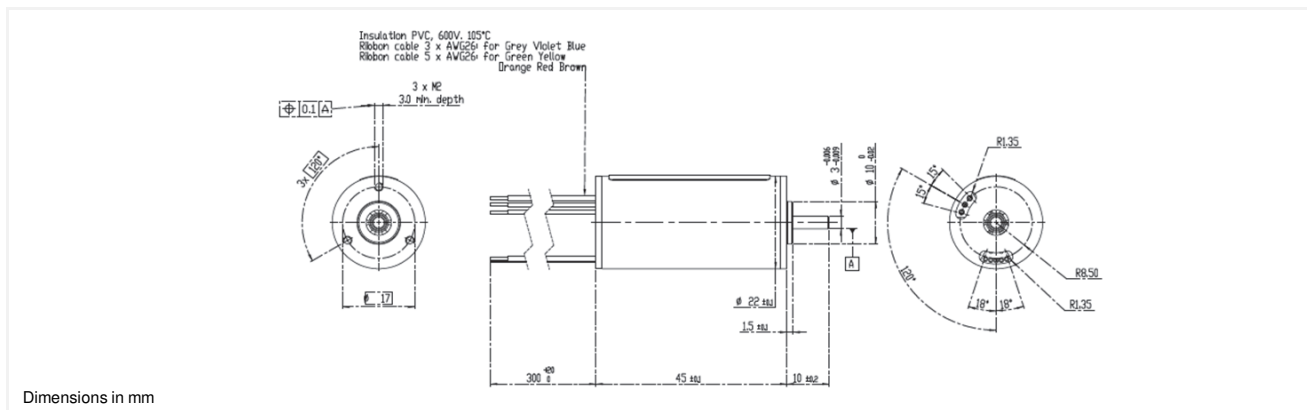


22ECP45 Ultra EC™

2 pole

Ø22mm

80W



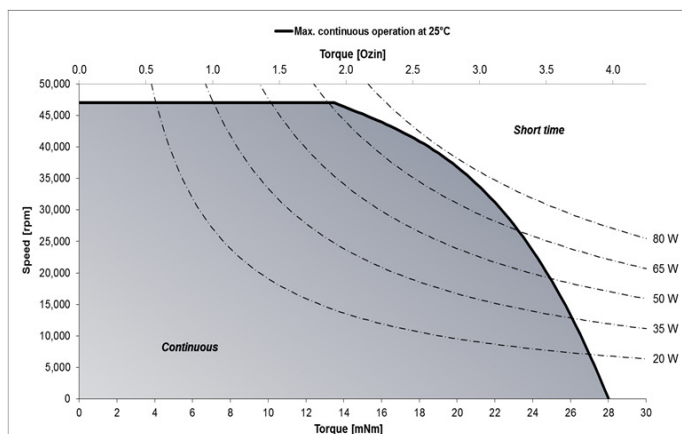
22ECP45 8B - **

Electrical Data	**	154	82	
1 Nominal Voltage	U_N	24	24	Volt
2 Optimization Direction	-	Symetrical	Symetrical	-
3 No-Load Speed	n_0	8,370	15,700	rpm
4 Typical No-Load Current	I_0	25.0	60.0	mA
5 Max Continuous Mechanical Power (@25°C)	P_{max}	80	80	W
6 Max Continuous Current	$I_{e max}$	1.0	2.0	A
7 Max Continuous Torque	$M_{e max}$	27.7 (3.93)	29.4 (4.17)	mNm (oz-in)
8 Back EMF Constant	K_E	2.82	1.53	V/1000 rpm
9 Torque Constant	k_M	27.0	14.6	mNm/A
10 Motor Regulation	R/k^2	8.0	7.0	$10^3/Nms$
11 Motor Regulation	$k/R^{1/2}$	11.19 (1.59)	11.9 (1.69)	mNm/W ^{1/2} (oz-in/W ^{1/2})
12 Internal Resistance - phase to phase	R_i	5.80	1.50	ohms
13 Line to Line Resistance at Connectors	R_L	5.89	1.59	ohms
14 Inductance Phase to Phase	L	0.94	0.27	mH
15 Mechanical Time Constant	t_m	1.8	1.6	ms
16 Electrical Time Constant	t_e	0.16	0.18	ms

General Data				
17 Maximum Motor Speed	n_{max}		47,000	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	-		5.5	N
21 Axial Static Force w/o Shaft Support (max)	-		34.0	N
22 Maximum Winding Temperature	-		125 (257)	°C (°F)
23 Thermal Resistance	R_{th1}/R_{th2}		2/9.7	°C/W
24 Thermal Time Constant	t_w		850	s
25 Weight	-		100 (3.53)	g (oz)
26 Rotor Inertia	J		2.300	g.cm ²
27 Hall Sensor Electrical Phasing	-		120	Electrical °

* Available without hall sensor

with hall effect sensors	
Wire	Description
Grey	Phase 1
Violet	Phase 2
Blue	Phase 3
Green	3.5 to 27V DC
Yellow	GND
Orange	Sensor 1
Red	Sensor 2
Brown	Sensor 3



V042816