



		Samples available			
		Units	212-401		
Design and Accessories					
1	Commutation	Precious Metal Brush			
2	No. of Output Shafts	2			
3	Unit Weight	g	9.5		
4	Body Diameter	mm	12		
5	Body Length	mm	25		
6	Rotation Direction	CCW			
7	Bearing Type	Sintered Bronze			
Physical Characteristics					
8	Shaft Diameter	mm	3		
9	Shaft Length	mm	8		
10	Shaft Orientation	Inline			
11	Rear Shaft Diameter	mm	1		
12	Rear Shaft Length	mm	6		
13	Motor Construction	Iron Core			
Operational Characteristics					
14	Rated Operating Voltage	V	12		
15	Rated Load	mN·m	5		
16	Rated Load Speed	rpm	440		
17	N/L Speed	rpm	600		
18	Max. Start Voltage	V	1.4		
19	Max. N/L Current	mA	35		
20	Max. Operating Voltage	V	14.4		
21	Max. Rated Load Current	mA	95		
22	Min. Insulation Resistance	MOhm	1		
23	Max. Start Current	mA	240		
24	Typical Rated Load Power Consumption	mW	960		
25	Typical N/L Current	mA	28		
26	Typical Peak Efficiency	%	31		
27	Typical Peak Eff. Torque	mN·m	5.8		
28	Typical Peak Eff. Speed	rpm	530		
29	Typical Peak Eff. Current	mA	87		

30	Typical Peak Eff. Power Out	mW	320
31	Typical Start Current	mA	240
32	Typical Max. Output Power	mW	440
33	Typical Stall Torque	mN·m	13

**Gear Characteristics**

34	Gear Ratio	:1	29.5
35	Gearhead Type		Spur

**Winding Characteristics**

36	Typical Terminal Resistance	Ohm	30
37	Typical Terminal Inductance	uH	4,900

**Environmental Characteristics**

38	Max. Operating Temp.	°C	50
39	Min. Operating Temp.	°C	-10
40	Max. Storage & Transportation Temp.	°C	80
41	Min. Storage & Transportation Temp.	°C	-40

**Packaging**

42	No. Units per Carton	pcs	500
43	Carton Type		Boxed Trays

**Motor Body Characteristics**

44	No. of Poles		
45	Shaft Axial Float	mm	
46	Max. Axial Compression	N	
47	Max. Radial Load	mN	

**Performance**

