



DIMENSIONS: MILLIMETERS
INCHES

42L048D

Electrical Data	42L048D1U Unipolar	42L048D2U Unipolar	42L048D1B Bipolar	42L048D2B Bipolar	
1 Operating Voltage	5	12	5	12	VDC
2 Resistance per Phase, ± 10%	5.2	30.0	5.2	30.0	Ohms
3 Inductance per Phase, typ	2.1	11.3	4.2	22.3	mH
4 Rated Current per Phase *	0.96	0.40	0.96	0.40	A
Coil independent parameters					
5 Holding Torque, MIN *	106 (15.1)	106 (15.1)	131 (18.5)	131 (18.5)	mNm (oz-in)
6 Detent Torque, Max	29.7 (4.2)	29.7 (4.2)	29.7 (4.2)	29.7 (4.2)	mNm (oz-in)
7 Rotor inertia	19.5 (0.1066)	19.5 (0.1066)	19.5 (0.1066)	19.5 (0.1066)	(gcm ²) (oz-in-s ²)
8 Step Angle	7.5	7.5	7.5	7.5	Degree
9 Absolute accuracy 2 ph. On, Full step	± .5	± .5	± .5	± .5	Degree
10 Steps per Revolution	48	48	48	48	
11 Ambient Temp Range (operating)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	-20 to +70 (-4 to +158)	°C (°F)
12 Maximum Coil Temperature	130 (266)	130 (266)	130 (266)	130 (266)	°C (°F)
13 Bearing Type	Sintered Bronze Sleeve	Sintered Bronze Sleeve	Sintered Bronze Sleeve	Sintered Bronze Sleeve	
14 Insulation Resistance at 500 VDC	100	100	100	100	Mohms
15 Dielectric Withstanding Voltage	650 for 2 seconds	650 for 2 seconds	650 for 2 seconds	650 for 2 seconds	VAC
16 Weight	116.4 (4.1)	116.4 (4.1)	116.4 (4.1)	116.4 (4.1)	g (oz)
17 Leadwire	AWG 26, UL 1430	AWG 26, UL 1430	AWG 26, UL 1430	AWG 26, UL 1430	

All Motor Data Values at 20°C Unless Otherwise Specified

* Energize at Rated Current, 2 Phase On

