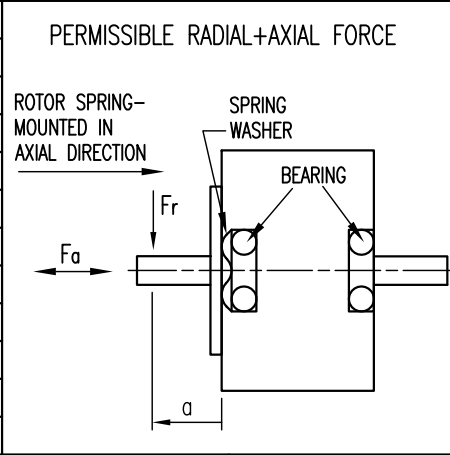


SPECIFICATION	CONNECTION	STAR
NO. OF POL./PHASE		16/3
VOLTAGE RATED (VDC)		24
NO LOAD CURRENT (A)		<0.3
CURRENT RATED/PEAK (A)		2.36/ 7.0
RESISTANCE/PHASE TO PHASE (Ohms) @20°C		0.8 $\pm$ 10% $\triangle$
INDUCTANCE/PHASE TO PHASE (mH) @1KHz		0.33 $\pm$ 20% $\triangle$
TORQUE RATED/PEAK (Nm) [lb-in]		0.084/0.25 [0.74/2.22]
TORQUE CONSTANT (Nm/A)		0.0335
POWER RATED (W)		50
SPEED RATED/NO LOAD (RPM)		5260/6700 $\triangle$
ROTOR INERTIA (Kg-m <sup>2</sup> ) [lb-in <sup>2</sup> ]		1.35x10 <sup>-5</sup> [0.046]
WEIGHT (Kg) [lb]		0.12 [0.26]

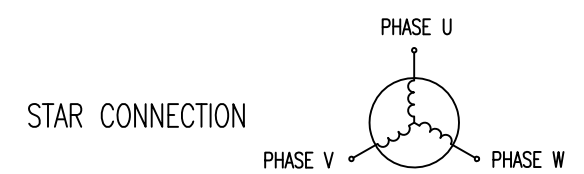


**WIRING DIAGRAM**

	FUNCTION	Dir. $\longleftrightarrow$					
		X	HI	HI	X	LOW	LOW
MOTOR 16 POL.	U	X	HI	HI	X	LOW	LOW
	V	HI	X	LOW	LOW	X	HI
	W	LOW	LOW	X	HI	HI	X
HALL 48 IMPL. REV.	+5V						
	H1	0	0	0	1	1	1
	H2	0	1	1	1	0	0
	H3	1	1	0	0	0	1
GND							

TEMPERATURE RISE: MAX.80°C		
AMBIENT TEMPERATURE -20°~ 50°C $\triangle$		
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)		
INSULATION CLASS B 130° [266°F]		
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)		
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)		

AXIAL-FORCE $F_a$ (N)	$F_a=10 \text{ max.}$	
DISTANCE $a$ (mm)	10	
RADIAL-FORCE $F_r$ (N)	28 max.	
	AXIAL	RADIAL
SHAFT PLAY (mm)	0.14	0.02
AT LOAD MAX: (N)	4	4



1	CHANGE AMBIENT TEMP.	16.01.15	J.D.
C	UPDT. DATA	17.10.14	J.D.
B	VALUE CHANGED	08.08.14	J.D.
REV	DESCRIPTION	DATE	APVD

**Nanotec**  
 PLUG & DRIVE

DF45M024053-A2

SCALE FREE	APVD	G.S.	07.07.14
X $\pm 0.5$	CHKD		
1PL $\pm 0.2$	DRN	J.D.	07.07.14
2PL $\pm 0.1$	SIGNATURE	DATE	
ANGLE $\pm 30'$			

**BRUSHLESS DC MOTOR**

DWG.NO DF45M024053-A2