

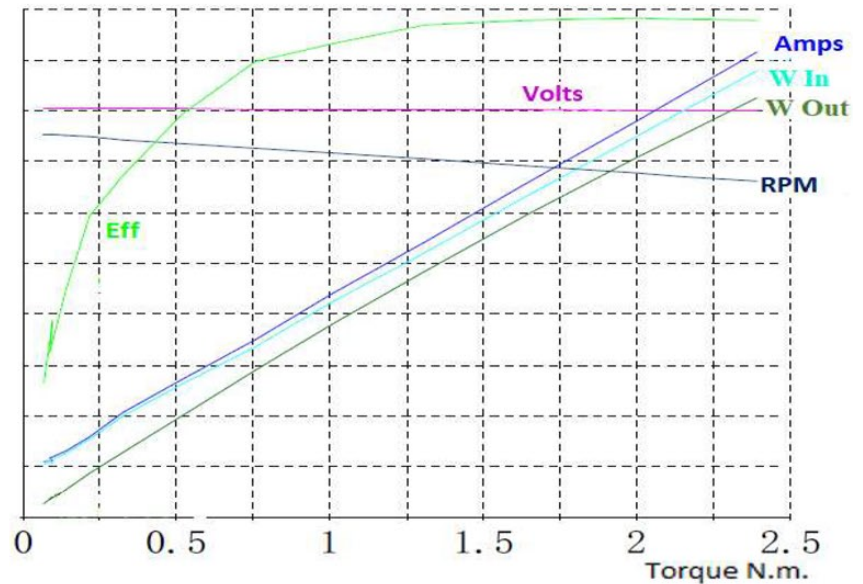
Model: MM5048FC/NV

Description: MaxMotion 0.50HP, 1750RPM, 48VDC, TEFC/NV, 56C

Tester: 01

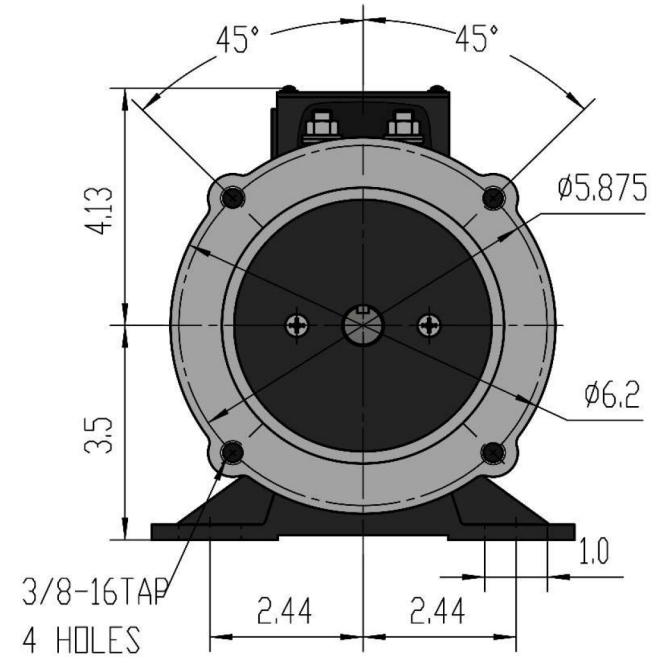
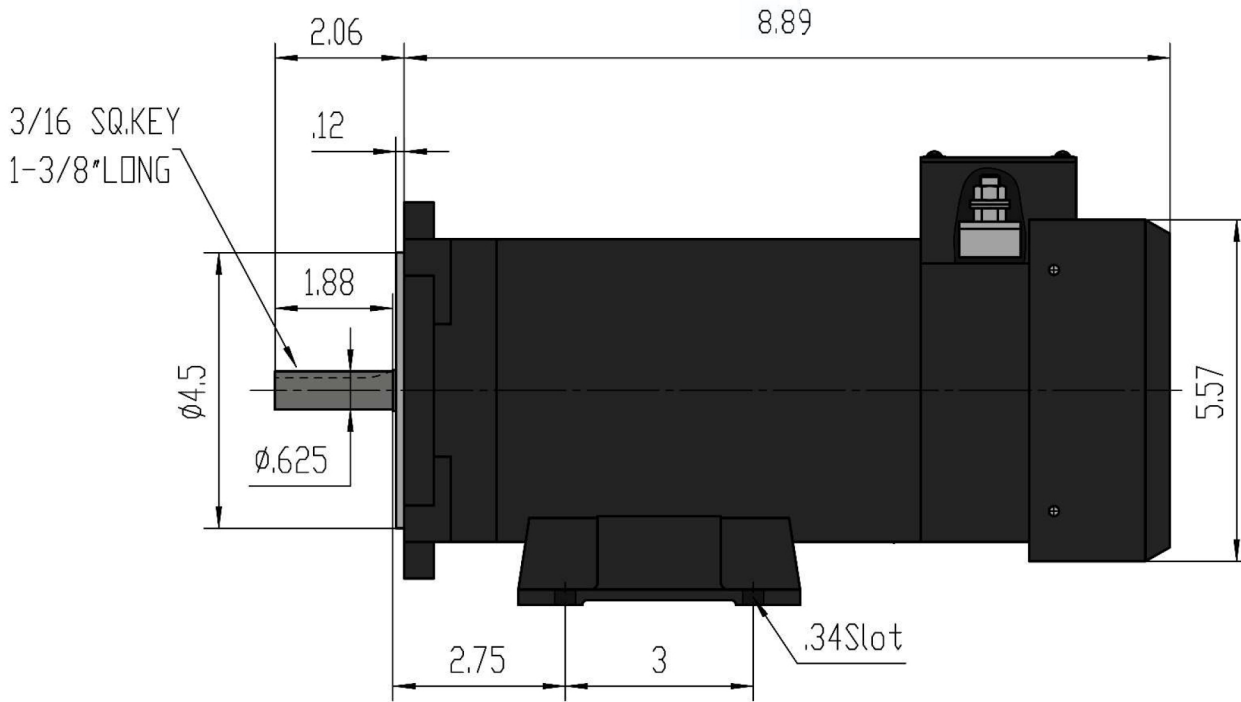
Test Date: 2018.04.21

V	A	W In	RPM	W out	Eff.%
60	12	600	2500	500	80
54	10.8	540	2250	450	72
48	9.6	480	2000	400	64
42	8.4	420	1750	350	56
36	7.2	360	1500	300	48
30	6	300	1250	250	40
24	4.8	240	1000	200	32
18	3.6	180	750	150	24
12	2.4	120	500	100	16
6	1.2	60	250	50	8
0	0	0	0	0	0



Measured Points	V	A	Input Watts	N.m.	RPM	Output Watts	%
No Load	48.27	1.314	63.42	0.07	1885	13.42	21.2%
Rated	48.05	9.948	477.9	2.14	1678	375	78.5%
Efficiency Max.	48.07	9.357	449.8	2	1692	353.6	78.6%
Max. Kw Output	48.01	10.99	527.5	2.39	1652	412.7	78.2%
Max. Torq. Output	48.01	10.99	527.5	2.39	1652	412.7	78.2%
End	48.01	10.99	527.5	2.39	1652	412.7	78.2%

Load	Measure	V	A	Input Watts	N.m.	RPM	Output Watts	Eff %
3.6%	1	48.27	1.314	63.42	0.07	1885	<b>13.42</b>	21.2%
5.4%	2	48.26	1.348	65.08	0.1	1885	<b>20.13</b>	30.9%
4.6%	3	48.27	1.389	67.03	0.09	1884	<b>17.36</b>	25.9%
7.1%	4	48.27	1.553	74.99	0.14	1880	<b>26.77</b>	35.7%
11.6%	5	48.27	1.902	91.79	0.22	1872	<b>43.51</b>	47.4%
17.1%	6	48.25	2.46	119.5	0.33	1859	<b>64.23</b>	53.8%
26.5%	7	48.23	3.253	156.9	0.52	1840	<b>99.41</b>	63.4%
38.7%	8	48.21	4.193	202.1	0.76	1818	<b>145.0</b>	71.8%
50.6%	9	48.18	5.289	254.8	1.01	1791	<b>189.8</b>	74.5%
64.6%	10	48.14	6.496	312.7	1.31	1761	<b>242.3</b>	77.5%
79.2%	11	48.11	7.888	379.5	1.64	1727	<b>296.9</b>	78.2%
94.3%	12	48.07	9.357	449.8	2	1692	<b>353.6</b>	78.6%
<b>100.0%</b>	<b>13</b>	<b>48.05</b>	<b>9.948</b>	<b>477.9</b>	<b>2.14</b>	<b>1678</b>	<b>375.0</b>	<b>78.5%</b>
110.1%	14	48.01	10.99	527.5	2.39	1652	<b>412.7</b>	78.2%



Customer is responsible in determining that MaxMotion product will fit/perform suitably in the intended application

Version: 1N1N

Revised: April 2020

HP	RPM	Voltage	Amps	Const.	Frame	Insul.	Torque	P. Code	Wgt lbs	Rated
0.5	1750	48Vdc	11.78	TENV	56C	Class H	18 in/lbs	K (SCR)	25	IP45

## MM5048NV

# LOW VOLTAGE DC PERMANENT MAGNET MOTOR

HEAVY GAUGE ROLLED STEEL CONSTRUCTION | TENV TOTALLY NON-VENTILATED & TEFC TOTALLY ENCLOSED FAN COOLED SCR RATED, 12, 24, 48VDC

MaxMotion

## Applications:

Low voltage permanent magnet DC motors are suitable for installations having batteries or generator supplied low voltage DC.



## Features:

**Design** - Low voltage

**Construction** - Rolled Steel, NEMA C-Face Footed with Removable Base

**Agency listings and standard** - NEMA, UL Recognized and CSA Certified, RoHS Compliant

**Service Factor** - 1.0

**IP Rating** - IP45

**Insulation** - Class F Insulation

**Speed Range** - 20:1 Constant Torque, Linear Speed/Torque Characteristics over entire speed range

**Voltage** - 12V, 24V & 48V

**Bearings** - Permanently Lubricated High quality Double Shielded Ball Bearings

**Enclosure Protection** - (TEFC) Totally Enclosed Fan Cooled & (TENV) Totally Enclosed Non-Ventilated

**Duty** - Continuous

**Warranty** - 18 Months

# LOW VOLTAGE DC PERMANENT MAGNET MOTOR

HEAVY GAUGE ROLLED STEEL CONSTRUCTION | TENV TOTALLY NON-VENTILATED & TEFC TOTALLY ENCLOSED FAN COOLED SCR RATED, 12, 24, 48VDC



HP	FL RPM	VOLTS	FRAME	CAT NO.	CONSTRUCTION	ENCLOSURE	NOM EFF.	F.L. AMPS	DE BEARING	NDE BEARING	WT (Lbs)	"C" Dimension (Inch)
0,25	1680	12	56C	MM2512NV	ROLLED STEEL	TENV	62,40%	30,9	6203	6203	21	10,01
	1680	12	56C	MM2512FC	ROLLED STEEL	TEFC	62,40%	30,9	6203	6203	21	11,6
	1758	24	56C	MM2524FC	ROLLED STEEL	TEFC	62,80%	15,46	6203	6203	21	11,6
	1815	48	56C	MM2548FC	ROLLED STEEL	TEFC	67,50%	7,73	6203	6203	21	11,6
1/3	1789	12	56C	MM3312NV	ROLLED STEEL	TENV	71,30%	38,3	6203	6203	23	10,01
	1789	12	56C	MM3312FC	ROLLED STEEL	TEFC	71,30%	38,3	6203	6203	23	11,6
	1527	24	56C	MM3324NV	ROLLED STEEL	TENV	64,80%	19,1	6203	6203	23	10,01
	1527	24	56C	MM3324FC	ROLLED STEEL	TEFC	64,80%	19,1	6203	6203	23	11,6
	1753	48	56C	MM3348FC	ROLLED STEEL	TEFC	71,40%	9,56	6203	6203	23	11,6
0,5	1714	12	56C	MM5012NV	ROLLED STEEL	TENV	70,90%	47,16	6203	6203	25	10,95
	1714	12	56C	MM5012FC	ROLLED STEEL	TEFC	70,90%	47,12	6203	6203	25	12,49
	1646	24	56C	MM5024FC	ROLLED STEEL	TEFC	77,90%	23,56	6203	6203	25	12,49
	1678	24	56C	MM5048NV	ROLLED STEEL	TENV	78,50%	11,78	6203	6203	25	10,95
	1678	48	56C	MM5048FC	ROLLED STEEL	TEFC	78,50%	11,78	6203	6203	25	12,49
0,75	1573	12	56C	MM7512FC	ROLLED STEEL	TEFC	73,80%	73,6	6203	6203	30	13,55
	1775	24	56C	MM7524FC	ROLLED STEEL	TEFC	75,20%	31,8	6203	6203	30	13,55
1	1672	12	56C	MM1012FC	ROLLED STEEL	TEFC	74,30%	95,4	6203	6203	32	14,3
	1764	24	56C	MM1024FC	ROLLED STEEL	TEFC	77,10%	47,7	6203	6203	32	14,3

