# **Motor Test Report**



Model: MM7590FC

Description: MaxMotion 0.75HP, 1750RPM, 90VDC, TEFC, 56C

Tester: 01

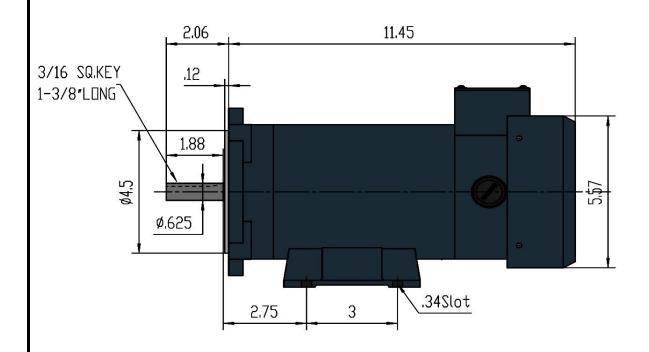
Test Date: 2018.04.24

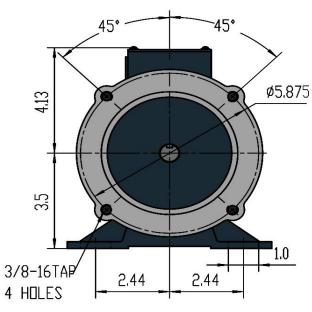
V	Α	W In	RPM	W out	Eff.%	r								 -,-,-,-,-
120	10	800	2500	700	100									W In
108	9	720	2250	630	90									W Out Amps
96	8	640	2000	560	80									
84	7	560	1750	490	70	+	Eff					//		Volts
72	6	480	1500	420	60	/								 RPM-
60	5	400	1250	350	50	+-/	<u>i</u>						i	 
48	4	320	1000	280	40			 		/	 	 	    	 
36	3	240	750	210	30	++	<u> </u>	/	/		¦	¦	¦¦	 
24	2	160	500	140	20		/		   		   	   	 	 l
12	1	80	250	70	10			! ! !			! ! !	! ! !	 	 
0	0	0	0	0	0	//		1						
	ı	1	ı			Ö	0.	8	1.	6	2.	4	3. T	4 e N.m.

Measured Points	V	Α	Input Watts	N.m.	RPM	Output Watts	%
No Load	90.45	0.483	43.68	0.03	1856	6.218	14.2%
Rated	90.07	7.312	658.6	3.18	1651	550	83.5%
Efficiency Max.	90.12	5.614	506.0	2.4	1696	425.8	84.2%
Max. Kw Output	90.04	8.313	748.5	3.64	1625	620	82.8%
Max. Torq. Output	90.04	8.313	748.5	3.64	1625	620	82.8%
End	90.04	8.313	748.5	3.64	1625	620	82.8%

Load	Measure	V	Α	Input Watts	N.m.	RPM	Output Watts	Eff %
1.1%	1	90.45	0.483	43.68	0.03	1856	6.218	14.2%
1.6%	2	90.45	0.499	45.13	0.04	1856	8.550	18.9%
2.0%	3	90.43	0.527	47.69	0.06	1855	10.88	22.8%
3.7%	4	90.42	0.612	55.34	0.10	1851	20.16	22.8%
6.9%	5	90.38	0.789	71.32	0.20	1844	38.16	36.4%
10.4%	6	90.38	1.08	97.58	0.30	1835	57.25	54.1%
17.3%	7	90.34	1.49	134.6	0.50	1820	94.9	58.7%
25.0%	8	90.31	1.994	180.1	0.73	1801	137.3	70.5%
34.8%	9	90.28	2.599	234.6	1.03	1780	191.2	76.2%
44.2%	10	90.23	3.284	296.3	1.32	1759	243.1	81.5%
54.9%	11	90.2	4.009	361.6	1.66	1739	301.9	82.0%
65.9%	12	90.15	4.788	431.6	2.01	1718	362.3	83.5%
77.4%	13	90.12	5.614	506.0	2.40	1696	425.8	83.9%
89.1%	14	90.1	6.487	584.5	2.80	1672	490.2	84.2%
100.0%	15	90.07	7.312	658.6	3.18	1651	550.0	83.9%
101.3%	16	90.07	7.409	667.3	3.23	1648	557.0	83.5%
112.7%	17	90.04	8.313	748.5	3.64	1625	620.0	82.8%

# Max Motion





С	Customer is responsable in determining that MaxMotion product will fit/perform suitably in the intended application								n: 1NIN	Revised:	April 2020
	HP	RPM	Voltage	Amps	Const.	Frame	Insul.	Torque	P. Code	Wgt lbs	Rated
	0,75	1750	90Vdc	9,82	TEFC	56C	Class H	27 in/lbs	K (SCR)	30	IP45

MM7590FC

### DC PERMANENT MAGNET MOTOR

HEAVY GAUGE ROLLED STEEL CONSTRUCTION | TENV TOTALLY NON-VENTILATED & TEFC TOTALLY ENCLOSED FAN COOLED SCR RATED, 90VDC, 180VDC



# **Applications:**

For use with SCR rated single phase DC variable speed controls used in conveyors, pumps, packaging equipment and many other applications where economical precise speed control is required.



### Features:

Design - SCR Rated

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 - 90V & 180V

Bearings - Permanently Lubricated High quality Double Shielded Ball Bearings

Brushes - Oversized for Extra Long Life, Easy brush access with Unique brush Holder

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

**Duty** - Continuous

Warranty - 18 Months



## **DC PERMANENT MAGNET MOTOR**

HEAVY GAUGE ROLLED STEEL CONSTRUCTION | TENV TOTALLY NON-VENTILATED & TEFC TOTALLY ENCLOSED FAN COOLED SCR RATED, 90VDC, 180VDC



НР	FL RPM	VOLTS	FRAME	CAT NO.	CONSTRUCTION	ENCLOSURE	NOM EFF.	F.L. AMPS	DE BEARING	NDE BEARING	WT (Lbs)	"C" Dimension (Inch)
	1773	90	56C	MM2590NV	ROLLED STEEL	TENV	76.70%	2.05	6203	6203	21	8
0.25	1773	90	56C	MM2590FC	ROLLED STEEL	TEFC	76.70%	2.05	6203	6203	21	9.6
0.25	1717	180	56C	MM2518NV	ROLLED STEEL	TENV	71.90%	2.55	6203	6203	21	8
	1717	180	56C	MM2518FC	ROLLED STEEL	TEFC	71.90%	2.55	6203	6203	21	9.6
	1691	90	56C	MM3390NV	ROLLED STEEL	TENV	77.70%	5.1	6203	6203	23	8
0.33	1691	90	56C	MM3390FC	ROLLED STEEL	TEFC	77.70%	5.1	6203	6203	23	9.6
0.33	1687	180	56C	MM3318NV	ROLLED STEEL	TENV	69.90%	2.55	6203	6203	23	8
	1687	180	56C	MM3318FC	ROLLED STEEL	TEFC	69.90%	2.55	6203	6203	23	9.6
	1702	90	56C	MM5090NV	ROLLED STEEL	TENV	81.90%	6.28	6203	6203	25	8.88
0.5	1702	90	56C	MM5090FC	ROLLED STEEL	TEFC	81.90%	6.28	6203	6203	25	10.4
0.5	1752	180	56C	MM5018NV	ROLLED STEEL	TENV	81.40%	3.14	6203	6203	25	8.88
	1752	180	56C	MM5018FC	ROLLED STEEL	TEFC	81.40%	3.14	6203	6203	25	10.4
0.75	1651	90	56C	MM7590FC	ROLLED STEEL	TEFC	83.90%	9.82	6203	6203	30	11.45
0.73	1675	180	56C	MM7518FC	ROLLED STEEL	TEFC	84.00%	4.9	6203	6203	30	11.45
1	1739	90	56C	MM1090FC	ROLLED STEEL	TEFC	84.00%	12.7	6203	6203	33	12.24
1	1739	180	56C	MM1018FC	ROLLED STEEL	TEFC	84.70%	6.4	6203	6203	33	12.24
1.5	1793	180	56C	MM1518FC-56C	ROLLED STEEL	TEFC	83.30%	7.86	6203	6203	45	14.39
1.5	1793	180	145TC	MM1518FC	ROLLED STEEL	TEFC	83.30%	7.86	6305	6305	45	13.8
2	1751	180	56C	MM2018FC-56C	ROLLED STEEL	TEFC	82.80%	10.4	6305	6305	55	14.75
	1751	180	145TC	MM2018FC	ROLLED STEEL	TEFC	82.80%	10.77	6305	6305	55	14.8
3	1814	180	145TC	MM3018FC	ROLLED STEEL	TEFC	82.50%	18.6	6305	6305	70	16.9

