

# PRODUCT INFORMATION PACKET



Model No: M1120059.00  
Catalog No: M1120059.00  
0.13 HP Sub-Fractional Motor, 3500 RPM, 90 V, 31 Frame, TENV  
Sub-Fractional Motors



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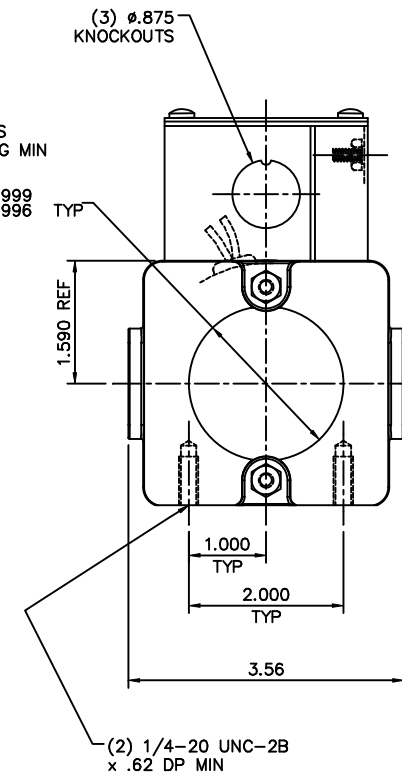
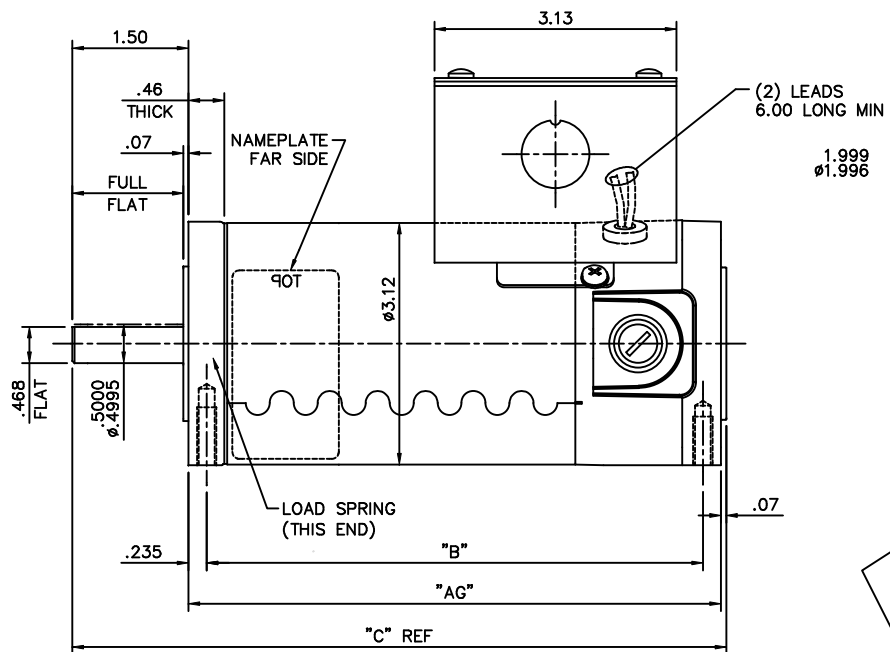
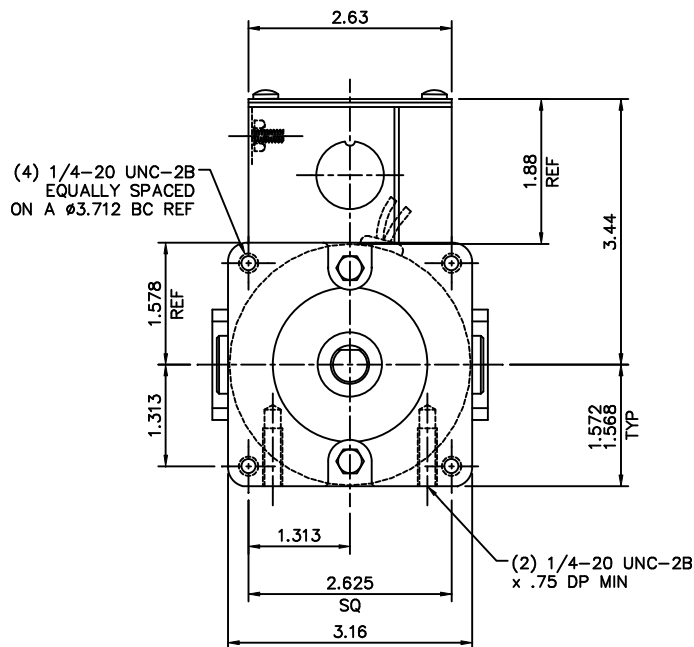
**Nameplate Specifications**

Output HP	0.13 Hp	Output KW	0.10 kW
Voltage	90 V	Current	1.5 A
Speed	3500 rpm	Service Factor	1
Efficiency	68 %	Duty	Continuous
Insulation Class	H	Frame	31
Enclosure	Totally Enclosed Non Ventilated	Thermal Protection	No
Ambient Temperature	40 °C	Drive End Bearing Size	6201-13
Opp Drive End Bearing Size	6201-13	UL	Recognized
CSA	Y	CE	Y

**Technical Specifications**


Rotation	Reversible	Mounting	Round
Overall Length	7.45 in	Frame Length	3.50 in
Shaft Diameter	0.500 in	Shaft Extension	1.5 in
Connection Drawing	M1005321	Outline Drawing	M1031034-M1120059

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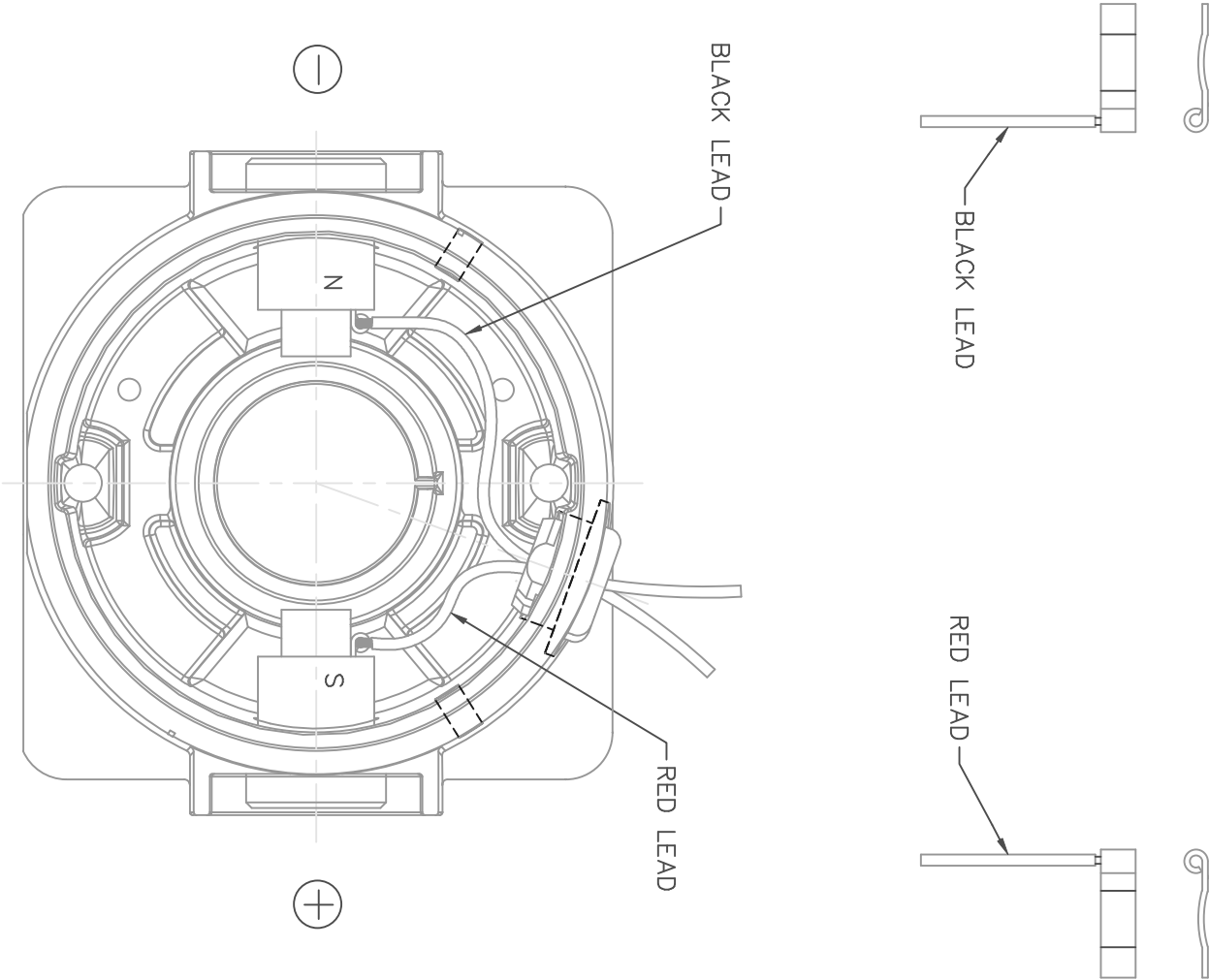


M1120062.00	7.88	7.42	9.45	90	1/4	3500
M1120060.00	5.38	4.92	6.95	90	1/10	3500
M1120059.00	5.88	5.42	7.45	90	1/8	3500
M1120058.00	6.88	6.42	8.45	90	1/6	3500
M1120045.00	6.88	6.42	8.45	180	1/8	1750
M1120043.00	7.88	7.42	9.45	180	1/6	1750
M1120042.00	7.88	7.42	9.45	90	1/6	1750
M1120041.00	6.38	5.92	7.95	180	1/10	1750
M1120040.00	4.88	4.42	6.45	12/24	1/14-1/7	1750/4200
M1120039.00	5.38	4.92	6.95	180	1/15	1750
M1120027.00	6.88	6.42	8.45	90	1/8	1750
M1120014.00	5.88	5.42	7.45	90	1/10	1750
M1120013.00	5.38	4.92	6.95	90	1/15	1750
CATALOG NO.	"AG" DIM	"B" DIM	"C" DIM	VOLT	H.P.	RPM


NOTES:  
1) END CAP MOUNTING FEET TO BE PARALLEL TO EACH OTHER WITHIN .002

14	ADDED M1120060.00 TO TABLE, ECN 07-1640	IPG	5/18/07	SAD	TOLERANCES UNLESS SPECIFIED	 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN	IPG 11/9/06			
13	ADDED M1120059.00 TO TABLE, ECN 07-1638	IPG	5/18/07	SAD	DEC.		INCHES	CHK	SAD 11/9/06		
12	CAT. M1120040.00: "AG" WAS 5.38, "B" WAS 4.92, "C" WAS 6.95, ECN 07-1635	IPG	5/18/07	SAD	.X		±.1	APPD			
11	ADDED M1120058.00 TO TABLE, ECN 07-1637	IPG	5/17/07	SAD	.XX		±.03	SCALE	5=8		
10	ADDED M1120027.00 TO TABLE, ECN 07-1633	IPG	5/16/07	SAD	.XXXX	±.0005	REF	M1030240.00			
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH	FMF	M1120014.00			
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT						RFP	CAD FILE	M1031034	SIZE	DRAWING NO.	REV.
						DIST	B	M1031034.00	14		

D.C. MOTORS



EXTERNAL CONNECTIONS FOR CCW ROTATION  
 VIEWING LEAD END OF MOTOR WITH RED LEAD  
 POSITIVE (+) AND BLACK LEAD NEGATIVE (-).  
 FOR CW ROTATION REVERSE POLARITY.

		TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN	IPG 11/6/06		
		DEC.	INCHES		CHK	SAD 11/6/06		
		.X	±.1		APPD			
		.XX	±.01		TITLE	CONNECTION DIAGRAM		
		.XXX	±.005		SCALE	1=1		
00	RELEASED PER 31 TT FR CONSOLIDATION, ECN 06-4430	IPG 11/6/06	SAD .XXXX	±.0005	MAT'L.	REF M1005036.01		
NO.	REVISION	BY & DATE	CHK ANG	±1/2'	FINISH	FMF M1120014.00		
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			DIST			A	M1005321.01	00

# LEESON ELECTRIC CORPORATION

## TYPICAL PERFORMANCE CURVE FOR DIRECT CURRENT PERMANENT MAGNET MOTOR

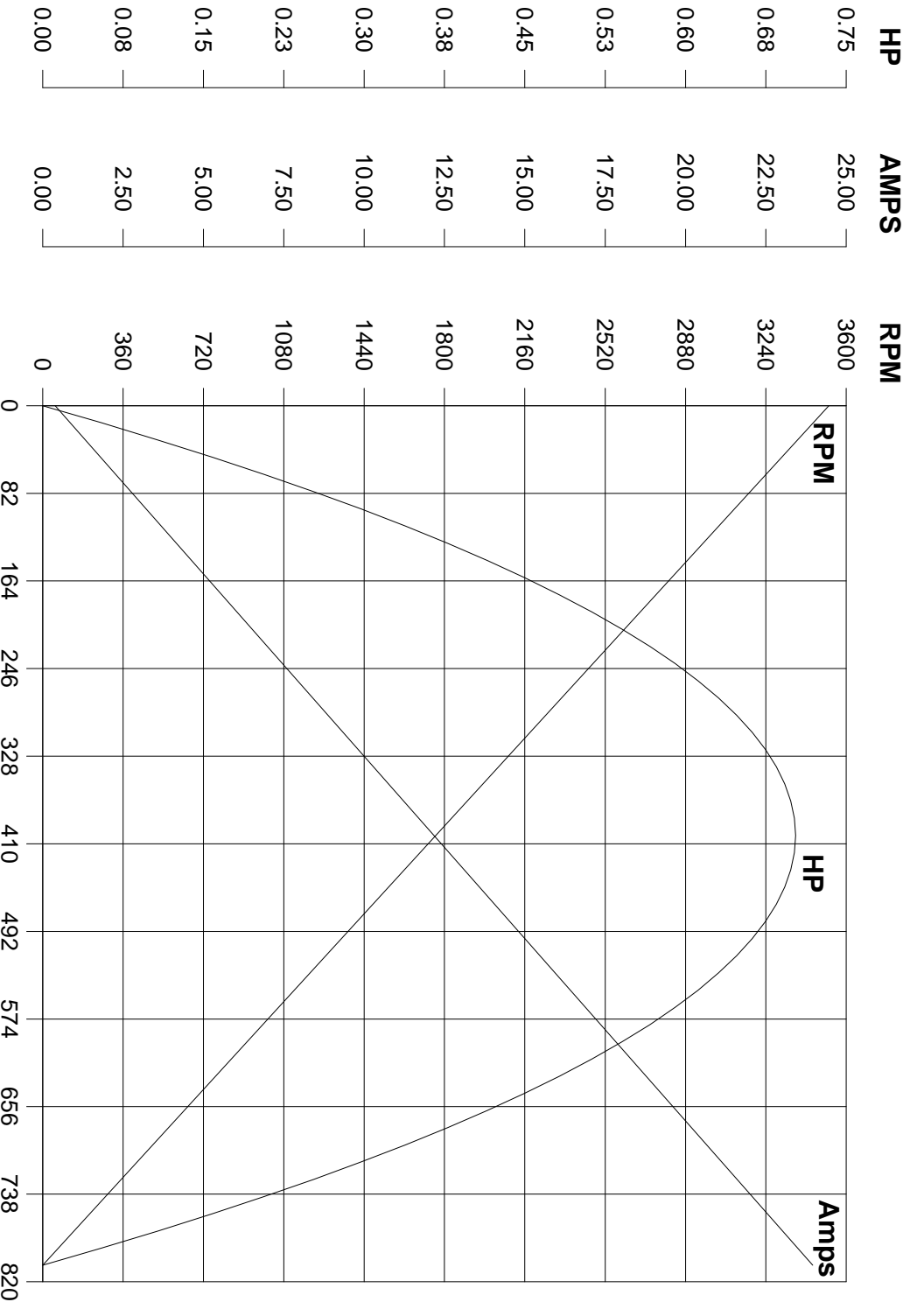
Model No. CM31D35NZ3

Catalog No. M1120059.00

HP 0.125 RPM 3500 DC Volts 90.0 N.P. FLA 1.50

F.F. 1.38 Encl IP55 Type DN S.F. 1.00

Max. Amb. 40.0 Deg C Insul. H Frame 31 Duty CONT



Ra 3.2300 Ohms  
 La 13.31 mHenrys  
 Ja 5.152 OZ-IN/√2  
 Ke 24.95 V/KRPM

Kt 33.74 OZ-IN/AMP  
 I<sub>max</sub> 25.4 AMPS Allowed  
 FL Torque 36.00 OZ-IN  
 FL EFF 68.00 %

Winding W- MD312364 Prepared by V. Boehlen Date 02-26-2020