

# PRODUCT INFORMATION PACKET



Model No: 109089.00  
Catalog No: 109089.00  
Premium Duck™ Washdown Motor, 1 HP, 180 V, 1750 RPM, ZS56C Frame, TEFC



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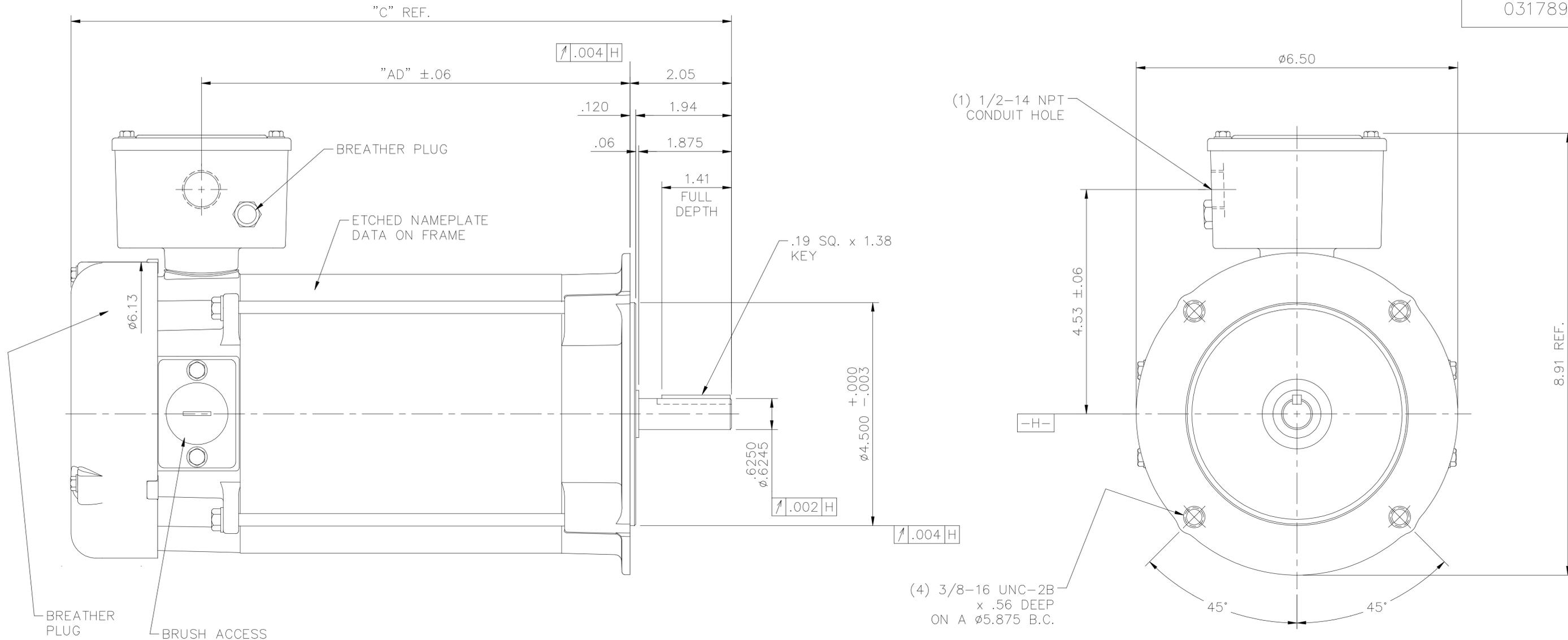
**Nameplate Specifications**

Output HP	<b>1 Hp</b>	Output KW	<b>0.75 kW</b>
Voltage	<b>180 V</b>	Speed	<b>1750 rpm</b>
Service Factor	<b>1.0</b>	Frame	<b>ZS56C</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Thermal Protection	<b>No Protection</b>
Efficiency	<b>85.3 %</b>	Ambient Temperature	<b>40 °C</b>
Current	<b>5.0 A</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Drive End Bearing Size	<b>6205</b>
Opp Drive End Bearing Size	<b>6203</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>N</b>

**Technical Specifications**

Rotation	<b>Reversible</b>	Mounting	<b>Round</b>
Overall Length	<b>13.87 in</b>	Frame Length	<b>9.63 in</b>
Shaft Diameter	<b>0.625 in</b>	Shaft Extension	<b>2.05 in</b>
Torque	<b>36 LB-IN</b>		
Connection Drawing	<b>005487</b>	Outline Drawing	<b>031789-ZS56C</b>

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FRAME	"C"	"AD"
NS56C	12.87	8.16
RS56C	13.37	8.66
US56C	13.87	9.16
VS56C	14.37	9.66
WS56C	14.87	10.16
XS56C	15.37	10.66
YS56C	15.87	11.16
ZS56C	16.37	11.66

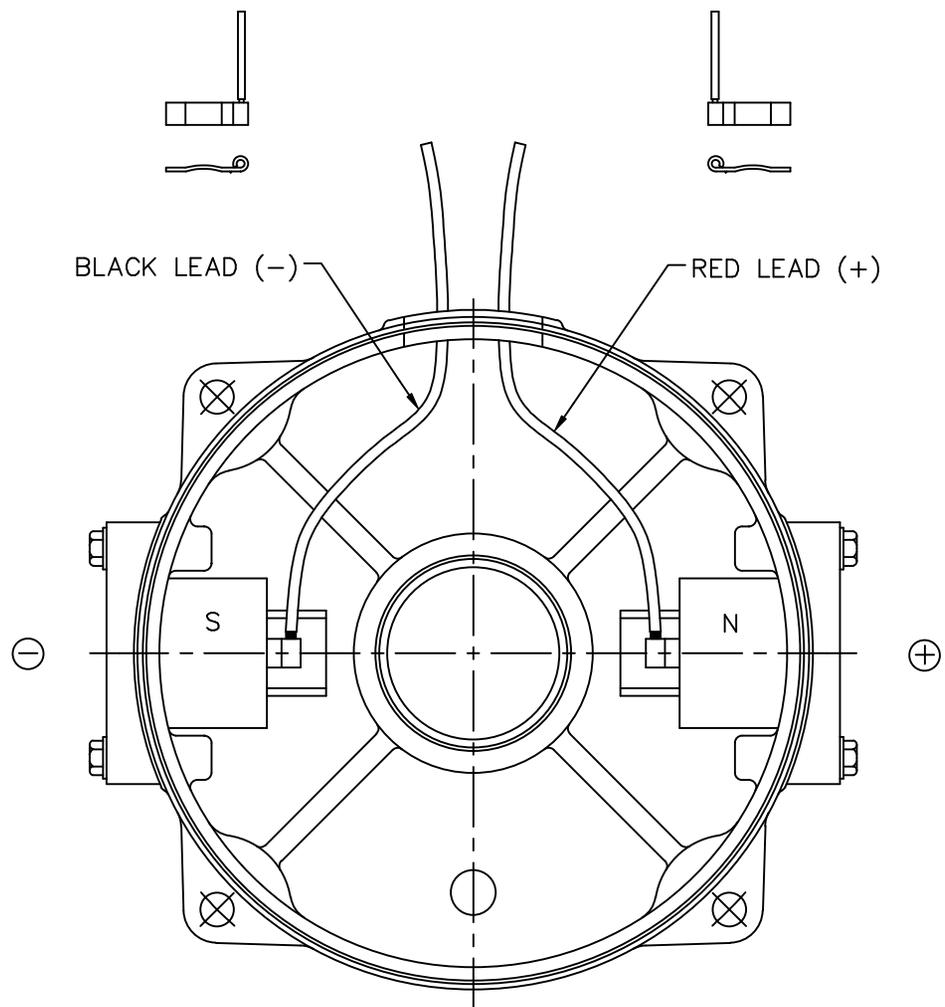
**STAINLESS STEEL WASHGUARD MOTOR**

**SPECIAL FEATURES:**

- 1) VITON CONDUIT BOX & COVER GASKETS
- 2) VITON O-RINGS IN ENDBELL RABBETS
- 3) VITON O-RINGS IN BRUSH HOLDER & CAP
- 4) VITON SHAFT SEAL
- 5) BREATHING PLUGS IN CONDUIT BOX & ENDBELL
- 6) ETCHED NAMEPLATE DATA ON MOTOR FRAME
- 7) ALL-STAINLESS STEEL CONSTRUCTION

ORACLE REV
002

		TOLERANCES UNLESS SPECIFIED		LEESON	ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN PG 12/13/04
		DEC.	INCHES			
		.X	±.1			APPD PG 12/13/04
		.XX	±.03	TITLE	OUTLINE	SCALE 1=2
D	CORRECTED BREATHING LOCATION, ECO-0168998	IPG	6/18/19		48 FRAME DC - S56C MOUNT - TEFC	REF 030967
01	ADDED FRAME DESIGNATION TO TABLE, PER 109088.00	IPG	1/31/05	SAD	MAT'L. STAINLESS STEEL	FMF 109088.00
NO.	REVISION	BY & DATE	CHK	ANG	FINISH	PREV
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	031789
				DIST	SIZE	DRAWING NO.
					B	031789
						REV. D



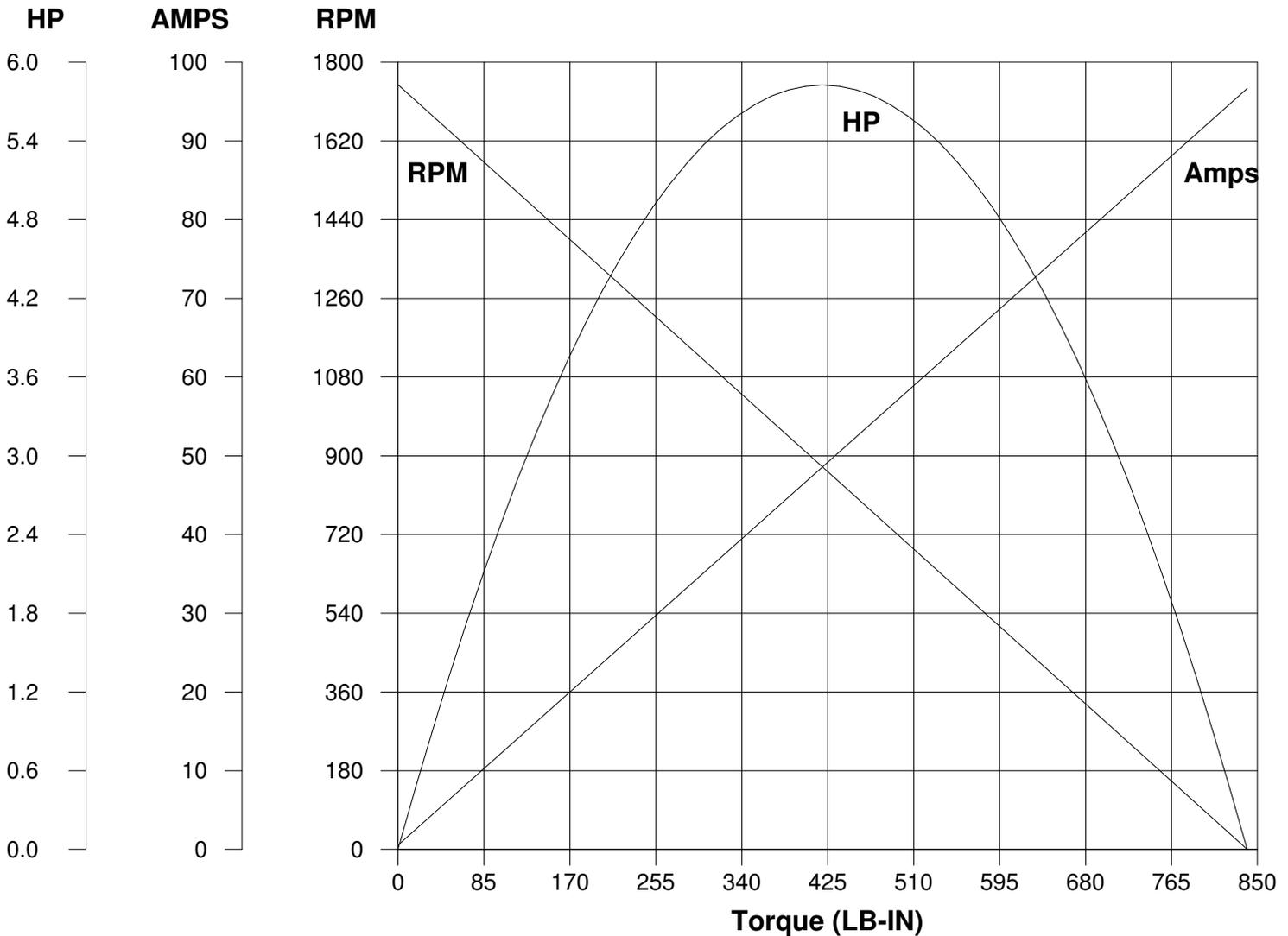
EXTERNAL CONNECTIONS FOR CCWLE ROTATION  
 VIEWING LEAD END OF MOTOR WITH RED LEAD  
 POSITIVE AND BLACK LEAD NEGATIVE.  
 FOR CW ROTATION, REVERSE POLARITY.

				TOLERANCES UNLESS SPECIFIED		 ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN PG 12/10/04		
				DEC.	INCHES		CHK		
				.X	±.1		APPD PG 12/10/04		
				.XX	±.01		SCALE 5=8		
				.XXX	±.005		REF		
				.XXXX	±.0005	MAT'L.	FMF 109075.00		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH	PREV		
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	005487	SIZE	DRAWING NO.	REV.
				DIST			A	005487.01	

# LEESON ELECTRIC CORPORATION

## TYPICAL PERFORMANCE CURVE FOR DIRECT CURRENT PERMANENT MAGNET MOTOR

<b>Model No.</b> <u>C4D17WC9</u>	<b>Catalog No.</b> <u>109089.00</u>	
<b>HP</b> <u>1.000</u>	<b>RPM</b> <u>1750</u>	<b>DC Volts</b> <u>180.0</u>
<b>F.F.</b> <u>1.38</u>	<b>Encl</b> <u>TEFC</u>	<b>Type</b> <u>DF</u>
<b>Max. Amb.</b> <u>40.0 Deg C</u>	<b>Insul.</b> <u>F</u>	<b>Frame</b> <u>ZS56C</u>
		<b>N.P. FLA</b> <u>5.00</u>
		<b>S.F.</b> <u>1.00</u>
		<b>Duty</b> <u>Cont</u>



<b>Ra</b>	<u>1.3700</u>	Ohms
<b>La</b>	<u>20.70</u>	mHenrys
<b>Ja</b>	<u>17.50</u>	LB-IN <sup>2</sup>
<b>Ke</b>	<u>102.9</u>	V/KRPM

<b>Kt</b>	<u>8.701</u>	LB-IN/AMP
<b>Imax</b>	<u>72.3</u>	AMPS Allowed
<b>FL Torque</b>	<u>36.00</u>	LB-IN
<b>FL EFF</b>	<u>87.30</u>	%

**Winding W-** D55298-1      **Prepared by** V. Boehlen      **Date** 10-18-2005