

**BALDOR® • RELIANCE™**

---

# Customer information packet

## D2302

.5HP, 1750RPM, DC, 56, 3420D, TEFC, F1, N

Class - None

Division -

## Specifications

Armature Voltage	230 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	230 V
Frame	56
Frame Material	Steel
Output Power	0.500 HP
XP Class and Group	None
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Armature Current	2.1 a
Armature Inertia	4.680 lb-ft <sup>2</sup>
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	COMPOUND
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 14 AWG 2 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	13.54 IN
Product Family	WP Below Decks Marine Duty
Pulley End Bearing Type	Sealed Bearing
RoHS Status	ROHS COMPLIANT

## Part detail

Revision	Q
Type	DC
Mech. spec.	34-6121
Base	
Status	PRD/A
Elec. spec.	34WGZ512
Layout	34LY6121
Eff. date	09-11-2021
CD Diagram	CD0862B01
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	0.625 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	Shaft Slinger

**Nameplate**

<b>NP2801L</b>			
<b>CAT.NO.</b>	D2302		
<b>SPEC.</b>	34-6121Z512		
<b>HP</b>	.5	<b>ENCL</b>	TEFC
<b>RPM</b>	1750		
<b>FRAME</b>	56	<b>TYPE</b>	3420D
<b>ARM V</b>	230	<b>ARM A</b>	2.1
<b>FLD V</b>	230	<b>FLD A</b>	.24
<b>INSUL</b>	F	<b>AMB.</b>	40
<b>DUTY</b>	CONT	<b>SUPPLY</b>	A
<b>BRG/DE</b>	6203	<b>BRG/ODE</b>	6203
<b>BRUSHES</b>	2/BP5000H03		
		<b>BLANK</b>	
<b>SER.</b>			
<b>BLANK</b>	IEEE 45		
<b>APRV-CSA</b>	<b>APRV-UL</b>		

**DC Motor Performance Data**

Record # 254

Typical performance - not guaranteed values

<b>Winding: 34WGZ512-R001</b>		<b>Type: 3420D</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>General Characteristics</b>		
Rated Output (HP)	0.5	Armature Resistance @ 25°C	10.033 Ω		
R.P.M.	1750	Series Winding Resistance @ 25°C	2.47 Ω		
Armature Volts	230	Shunt Winding Resistance @ 25°C	1037.8 Ω		
Armature Amps	2.1	Armature Inductance	100.96 mH		
Field Volts	230				
Field Amps	0.24				
Rating - Duty	40C AMB-CONT				
Power Supply Code	K				

**Load Characteristics at 230 Armature Volts, 230 Field Volts, 0.23 Field Amps**

Load Point	1	2	3	4	5	6	7
Armature Amps	0.28	0.77	1.18	1.64	2.07	2.52	2.95
R.P.M.	2012	1920	1845	1776	1692	1624	1560
Torque ( LB-FT )	0	0.38	0.75	1.13	1.5	1.88	2.25

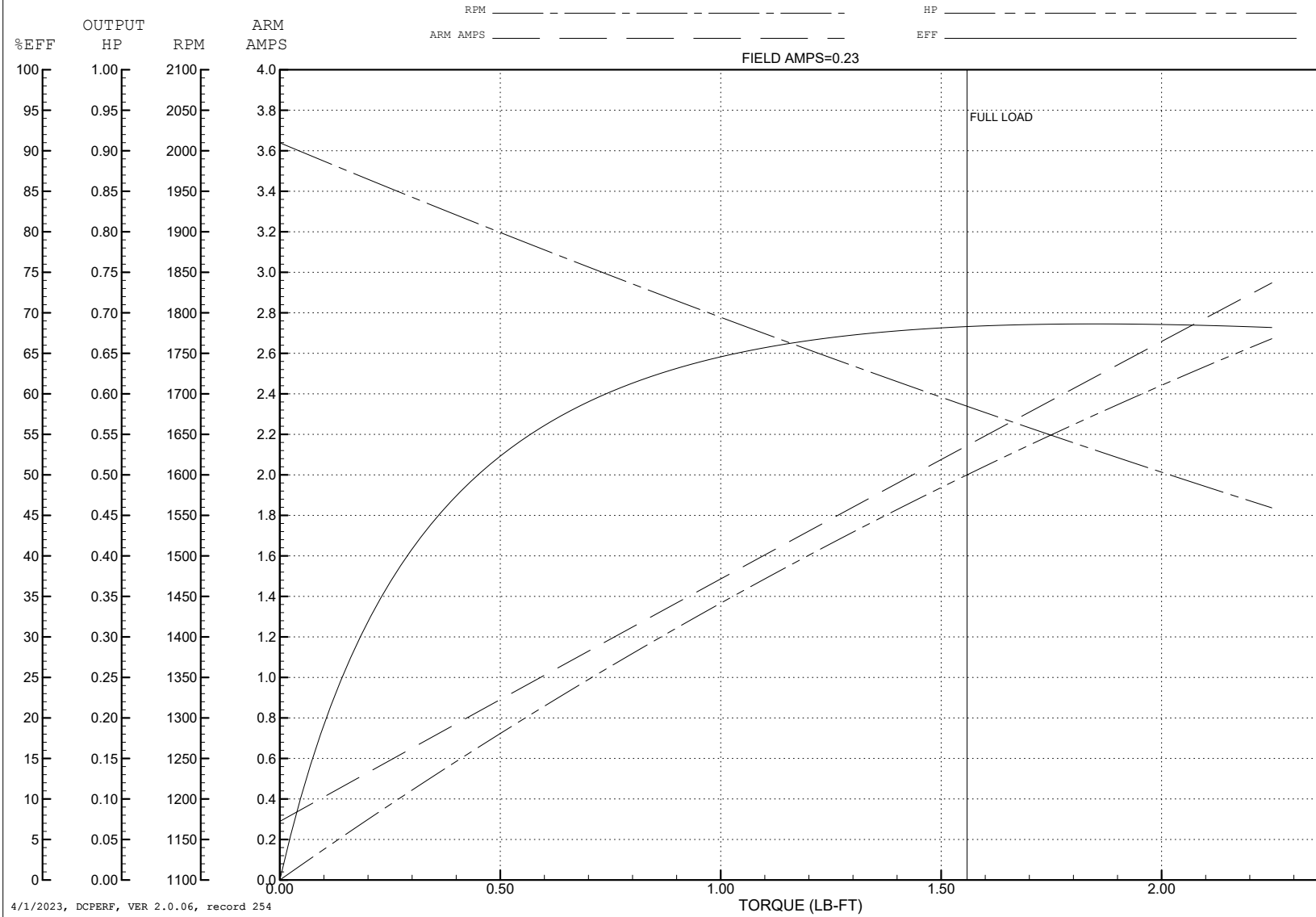
ABB Motors and Mechanical Inc.

WINDING # 34WGZ512

0.5 HP DC 1750 RPM 230 V ARM 230 V FLD 3420D

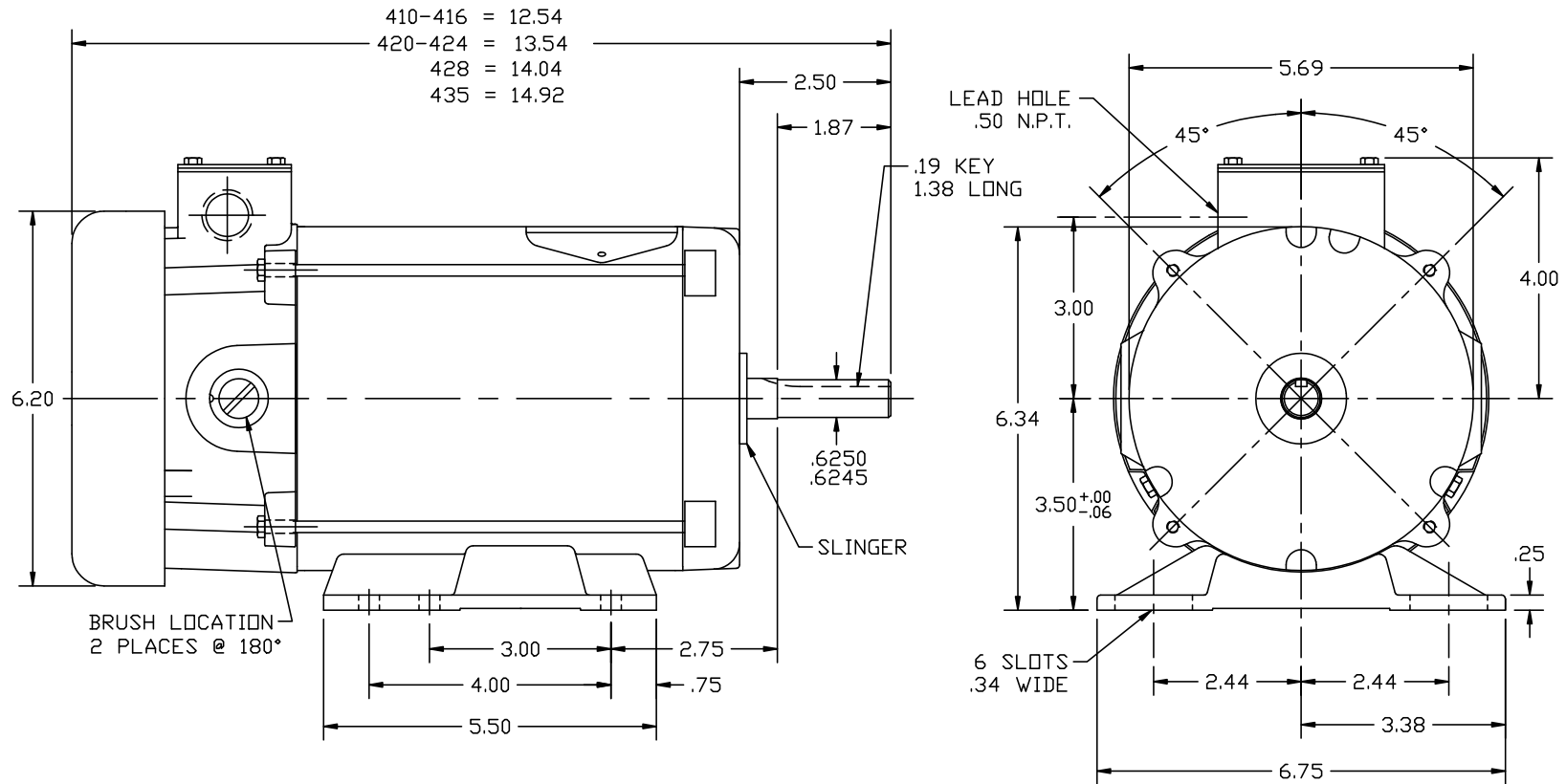
Typical performance - not guaranteed values.

ENCL: TEFC DUTY: CONT CL: F



4/1/2023, DCPERF, VER 2.0.06, record 254

34-6121



MATERIAL: -			
REV: D	LOADED TO ACAD		
1219-42	REF: 34-6099	BY: TDJ	REVISED: 08/09/95
	FILE: AAA00022425	TDR: 0064848	

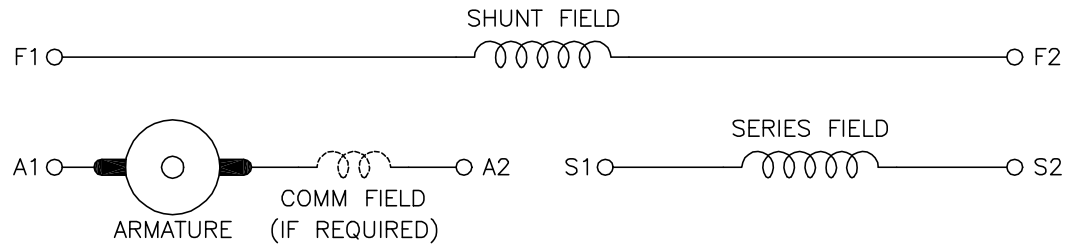
BALDOR ELECTRIC Co.

STD. HDRZ 34DC NEMA 56 TEFC S/P 14-2 WEATHERPROOF

34-6121

CD0862B01

# COMPOUND WOUND



DIRECTION OF ROTATION			
CWDE		CCWDE	
POS TERM (+)	NEG TERM (-)	POS TERM (+)	NEG TERM (-)
A1	S2	A2	S2
F1	F2	F1	F2
CONNECT A2 & S1		CONNECT A1 & S1	

NOTES:

1. LIMIT STARTING INRUSH CURRENT TO NOT MORE THAN 3 TIMES RATED AMPERES BY ENERGIZING THE FULL SHUNT FIELD BEFORE BRINGING THE ARMATURE VOLTAGE UP SLOWLY OR IN STEPS.
2. OPTIONAL FIELD REOSTAT MAY BE CONNECTED IN SERIES WITH THE SHUNT FIELD.
3. OPTIONAL THERMOSTAT LEADS ARE MARKED J,J.

REV. DESC: NEW, REPLACE CD0862			
REV. LTR: -	BY: JLP	REVISED: 16:10:51 11/03/2004	TDR: 347796
CD0862B01		FILE: AAA00121482	REF: CD0862B01
		MTL: -	

**BALDOR ELECTRIC Co.**

DC CONNECTION DIAGRAM, COMPOUND FIELD, 6 LEAD

CD0862B01