ABB BALDOR RELIANCE

Customer information packet

D2302

.5HP, 1750RPM, DC, 56, 3420D, TEFC, F1, N
Class - None
Division -

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Specifications

Armature Voltage	230 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	230 V
Frame	56
Frame Material	Steel
Haz Area Class and Group	None
Output Power	0.500 HP
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Armature Current	2.1 a
Armature Inertia	4.680 lb-ft2
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	T
Type	DC
Mech. spec.	34-6121
Base	
Status	PRD/A
Elec. spec.	34WGZ512
Layout	34LY6121
Eff. date	10-25-2024
CD Diagram	CD0862B01
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

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

Nameplate

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

DC Motor Performance Data
Record # 254
Typical performance - not guaranteed values

Winding: 34WGZ512-R001 **Type:** 3420D **Enclosure:** TEFC

Nameplate Data	
Rated Output (HP)	0.5
R.P.M.	1750
Armature Volts	230
Armature Amps	2.1
Field Volts	230
Field Amps	0.24
Rating - Duty	40C AMB-CONT
Power Supply Code	K

General Characteristics	
Armature Resistance @ 25ºC	10.033 Ω
Series Winding Resistance @ 25ºC	2.47 Ω
Shunt Winding Resistance @ 25ºC	1037.8 Ω
Armature Inductance	100.96 mH

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

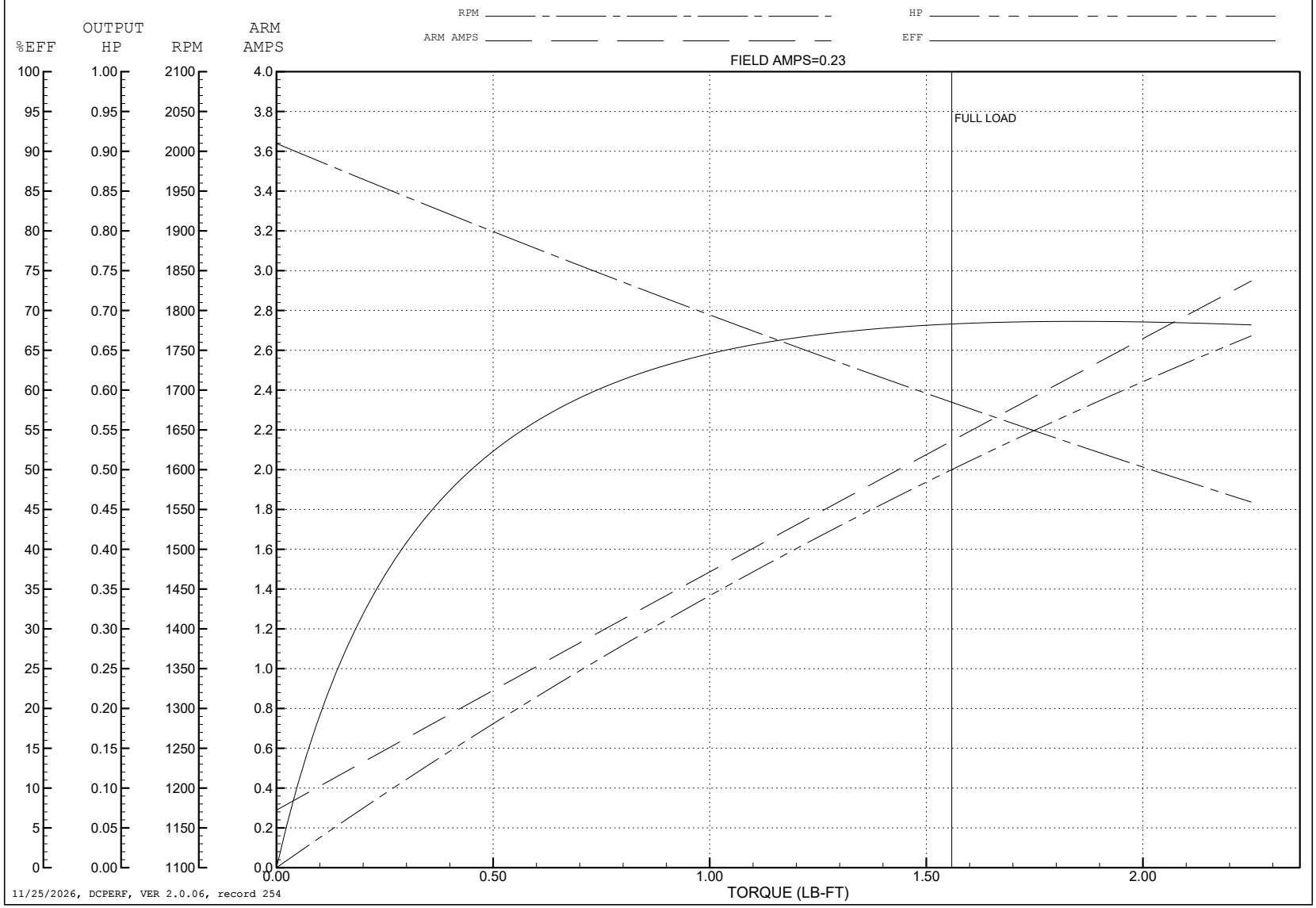
ABB Motors and Mechanical Inc.

WINDING # 34WGZ512

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

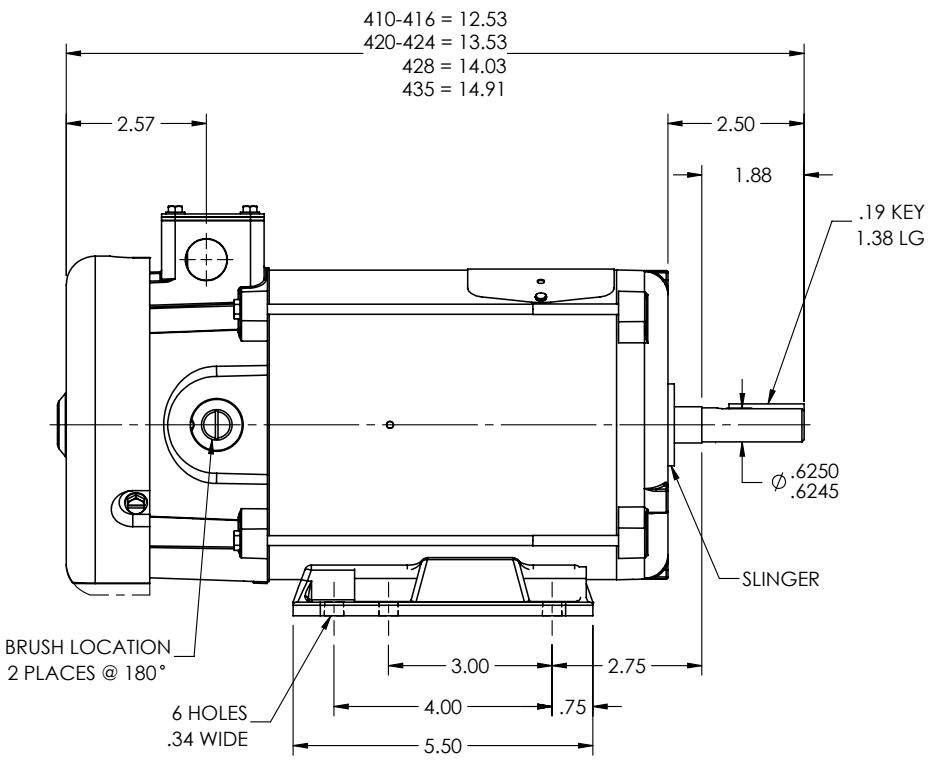
Typical performance - not guaranteed values.

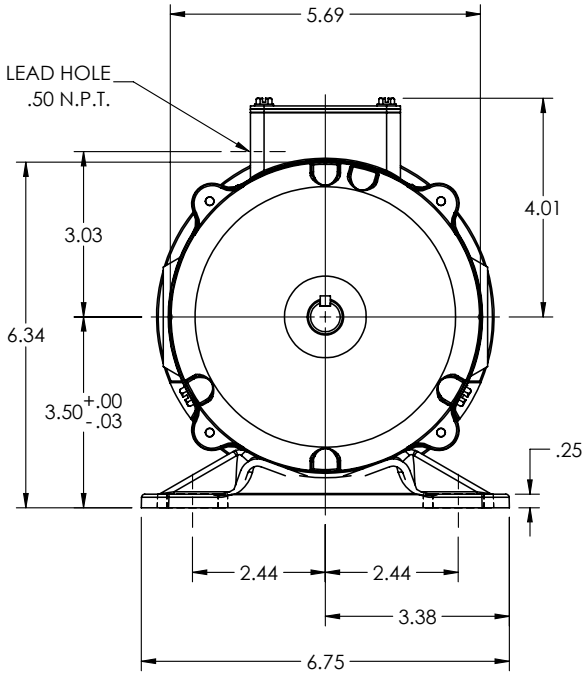
ENCL: TEFC DUTY: CONT CL: F



11/25/2026, DCPERF, VER 2.0.06, record 254

34LY6121





CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOAD TO SOLIDWORKS - REV D			
REV: E	VERSION: 01	REVISED: 08:22:18 12/22/2022	TDR: 000001201165
34LY6121	MODEL NO. 34LY6121		REF: -
	BY: ENFRAJ0		

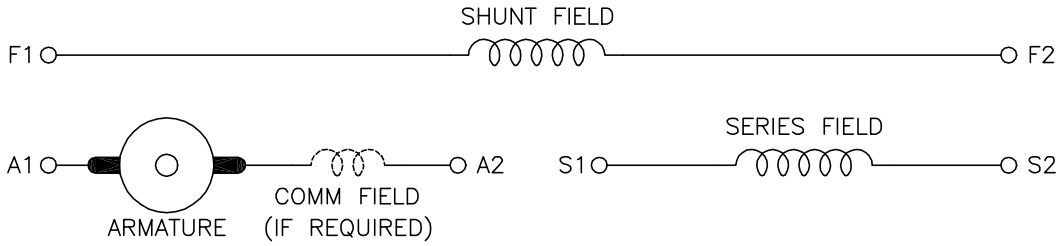
BALDOR - RELIANCE®

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

34LY6121

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.

CD0862B01

REV. DESC: NEW, REPLACE CD0862			BALDOR ELECTRIC Co.
REV. LTR: –	BY: JLP	REVISED: 16:10:51 11/03/2004	TDR: 347796
CD0862B01		FILE: AAA00121482	REF: CD0862B01
		MTL: –	DC CONNECTION DIAGRAM, COMPOUND FIELD, 6 LEAD