

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
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-ft ²
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		General Characteristics	
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

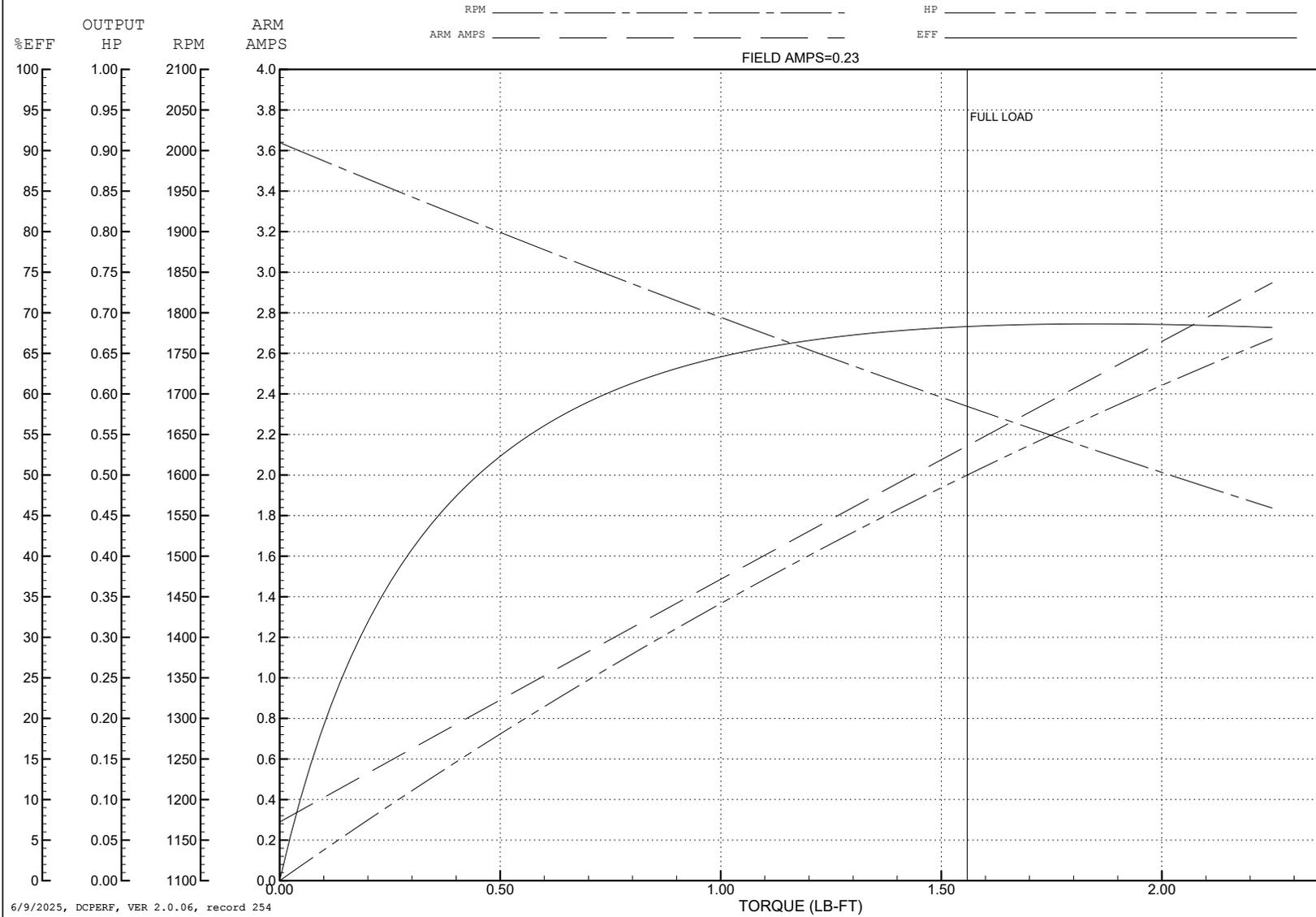
ABB Motors and Mechanical Inc.

WINDING # 34WGZ512

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

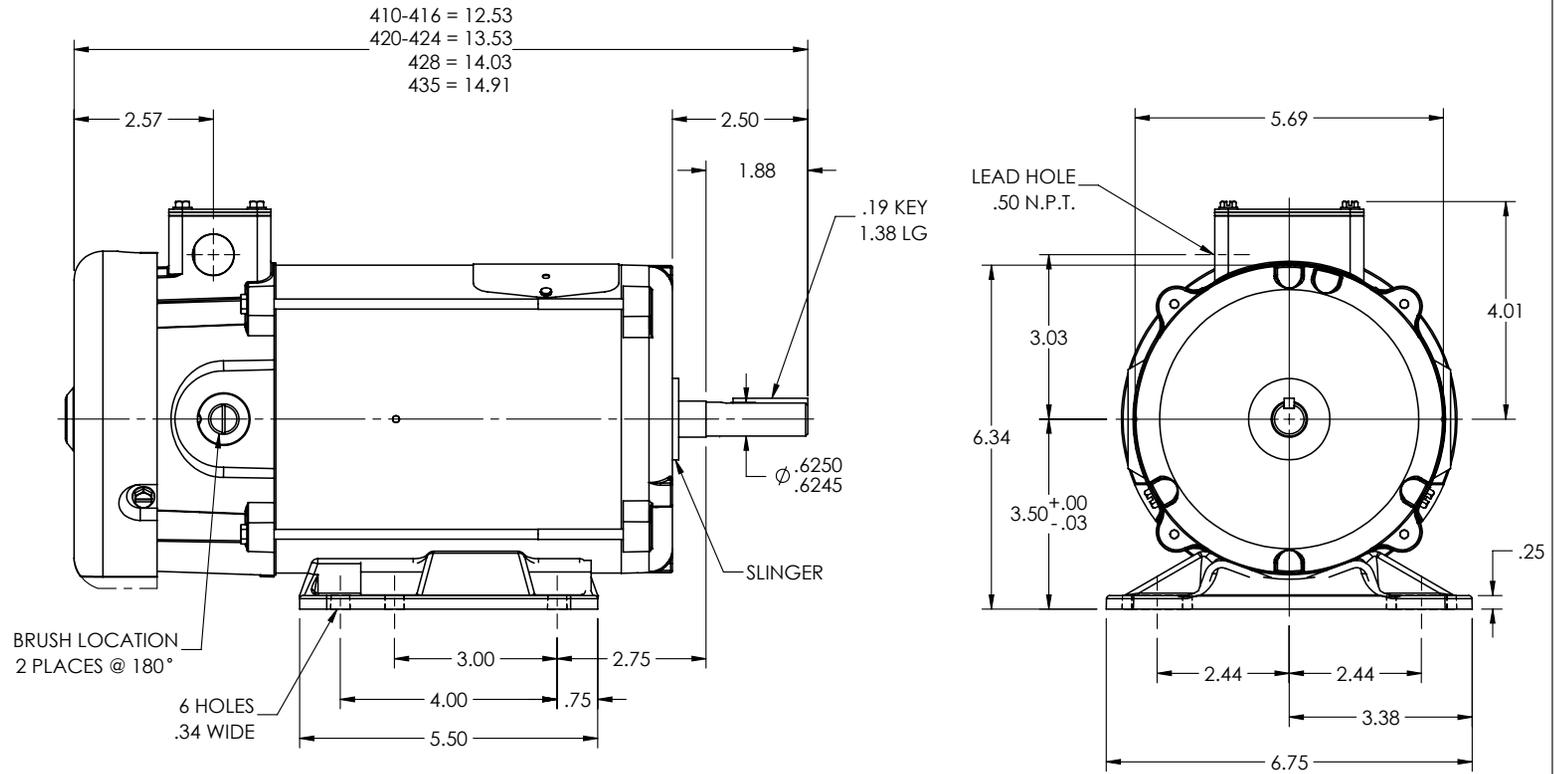
Typical performance - not guaranteed values.

ENCL: TEFC DUTY: CONT CL: F



6/9/2025, 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
BY: ENFRAJ0

REF: -

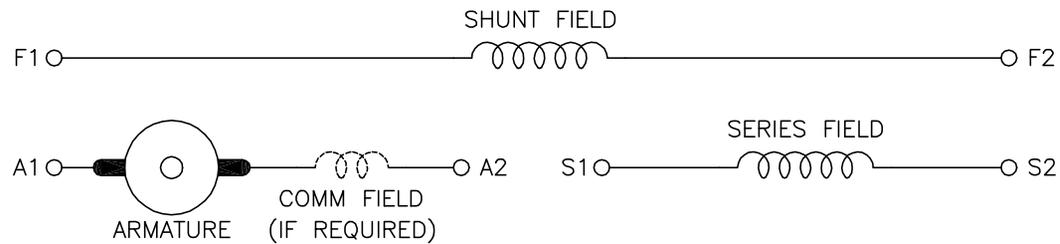
BALDOR - RELIANCE®

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:

- 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.
- OPTIONAL FIELD REOSTAT MAY BE CONNECTED IN SERIES WITH THE SHUNT FIELD.
- 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