

**BALDOR • RELIANCE**

---

# Customer information packet

## CD3433

.33HP, 1750RPM, DC, 56C, 3413D, TEFC, F1, N

Class - None

Division -

## Specifications

Armature Voltage	90 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	100 V
	50 V
Frame	56C
Frame Material	Steel
Haz Area Class and Group	None
Output Power	0.330 HP
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Armature Current	3.4 a
Armature Inertia	3.042 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	SHUNT
Heater Indicator	No Heater
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 14 AWG
	4 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	13.34 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00

## Part detail

Revision	AJ
Type	DC
Mech. spec.	34-6172
Base	
Status	PRD/A
Elec. spec.	34WG1982
Layout	34LY6172
Eff. date	10-25-2024
CD Diagram	CD0860C01
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

<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>	No Slinger

**Nameplate**

<b>NP0111L</b>			
<b>CAT.NO.</b>	CD3433		
<b>SPEC.</b>	34-6172-1982		
<b>HP</b>	.33	<b>ENCL</b>	TEFC
<b>RPM</b>	1750		
<b>FRAME</b>	56C	<b>TYPE</b>	3413D
<b>ARM V</b>	90	<b>ARM A</b>	3.4
<b>FLD V</b>	100/50	<b>FLD A</b>	.4/.8
<b>INSUL</b>	F	<b>AMB.</b>	40
<b>DUTY</b>	CONT	<b>SUPPLY</b>	1.3
<b>BRG/DE</b>	6203	<b>BRG/ODE</b>	6203
<b>BRUSHES</b>	2/BP5000H03		
	<b>BLANK</b>		
<b>SER.</b>			
<b>BLANK</b>			
<b>APRV-CSA</b>		<b>APRV-UL</b>	

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
TK3400	TACHO MOUNTING KIT FOR TK3400	A8
TK3400-HPU	HPU10 MOUNTING KIT 34P/35P TEFC	

**DC Motor Performance Data**

Record # 1417

Typical performance - not guaranteed values

Winding: 34WG1982-R001		Type: 3413D	Enclosure: TEFC	
<b>Nameplate Data</b>		<b>General Characteristics</b>		
Rated Output (HP)	0.33	Armature Resistance @ 25°C	3.05 Ω	
R.P.M.	1750			
Armature Volts	90			
Armature Amps	3.4	Shunt Winding Resistance @ 25°C	260 Ω	
Field Volts	100 / 50			
Field Amps	0.4 / 0.8	Armature Inertia	3.042 LI <sup>2</sup>	
Rating - Duty	40C AMB-CONT			
Form Factor	1.3			

**Load Characteristics at 90 Armature Volts, 100 Field Volts, 0.38 Field Amps**

Load Point	1	2	3	4	5	6	7
Armature Amps	0.3	1	1.75	2.6	3.4	4.3	5.3
R.P.M.	1940	1900	1862	1818	1786	1763	1735
Torque ( LB-FT )	0	0.258	0.494	0.752	0.988	1.246	1.482

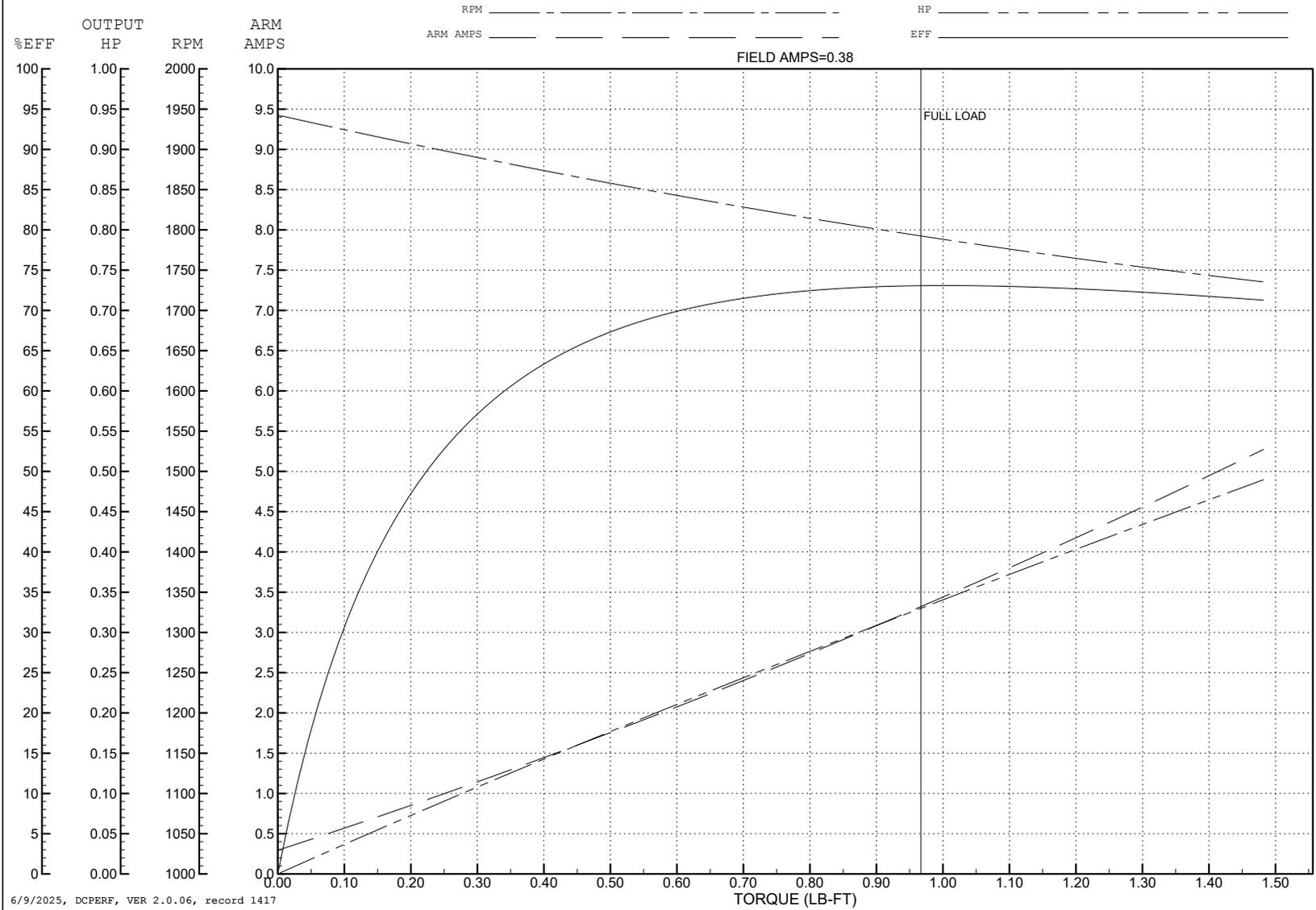
ABB Motors and Mechanical Inc.

WINDING # 34WG1982

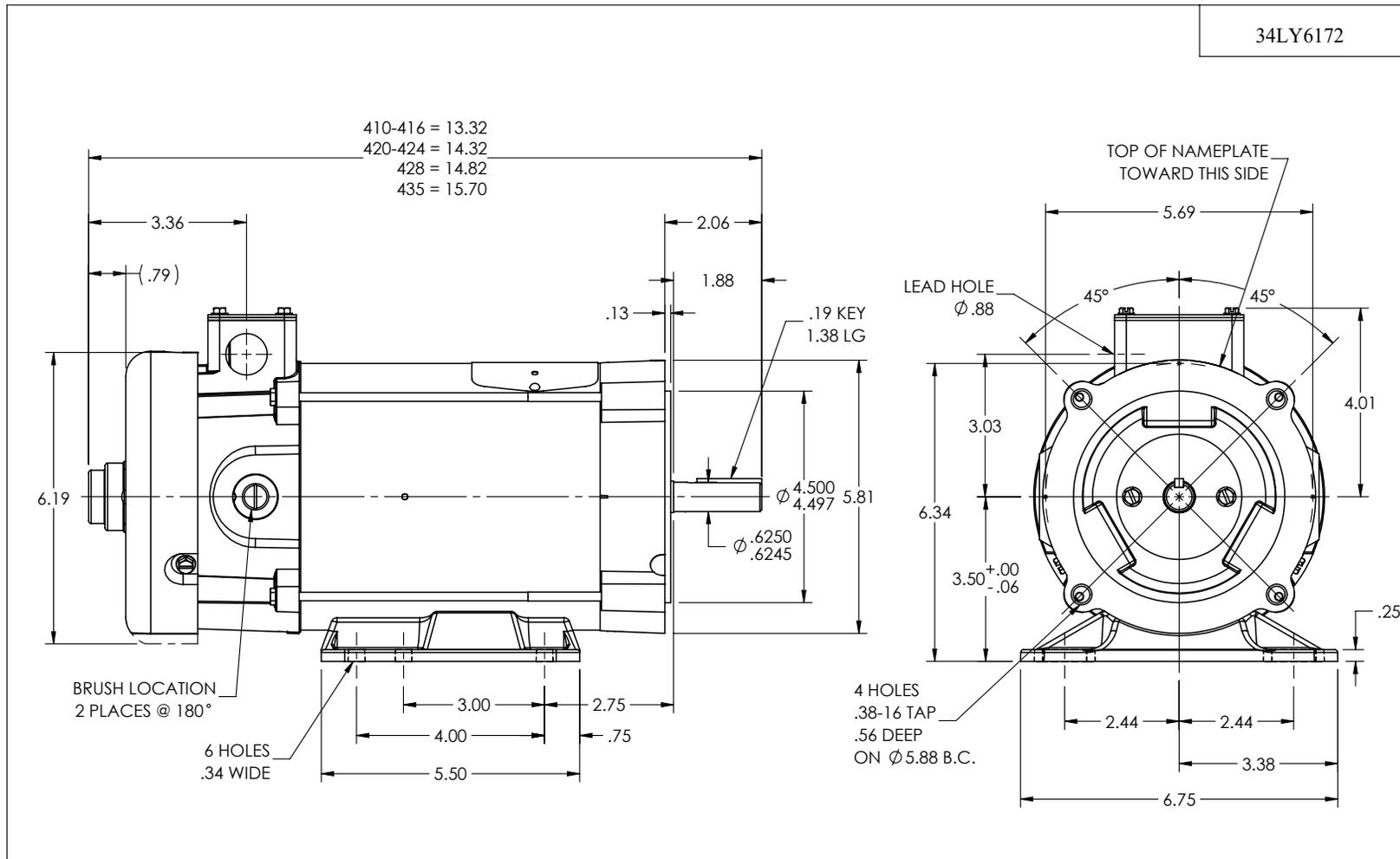
0.33 HP DC 1750 RPM 90 V ARM 100/50 V FLD 3413D

Typical performance - not guaranteed values.

ENCL: TEFC DUTY: CONT CL: F



34LY6172



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

REV. DESC: LOAD TO SOLIDWORKS - REV H			
REV: J	VERSION: 02	REVISED: 09:25:30 12/22/2022	TDR: 000001201165
34LY6172	MODEL NO. 34LY6172	REF: -	
	BY: ENFRAJ0		

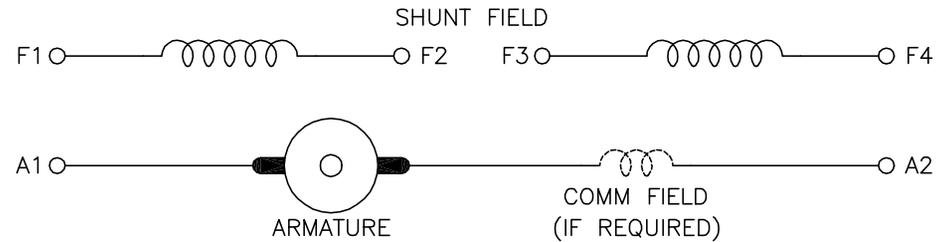
**BALDOR - RELIANCE®**

STD HOR "C" 34DC NEMA 56C TEFC; EXT. THRU BOLTS & MFTK

34LY6172

CD0860C01

# SHUNT WOUND



CONNECTION	DIRECTION OF ROTATION			
	CWDE		CCWDE	
	POS TERM (+)	NEG TERM (-)	POS TERM (+)	NEG TERM (-)
HIGH VOLTAGE	A1 F1 CONNECT F2 & F3	A2 F4	A2 F1 CONNECT F2 & F3	A1 F4
LOW VOLTAGE	A1 F1 & F3	A2 F2 & F4	A2 F1 & F3	A1 F2 & F4

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 CD0860			
REV. LTR: -	BY: JLP	REVISED: 15:35:22 11/03/2004	TDR: 347796
100098000		FILE: AAA00121477	REF: CD0860C01
		MTL: -	

**BALDOR ELECTRIC Co.**

DC CONNECTION DIAGRAM, SHUNT FIELD, 6 LEAD, DUAL VOLTAGE

CD0860C01