Customer information packet

CD3451

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

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Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	100 V
	200 V
Frame	56C
Frame Material	Steel
Haz Area Class and Group	None
Output Power	0.500 HP
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Armature Current	2.6 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	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	14.34 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00

Part Detail

Revision	AB
Type	DC
Mech. spec.	34-6172
Base	
Status	PRD/A
Elec. spec.	34WG2684
Layout	34LY6172
Eff. date	10-25-2024
CD Diagram	CD0860C01
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

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

Nameplate

NP0111L					
CAT.NO.	CD3451				
SPEC.	34-6172-2684				
HP	.5	**ENCL**	TEFC		
RPM	1750				
FRAME	56C	**TYPE**	3420D		
ARM V	180	**ARM A**	2.6		
FLD V	200/100	**FLD A**	.25/.5		
INSUL	F	**AMB.**	40		
DUTY	CONT	**SUPPLY**	1.3		
BRG/DE	6203	**BRG/ODE**	6203		
BRUSHES	2/BP5000H03				
	BLANK				
SER.					
BLANK					
APRV-CSA	**APRV-UL**				

Accessories

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

DC Motor Performance Data
Record # 463
Typical performance - not guaranteed values

Winding: 34WG2684-R001	**Type:** 3420D	**Enclosure:** TEFC

Nameplate Data	
Rated Output (HP)	0.5
R.P.M.	1750
Armature Volts	180
Armature Amps	2.6
Field Volts	200 / 100
Field Amps	0.25 / 0.5
Rating - Duty	40C AMB-CONT
Form Factor	1.3

General Characteristics	
Armature Resistance @ 25ºC	5.7398 Ω
Shunt Winding Resistance @ 25ºC	399.2056 Ω
Armature Inertia	4.68 LI^2

Load Characteristics at 180 Armature Volts, 200 Field Volts, 0.24 Field Amps

Load Point	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Armature Amps	0.4	1.5	2.2	2.8	3.5	4.3	5.8
R.P.M.	1977	1899	1879	1860	1839	1813	1807
Torque (LB-FT)	0	0.75	1.125	1.5	1.875	2.25	3

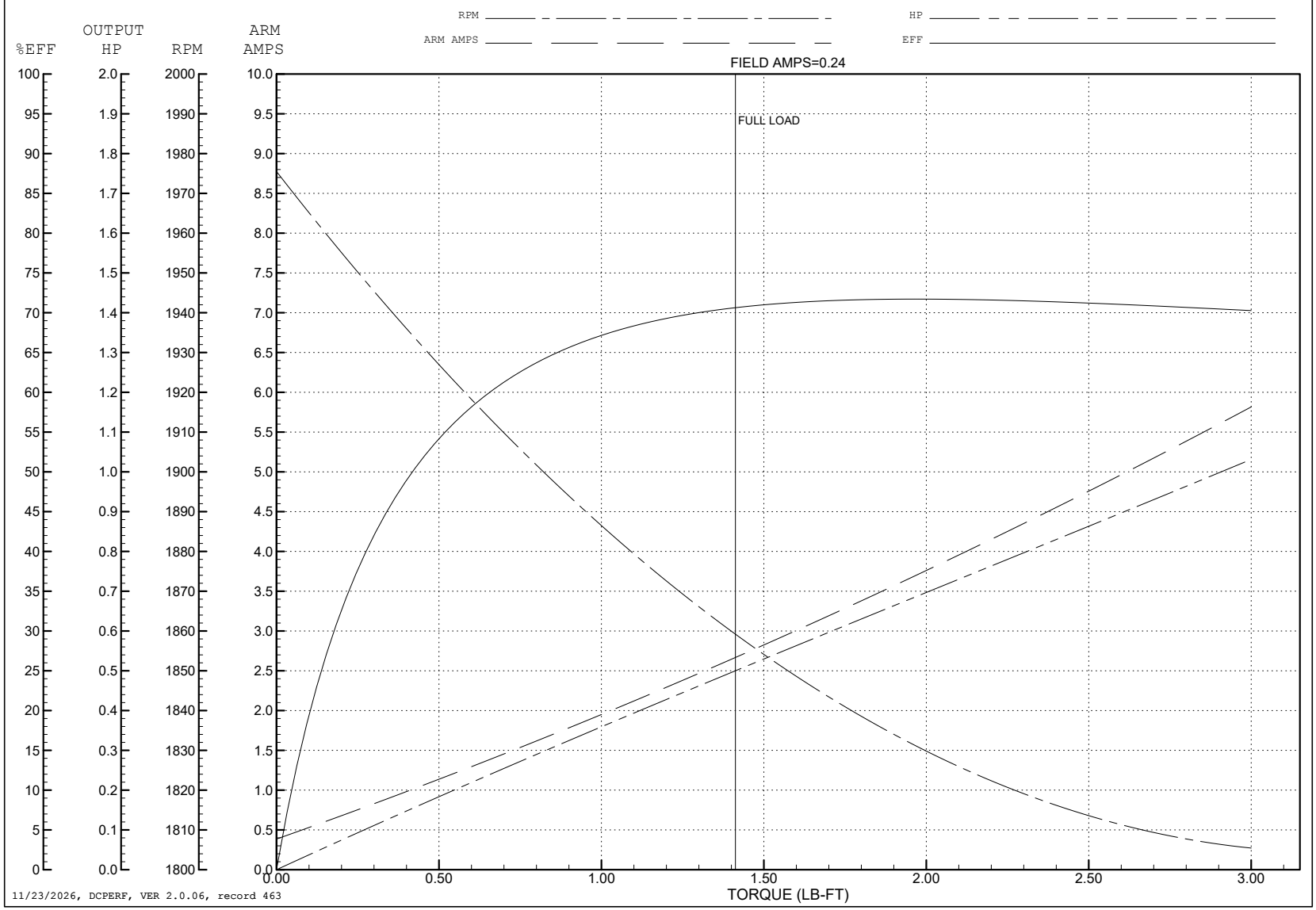
ABB Motors and Mechanical Inc.

WINDING # 34WG2684

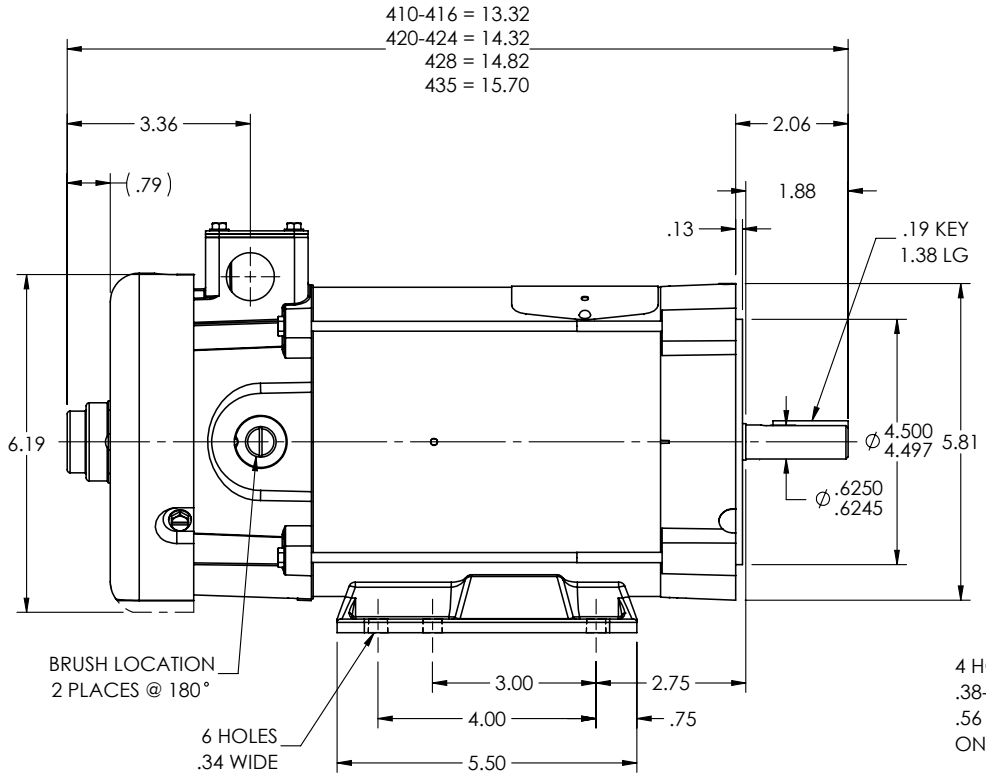
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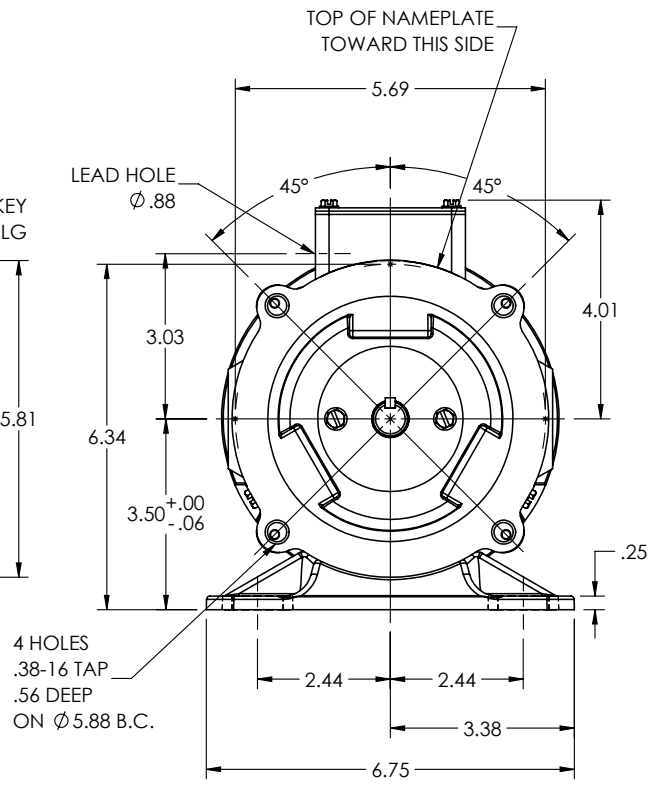
ENCL: TEFC DUTY: CONT CL: F

Typical performance - not guaranteed values.



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		

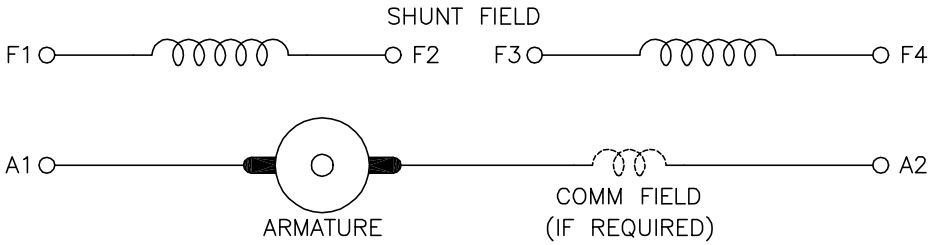
BALDOR - RELIANCE®

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.

CD0860C01

REV. DESC: NEW, REPLACE CD0860			BALDOR ELECTRIC Co.
REV. LTR: –	BY: JLP	REVISED: 15:35:22 11/03/2004	TDR: 347796
CD0860C01		FILE: AAA00121477	REF: CD0860C01
		MTL: –	DC CONNECTION DIAGRAM, SHUNT FIELD, 6 LEAD, DUAL VOLTAGE