

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CD3451**

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

Part Detail							
Revision:	W	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:	3420D	Elec. Spec:	34WG2684	CD Diagram:	CD0860C01
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	34-6172	Layout:	34LY6172
Frame:	56C	Mounting:	F3	Poles:	00	Created Date:	
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	06-14-2018
Field Type:	Shunt	Literature:		Elec. Diagram:		Replaced By:	

Specs			
Enclosure:	TEFC		
Frame:	56C		
Frame Material:	Steel		
XP Class and Group:	None		
Agency Approvals:	CSA		
	UR		
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		
Insulation Class:	F		
Lifting Lugs:	No Lifting Lugs		
Motor Lead Quantity/Wire Size:	2 @ 14 AWG		

	4 @ 18 AWG		
<b>Motor Lead Exit:</b>	Ko Box		
<b>Motor Lead Termination:</b>	Flying Leads		
<b>Mounting Arrangement:</b>	F3		
<b>Product Family:</b>	General Purpose		
<b>Pulley End Bearing Type:</b>	Sealed Bearing		
<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		
<b>Motor Standards:</b>	NEMA		
<b>XP Division:</b>	Not Applicable		

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		
SER.	BLANK		
BLANK			
APRV-CSA	<input type="checkbox"/>	APRV-UL	<input type="checkbox"/>

Parts List		
Part Number	Description	Quantity
SA006761	SA 34-6172-2684	1.000 EA
AA003395	AA 34-6172-2684	1.000 EA
34EP3103A01	FR ENDPLATE, MACH	1.000 EA
WD4100A17	PLUG STIMPSON D4036	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
34EP3300A29	PU ENDPLATE, MACH	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
BP5201A10SP	BRUSH HOLDER ASSY W/BP4509A01 & BP3000A0	1.000 EA
80XN1032A03	10-32 X 3/16 SET SCREW	2.000 EA
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
34FH5002A01SP	FAN COVER ASSY W/SHAFT COVER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
34CB4504SP	CONDUIT BOX LID, STAMPED	1.000 EA
34GS1011SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
WD4102A07	STRAIN RELIEF - MICRO PLASTIC #23MP07W20	1.000 EA
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.001 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.014 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 EA
BP5000H03SP	BRUSH ASSY, GRADE H619	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0860	CONN. DIAGRAM-DC(SHUNT WOUND MOTOR)	1.000 EA
NP0111L	NP STD LASER ENGRAVED DC MOTORS, UL CSA	1.000 EA
27PA1001	PKG GRP, PRINT PK1027A06	1.000 EA

<b>Accessories</b>		
<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 # 463 - Typical performance - not guaranteed values

<b>Winding:</b> 34WG2684-R001	<b>Type:</b> 3420D	<b>Enclosure:</b> TEFC
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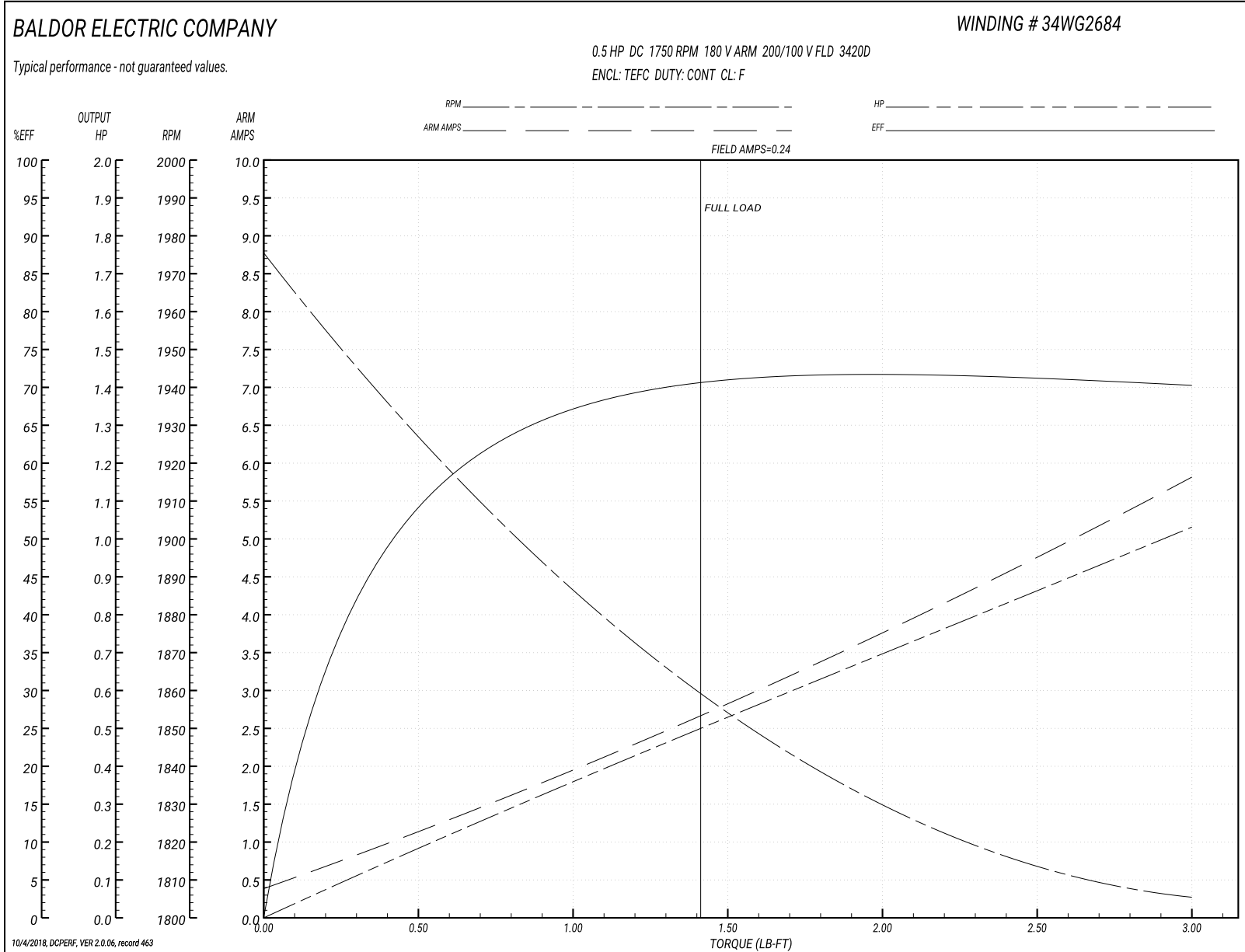
Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	5.7398 Ω
R.P.M.	1750		
Armature Volts	180		
Armature Amps	2.6	Shunt Winding Resistance @ 25°C	399.2056 Ω
Field Volts	200 / 100		
Field Amps	0.25 / 0.5	Armature Inertia	4.68 LI <sup>2</sup>
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

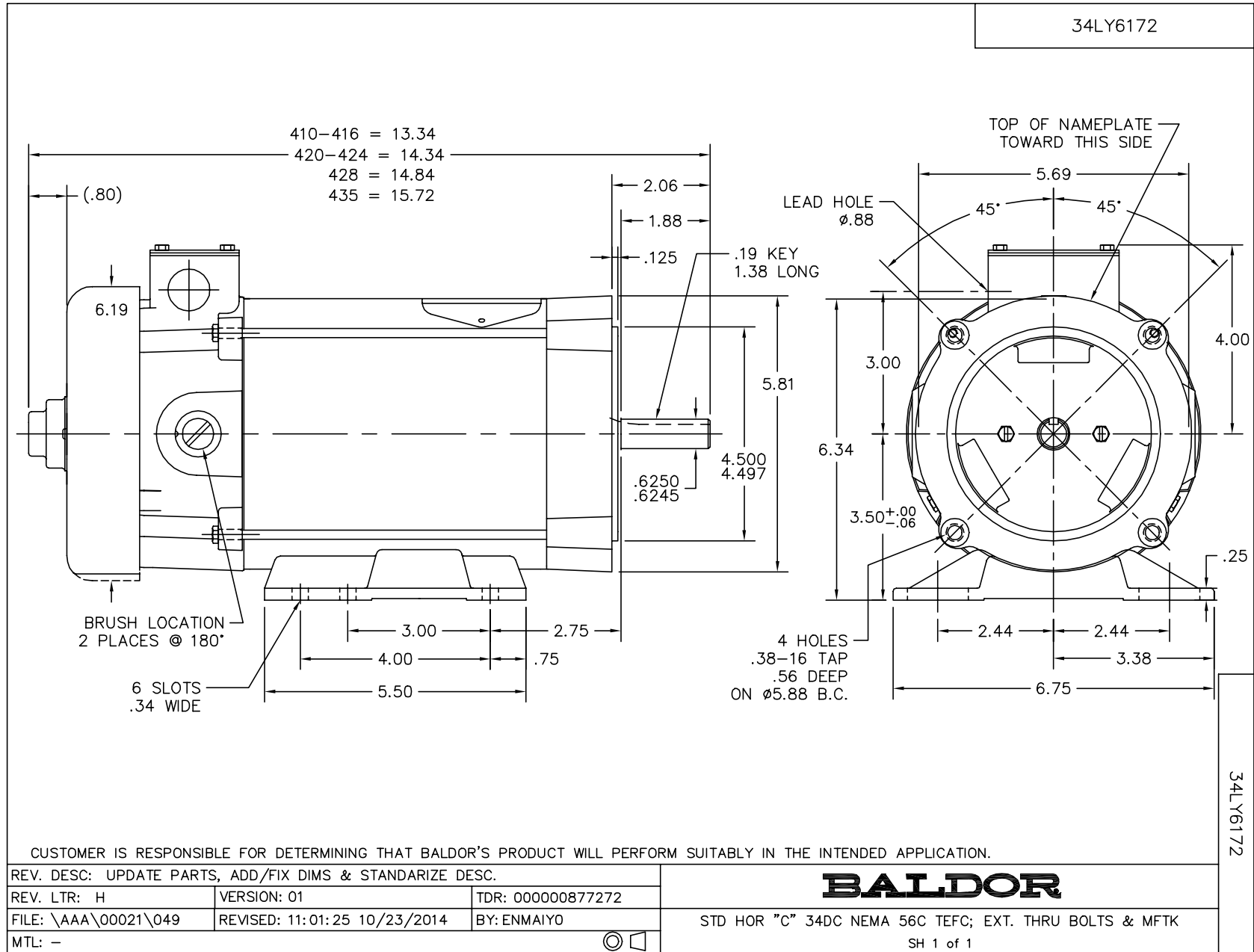
Load Characteristics at 180 Armature Volts, 200 Field Volts, 0.24 Field Amps

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



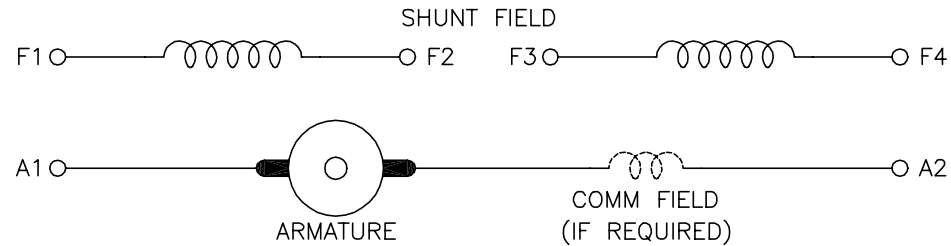
Performance Graph at 180.0 Arm V, 0.5HP Typical performance - Not guaranteed values





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