

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **CD5319**

**1HP, 1750RPM, DC, 56C, 3535D, TEFC, F1**

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:		Elec. Spec:	35WGZ390	CD Diagram:	CD0860C01
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	35P442	Layout:	35LYP442
Frame:	56C	Mounting:	F1	Poles:	2///	Created Date:	
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	09-01-2016
Field Type:	Shunt	Literature:		Elec. Diagram:		Replaced By:	

Nameplate NP0111L	
CAT.NO.	CD5319
SPEC.	35P442Z390
HP	1
RPM	1750
FRAME	56C
ARM V	90
FLD V	100/50
INSUL	F
DUTY	CONT
BRG/DE	6205
BRUSHES	2/BP5000T07
SER.	
BLANK	
APRV-CSA	<input type="checkbox"/>
APRV-UL	<input type="checkbox"/>

		ENCL	TEFC
		TYPE	3535D
		ARM A	10
		FLD A	.6/1.2
	AMB.	40	
		SUPPLY	1.3
		BRG/ODE	6203
		BLANK	

Parts List		
Part Number	Description	Quantity
SA046474	SA 35P442Z390	1.000 EA
AA005333	AA 35P442Z390	1.000 EA
MH2001A01B19	GLASTIC SHEET .093 X 1.188 X	0.126 LB
BP5000T07SP	CARBON BRUSH - SCHUNK GRADE 3971	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #8 SCREW	1.000 EA
35EP3112A02	FR ENDPLATE, MACH	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP3301A01	PU ENDPLATE, MACH	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
BP5201A14SP	BRUSH HOLDER ASSY	1.000 EA
80XN1032A03	10-32 X 3/16 SET SCREW	2.000 EA
35FN3002A05	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH5001A10SP	FAN COVER ASS'Y TEFC HORZ	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4506	CONDUIT BOX LID, STAMPED	1.000 EA
35GS1010	CONDUIT BOX LID, GASKET	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
WD4102A06	SR-7K-2 HEYCO STRN RELIEF OR 23MP07K20 M	1.000 EA
WD4100A17	PLUG STIMPSON D4036	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.017 GA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
10XF0440S02	04-40 X 1/8 TYPE F HEX HD STAINLESS STIC	2.000 EA
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.001 EA
HA3101A22	THRUBOLT 1/4-20 X 9.000	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	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>
TK3500	TACHO MOUTING KIT TK3500	A8

**DC Motor Performance Data**

Record # 1974 - Typical performance - not guaranteed values

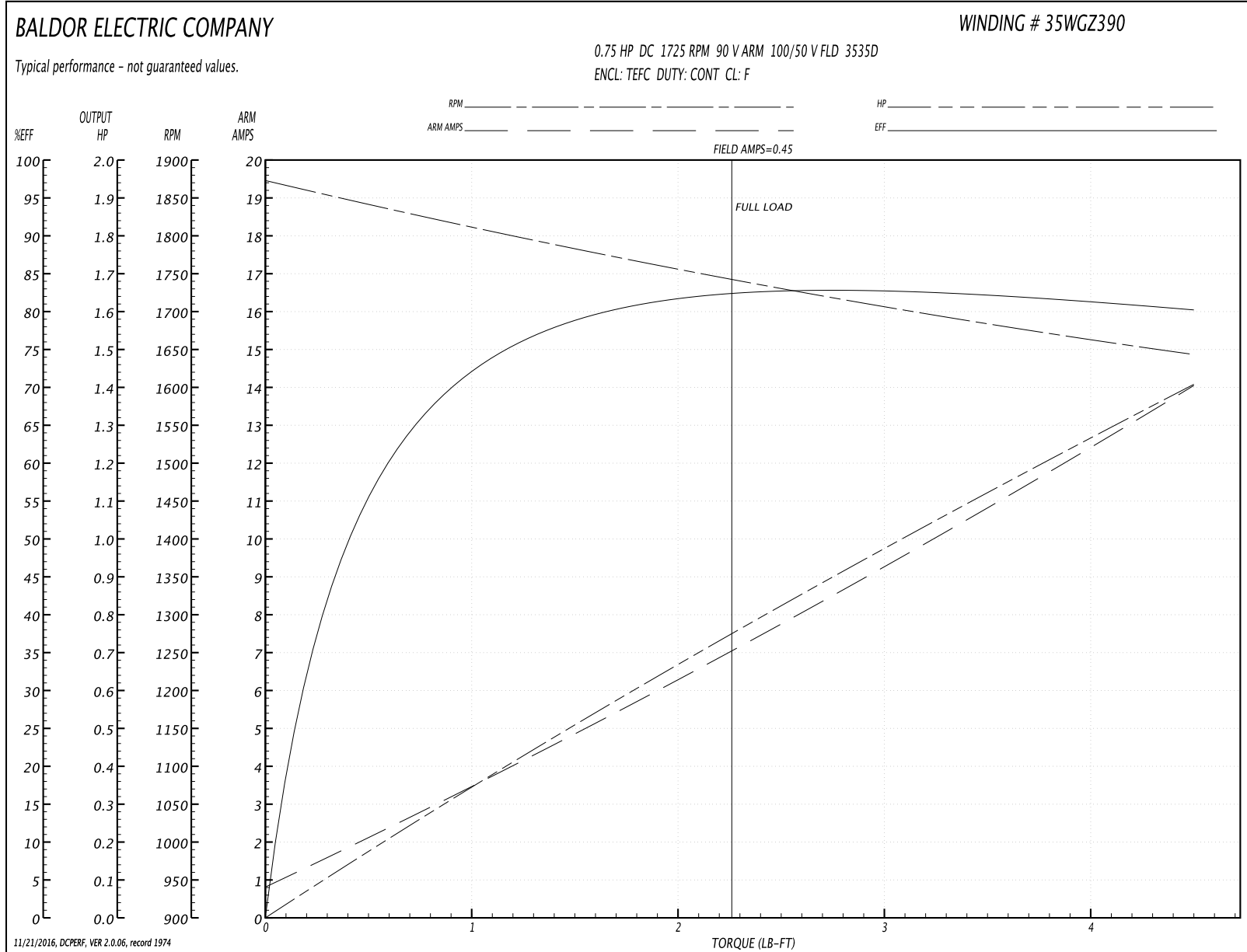
<b>Winding:</b> 35WGZ390-R001	<b>Type:</b> 3535D	<b>Enclosure:</b> TEFC
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.75	Armature Resistance @ 25°C	0.4875 Ω
R.P.M.	1725	Commutating Winding Resistance @ 25°C	0.3834 Ω
Armature Volts	90		
Armature Amps	7.2	Shunt Winding Resistance @ 25°C	171.98 Ω
Field Volts	100 / 50	Armature Inductance	8.709 mH
Field Amps	0.45 / 0.9	Armature Inertia	13.657 LI <sup>2</sup>
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts, 100 Field Volts, 0.45 Field Amps

Load Point	1	2	3	4	5	6	7
Armature Amps	0.81	2.76	4.92	7.03	9.23	11.56	14.09
R.P.M.	1882	1815	1773	1751	1717	1669	1641
Torque ( LB-FT )	0	0.75	1.5	2.25	3	3.75	4.5

Performance Graph at 90.0 Arm V, 0.75HP Typical performance - Not guaranteed values



**DC Motor Performance Data**

Record # 2536 - Typical performance - not guaranteed values

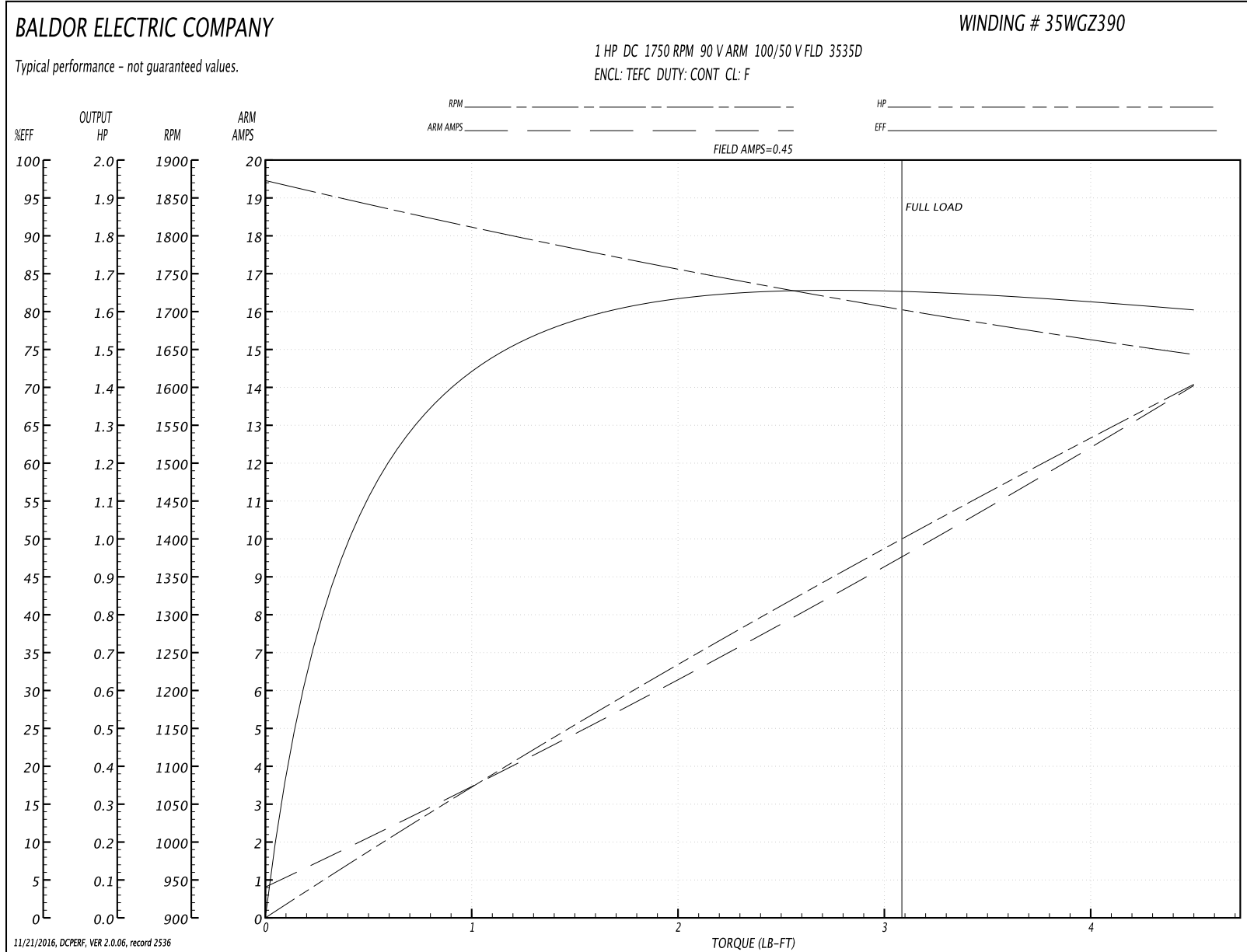
<b>Winding:</b> 35WGZ390-R001	<b>Type:</b> 3535D	<b>Enclosure:</b> TEFC
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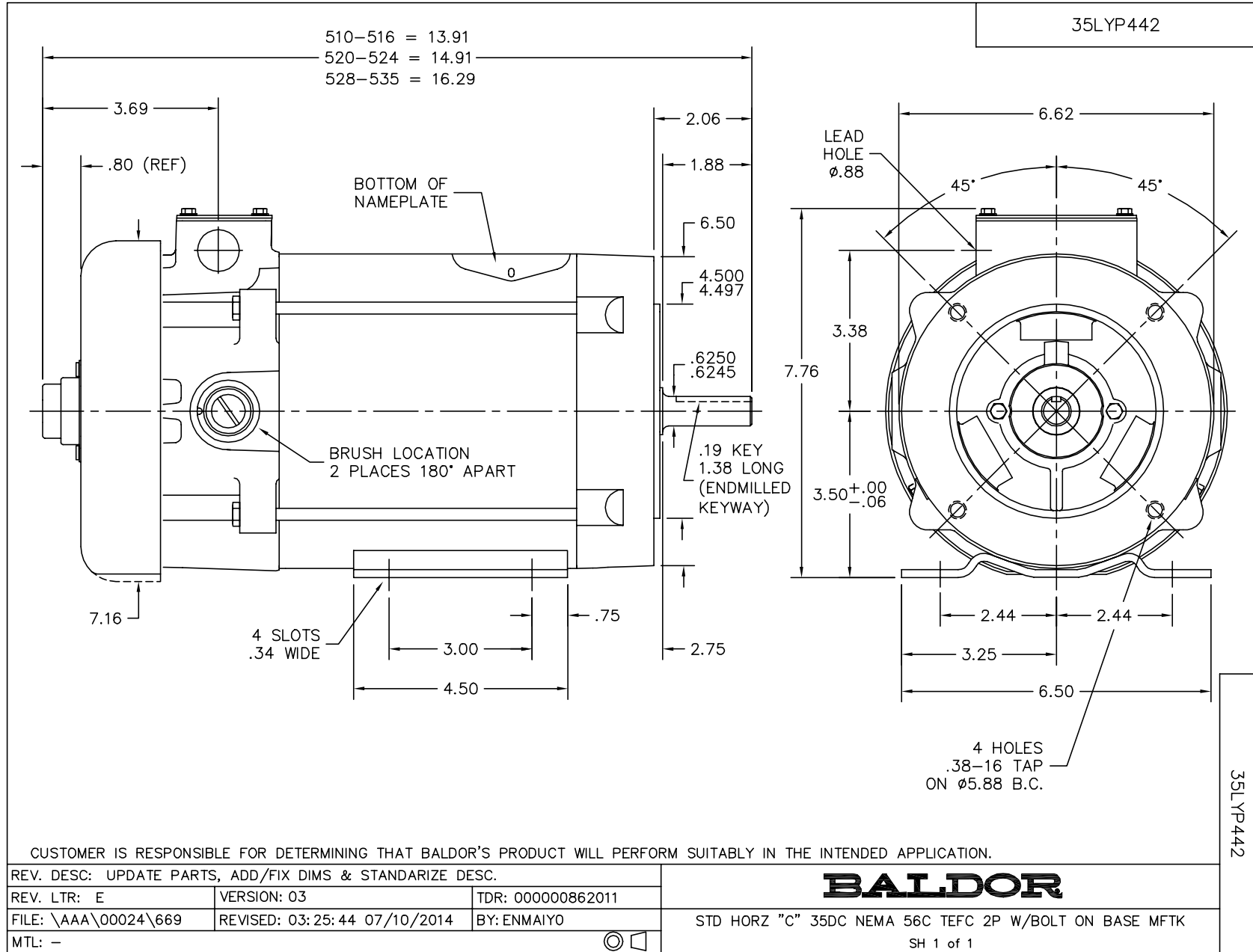
Nameplate Data		General Characteristics	
Rated Output (HP)	1	Armature Resistance @ 25°C	0.4875 Ω
R.P.M.	1750	Commutating Winding Resistance @ 25°C	0.3834 Ω
Armature Volts	90		
Armature Amps	10	Shunt Winding Resistance @ 25°C	171.98 Ω
Field Volts	100 / 50	Armature Inductance	8.709 mH
Field Amps	0.6 / 1.2	Armature Inertia	13.657 LI <sup>2</sup>
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts, 100 Field Volts, 0.45 Field Amps

Load Point	1	2	3	4	5	6	7
Armature Amps	0.81	2.76	4.92	7.03	9.23	11.56	14.09
R.P.M.	1882	1815	1773	1751	1717	1669	1641
Torque ( LB-FT )	0	0.75	1.5	2.25	3	3.75	4.5

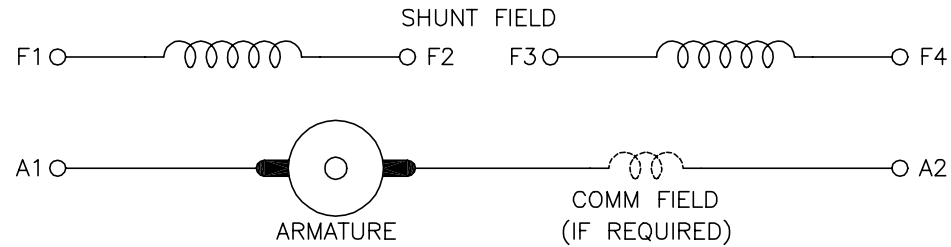
Performance Graph at 90.0 Arm V, 1.0HP Typical performance - Not guaranteed values





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