

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CDPT3320**

**.33HP, 1750RPM, DC, 56C, 3327P, TENV, F1**

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:	3327P	Elec. Spec:	33WGZ102	CD Diagram:	CD0194
Enclosure:	TENV	Mfg Plant:		Mech. Spec:	33-2155	Layout:	33LY2155
Frame:	56C	Mounting:	F1	Poles:	00	Created Date:	
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	11-05-2018
Field Type:		Literature:		Elec. Diagram:		Replaced By:	

Specs			
Enclosure:	TENV		
Frame:	56C		
Frame Material:	Steel		
Agency Approvals:	CE		
	CSA		
	UR		
	WEEE		
Base Indicator:	Rigid		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Drip Cover:	No Drip Cover		
Duty Rating:	CONT		
Feedback Device:	TACHOMETER		
Heater Indicator:	No Heater		
Insulation Class:	F		
Lifting Lugs:	No Lifting Lugs		
Motor Lead Quantity/Wire Size:	2 @ 18 AWG, A		

<b>Motor Lead Exit:</b>	Ko Box		
<b>Motor Lead Termination:</b>	Flying Leads		
<b>Mounting Arrangement:</b>	F1		
<b>Product Family:</b>	General Purpose		
<b>Pulley End Bearing Type:</b>	Sealed Bearing		
<b>RoHS Status:</b>	ROHS COMPLIANT		
<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>Nameplate NP0891L</b>			
<b>CAT.NO.</b>	CDPT3320		
<b>SPEC.</b>	33-2155Z102		
<b>HP</b>	.33	<b>ENCL</b>	TENV
<b>RPM</b>	1750		
<b>FRAME</b>	56C	<b>TYPE</b>	3327P
<b>ARM V</b>	90	<b>ARM A</b>	3.2
<b>FLD V</b>		<b>FLD A</b>	
<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/BP5011T01		
		<b>BLANK</b>	IP44
<b>SER.</b>			
<b>BLANK</b>			
<b>APRV-CE</b>	<input type="checkbox"/> Y	<b>APRV-CSA</b>	<input type="checkbox"/> Y
		<b>APRV-UL</b>	<input type="checkbox"/> Y

Parts List		
Part Number	Description	Quantity
SA005102	SA 33-2155Z102	1.000 EA
AA002751	AA 33-2155Z102	1.000 EA
BP5011T01SP	CARBON BRUSH - 33P, 90V	1.000 EA
BP5012A04SP	BRUSH SPRING FOR DC MOTORS	1.000 EA
33CB5000A03	33P BOX & LEAD ASSY	1.000 EA
33GS1006A01	GASKET CONDUIT BOX (LEXIDE)	1.000 EA
51XT0832A08	8-32 X 1/2 TY23 HXWS SLDSR	3.000 EA
51XW0832G07	8-32 X 7/16 TY23 HXWS SLDSR GR	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
33EP3101A04	FR ENDPLATE, MACH	1.000 EA
HA6340A01	TG-300 TACH. ADAPTER MACH'D FOR 33 FRAME	1.000 EA
84XN2520J12	1/4-20 X 3/4 SOC.HD CAP SCR	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
33CB4507	COVER- 33 TACH. ADAP(CLOWTDR 10478 ORDER	1.000 EA
33GS5000	GASKET-COVER 33 TACH ADAPTER	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	3.000 EA
XY3824A12	.375-24 UNF-2B HEX NUT	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 EA
HW1000A38	WASHER, 3/8" FLAT, SAE Z/P	1.000 EA
18XN0632A16	FLAT HEAD SCREW	2.000 EA
12XN0440A12	4-40X.750 SLOTTED HEX HD CAP ZN	2.000 EA
HW1001A04	WASHER, #4 SPLT LK ZINC	2.000 EA
WD4100A26	HEYCO UNIVERSAL BUSHING P/N 2089, MTG HO	1.000 EA
33CB4501A01SP	BRUSH INSPECTION COVER	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
33GS1005A01	GASKET, BRUSH INSP. COVERELECTRICLY NON-	2.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
33EP3302A10	PU ENDPLATE, MACH	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
WD4102A12	SR 6P-4 HEYCO STRN RELIEF OR 23MP06P40 M	1.000 EA
34CB4512	34 CB LID, GALVANNEAL STAMPED	1.000 EA
34GS1001	GASKET, STD CONDUIT BOX LID (LEXIDE)	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 EA
X3B003Z029	TACH TG-300 50V .625BORE W/NOTCH CW	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.013 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
33RK5004SP	ROCKERARM	1.000 EA
HA3100S02	THRUBOLT - 10-32 X 9.00 SS	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
LC0194	CONNECTION LABEL	1.000 EA
NP0891L	NP STD LASER ENGRAVED DC MTRS, UL CSA CE	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
35PA1007	PKG GRP, PRINT PK1034A06	1.000 EA

**DC Motor Performance Data**

Record # 208 - Typical performance - not guaranteed values

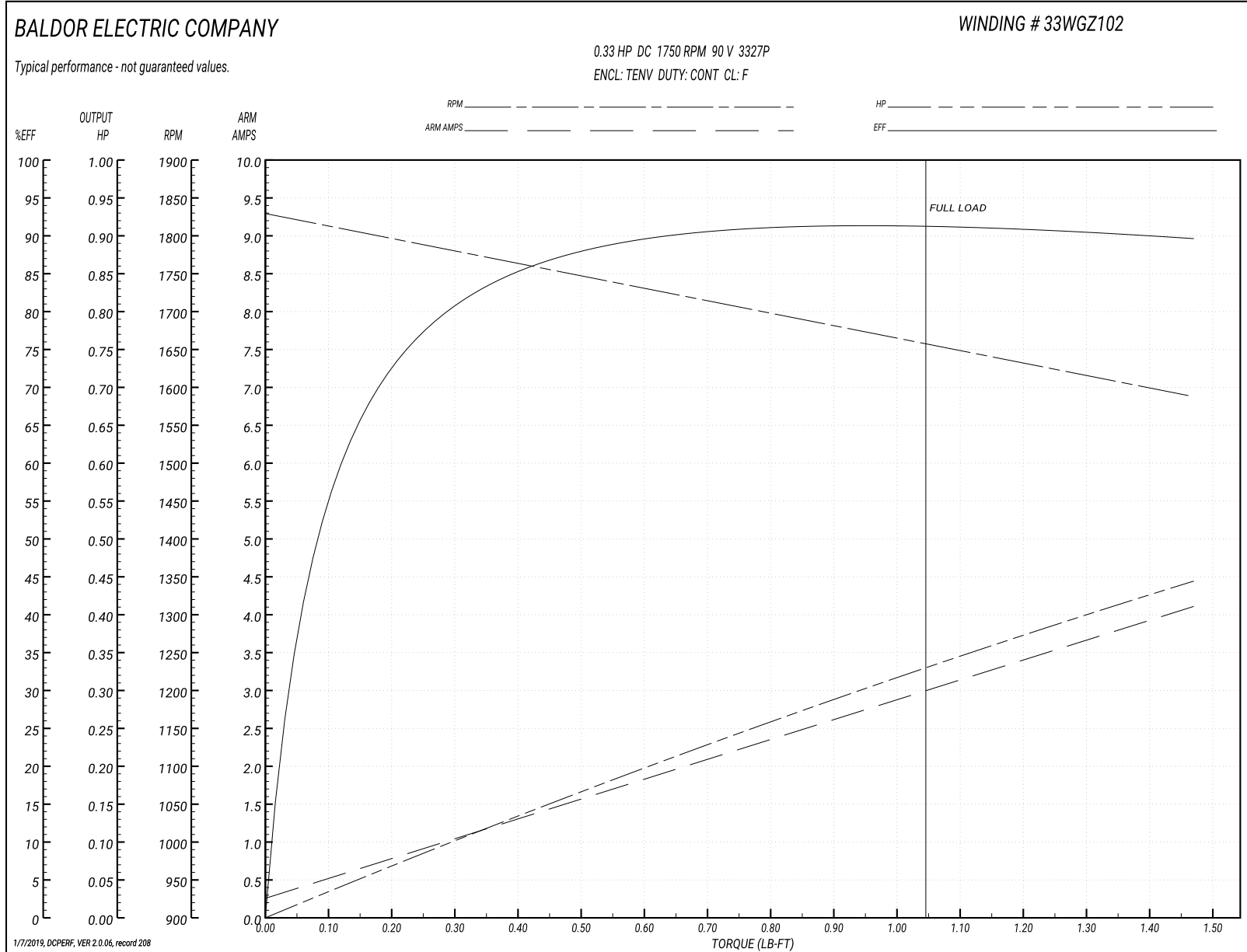
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.25	0.85	1.55	2.25	2.9	3.3	4.2
R.P.M.	1831	1796	1745	1703	1665	1627	1592
Torque ( LB-FT )	0	0.23	0.49	0.74	0.99	1.23	1.47

Performance Graph at 90.0 Arm V, 0.33HP Typical performance - Not guaranteed values





**DC Motor Performance Data**

Record # 209 - Typical performance - not guaranteed values

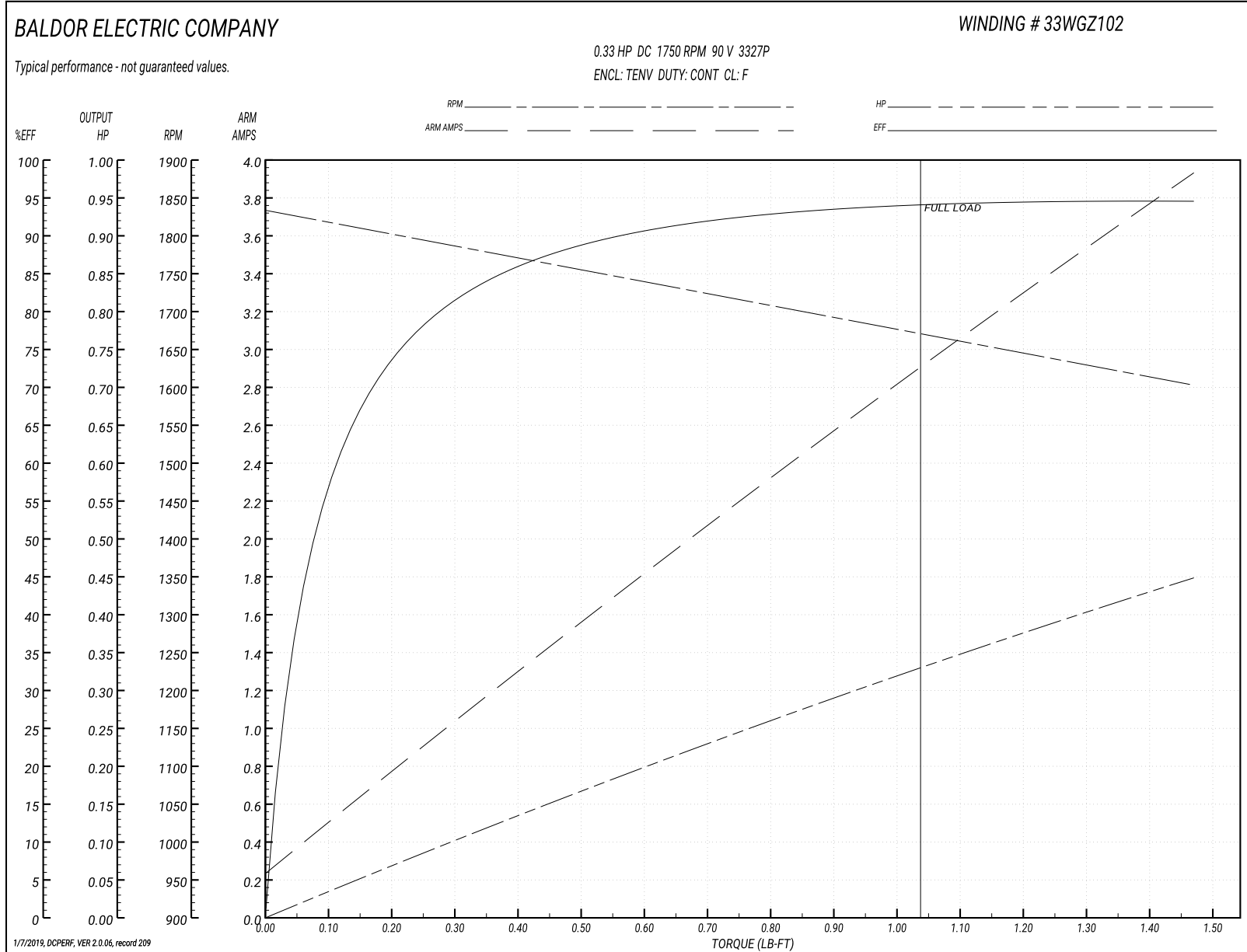
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.25	0.8	1.55	2.25	2.8	3.24	4
R.P.M.	1837	1801	1751	1718	1675	1630	1615
Torque ( LB-FT )	0	0.23	0.49	0.74	0.99	1.23	1.47

Performance Graph at 90.0 Arm V, 0.33HP Typical performance - Not guaranteed values



**DC Motor Performance Data**

Record # 210 - Typical performance - not guaranteed values

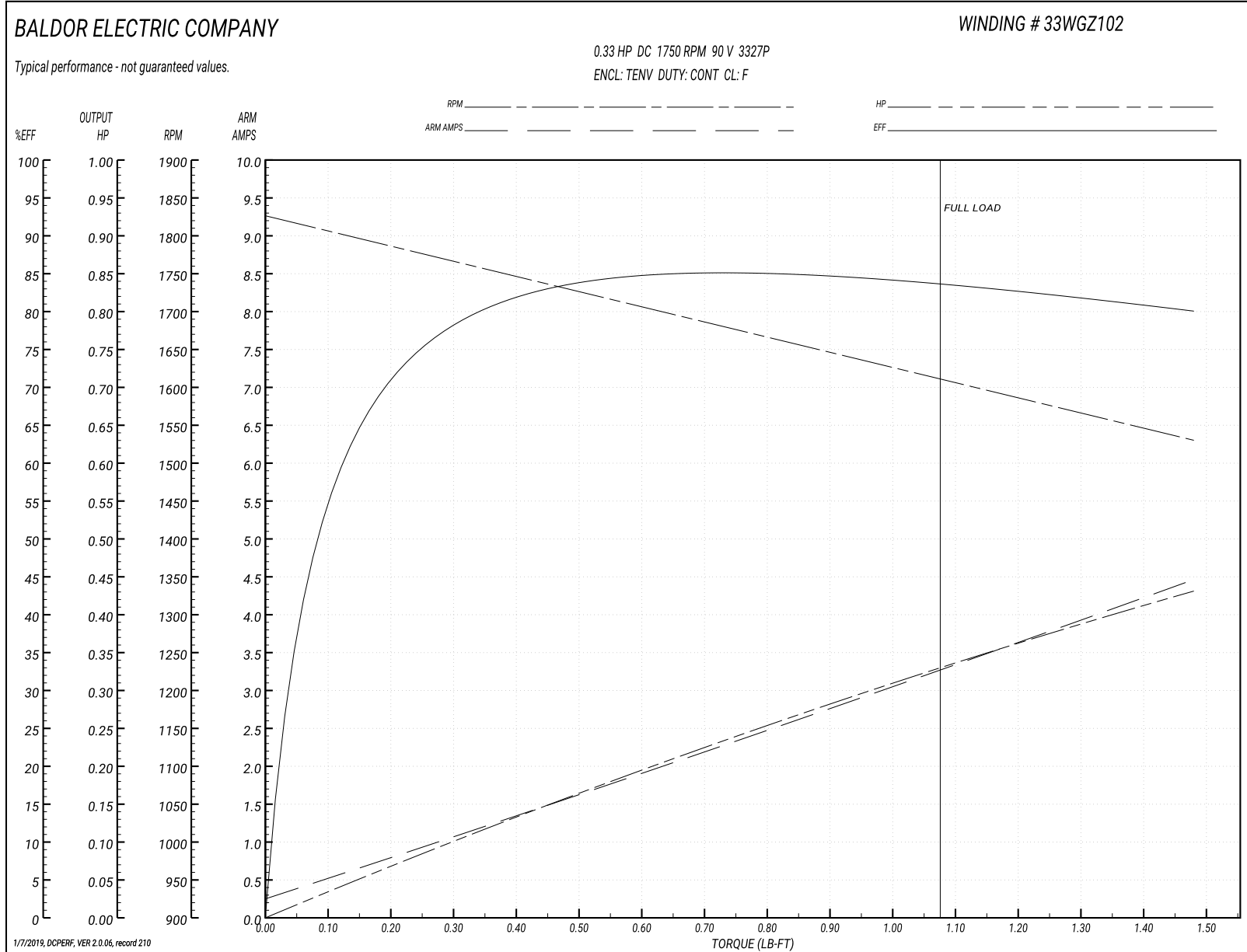
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.26	0.93	1.6	2.29	3.06	3.72	4.46
R.P.M.	1822	1781	1734	1676	1621	1576	1536
Torque ( LB-FT )	0	0.25	0.5	0.73	1	1.23	1.48

Performance Graph at 90.0 Arm V, 0.33HP Typical performance - Not guaranteed values



**DC Motor Performance Data**

Record # 211 - Typical performance - not guaranteed values

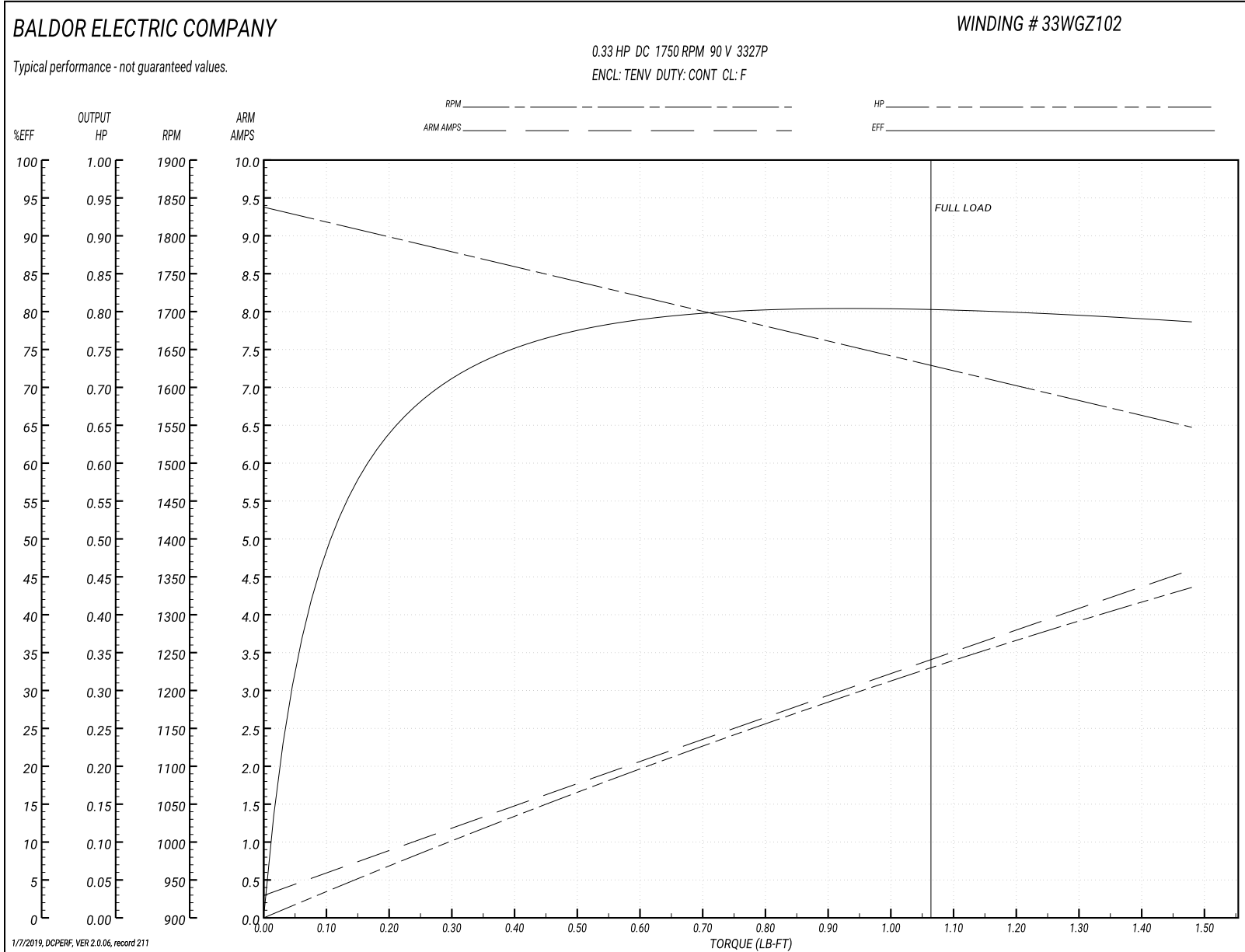
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.28	1.08	1.75	2.43	3.22	3.9	4.59
R.P.M.	1854	1782	1724	1692	1648	1590	1556
Torque ( LB-FT )	0	0.25	0.5	0.73	1	1.23	1.48

Performance Graph at 90.0 Arm V, 0.33HP Typical performance - Not guaranteed values



**DC Motor Performance Data**

Record # 212 - Typical performance - not guaranteed values

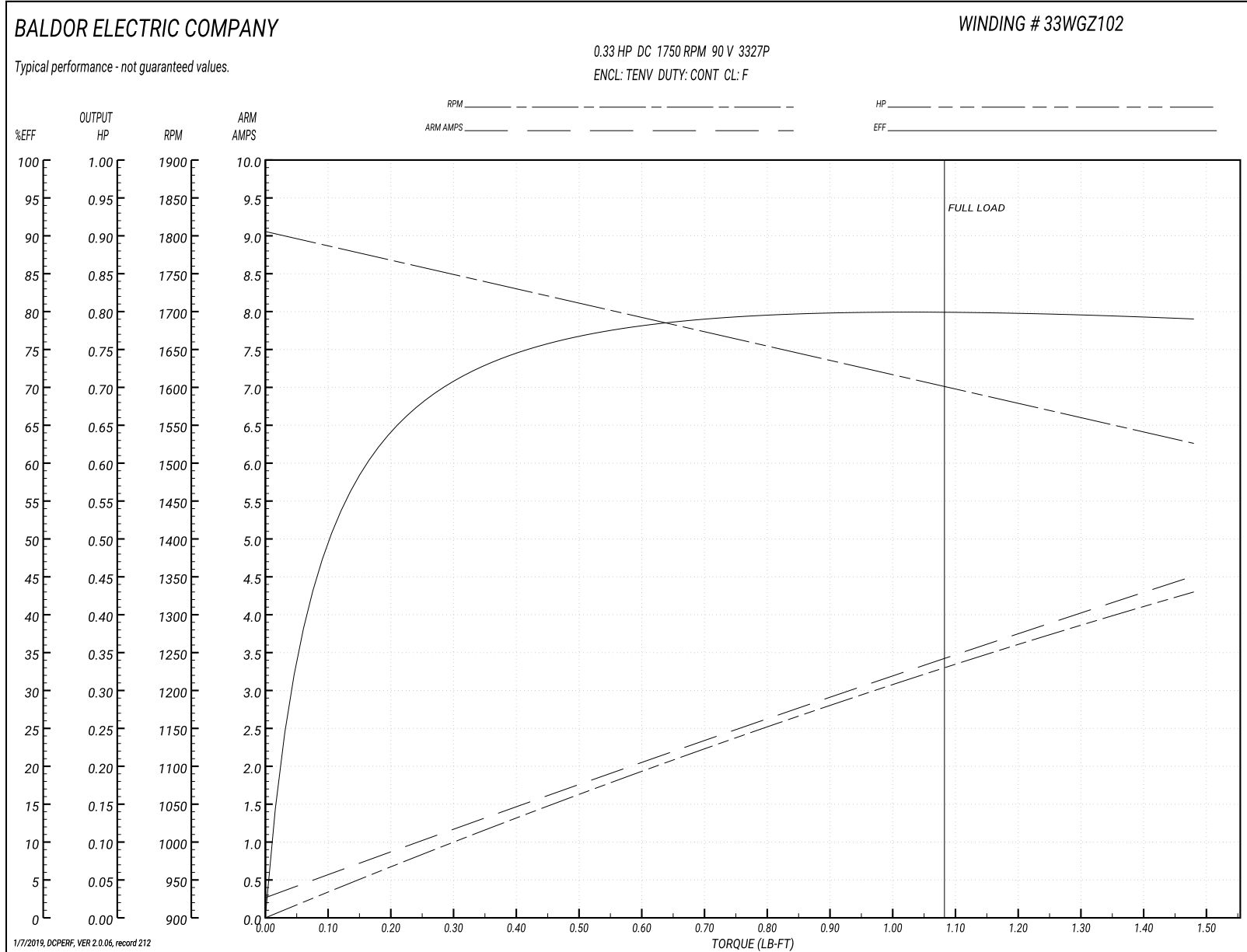
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.25	1.04	1.78	2.42	3.18	3.81	4.53
R.P.M.	1815	1752	1704	1666	1620	1576	1526
Torque ( LB-FT )	0	0.25	0.5	0.73	1	1.23	1.48

Performance Graph at 90.0 Arm V, 0.33HP Typical performance - Not guaranteed values





**DC Motor Performance Data**

Record # 213 - Typical performance - not guaranteed values

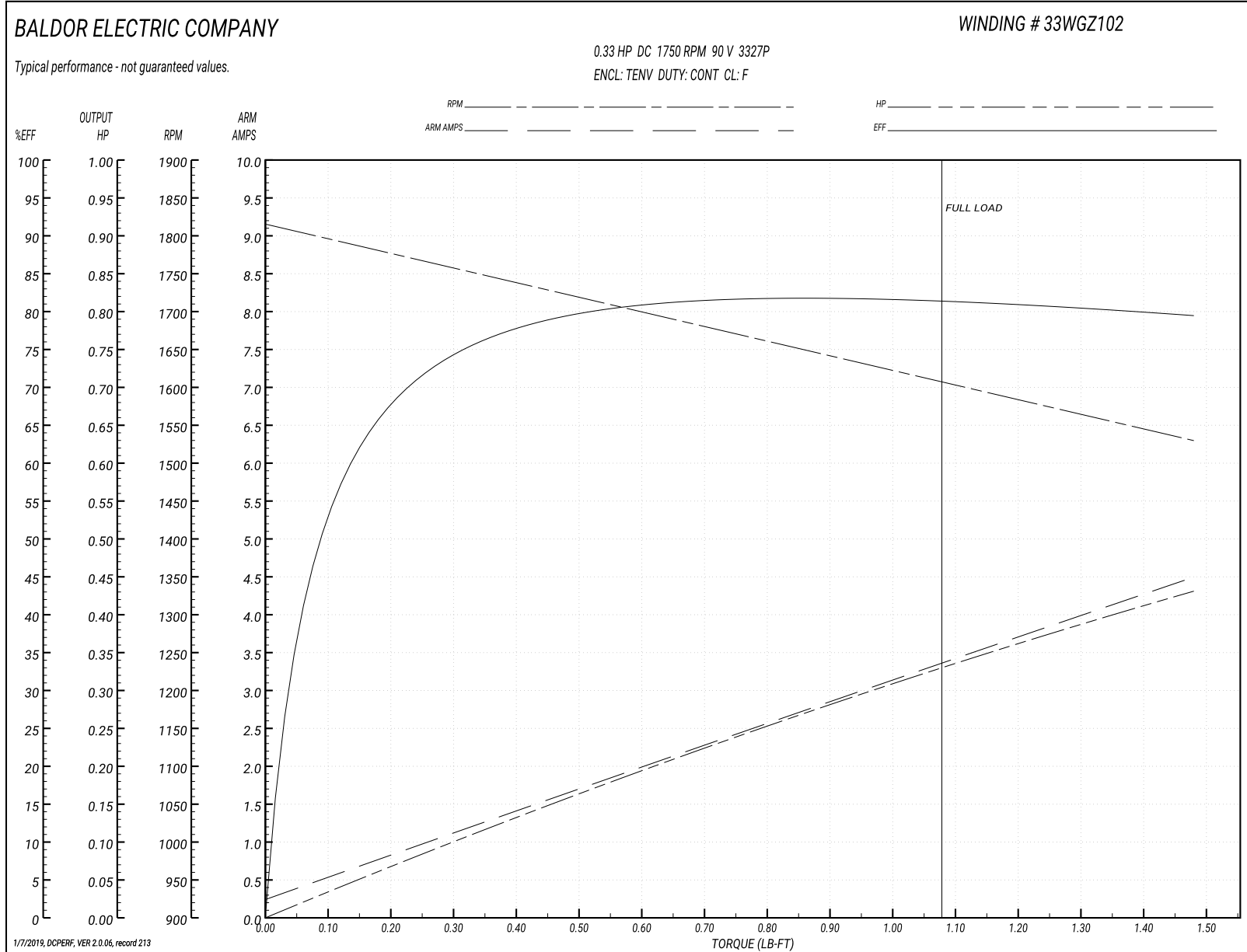
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.21	1.03	1.69	2.38	3.11	3.77	4.52
R.P.M.	1828	1756	1720	1664	1626	1578	1534
Torque ( LB-FT )	0	0.25	0.5	0.73	1	1.23	1.48

Performance Graph at 90.0 Arm V, 0.33HP Typical performance - Not guaranteed values



**DC Motor Performance Data**

Record # 579 - Typical performance - not guaranteed values

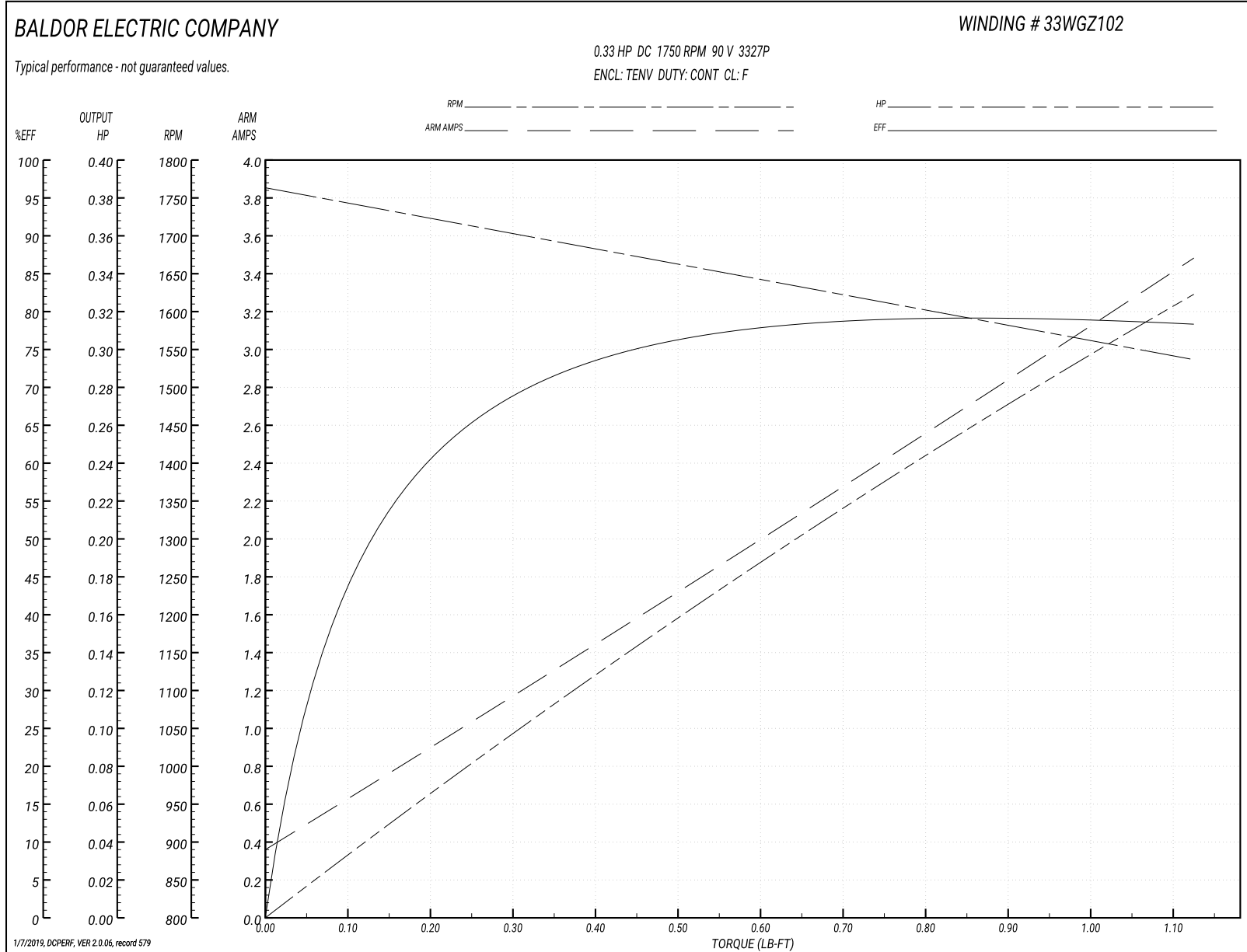
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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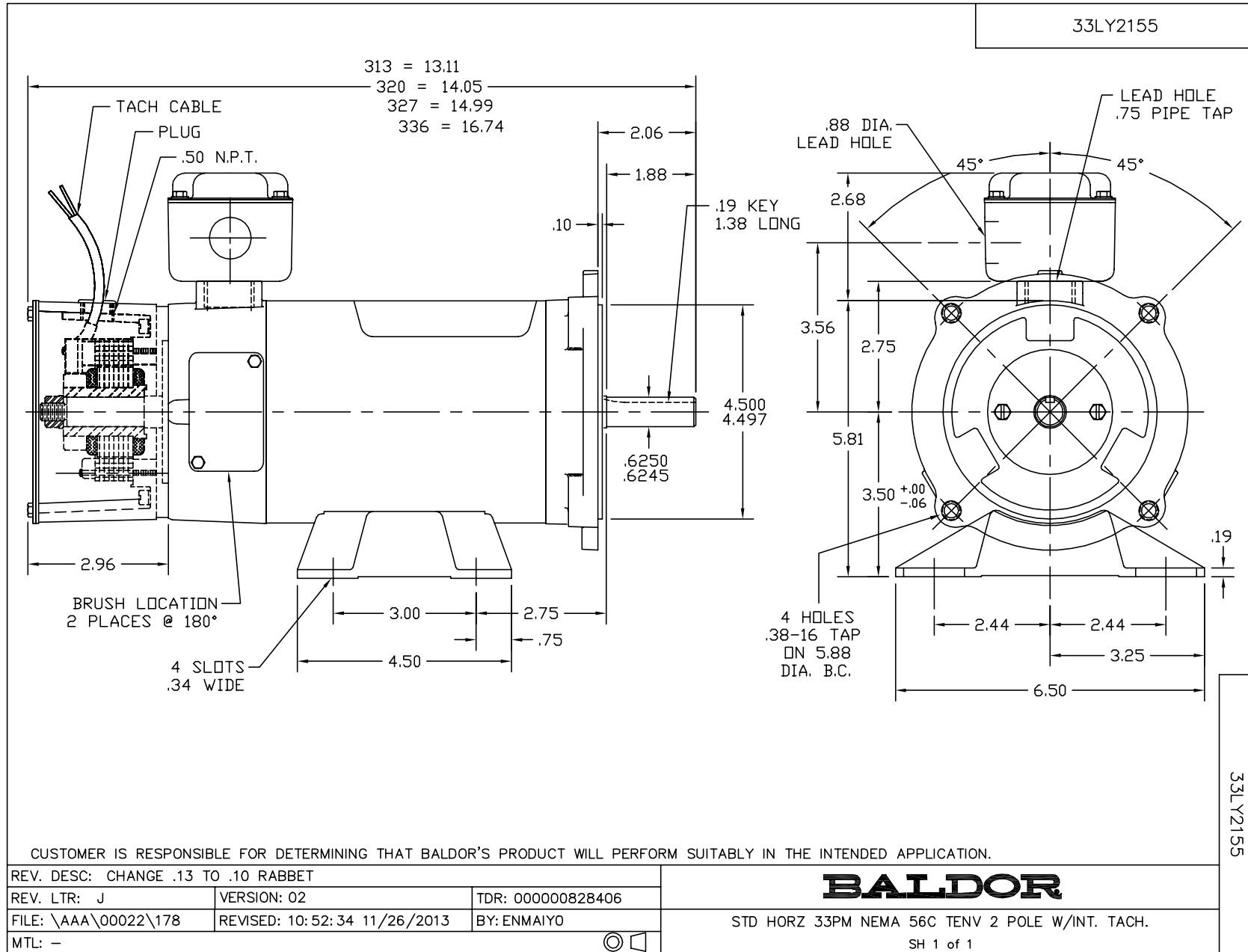
Nameplate Data		General Characteristics	
Rated Output (HP)	0.33	Armature Resistance @ 25°C	2.164 Ω
R.P.M.	1750		
Armature Volts	90	Voltage Constant	48.57 v/krpm
Armature Amps	3.2		
Field Volts			
Field Amps		Armature Inertia	10.5354 LI <sup>2</sup>
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

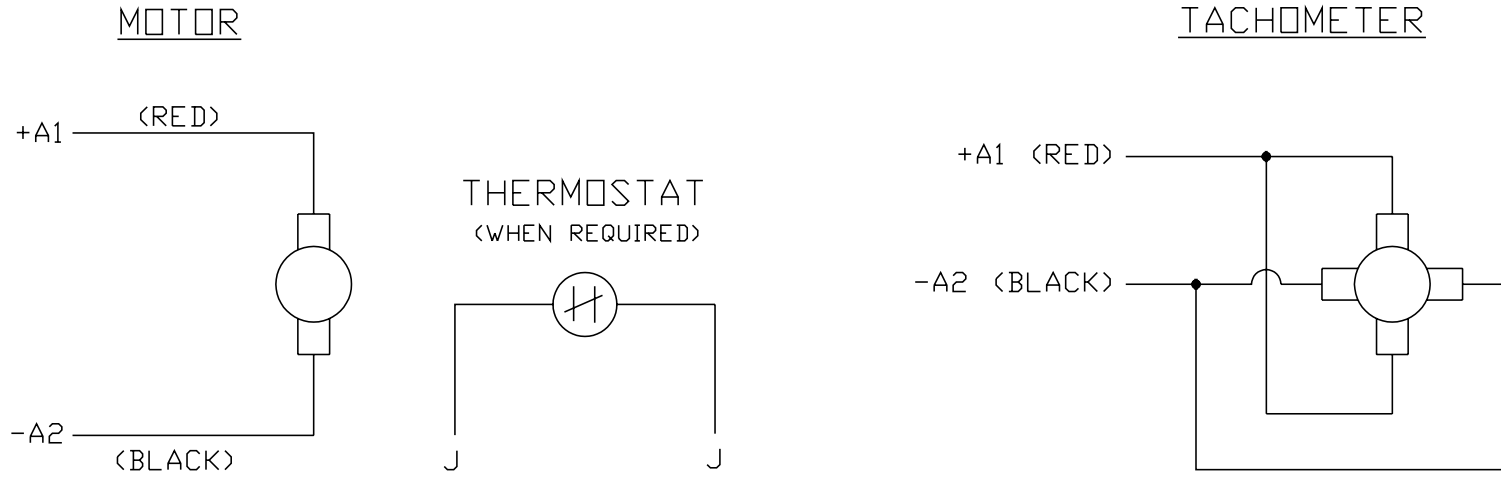
Load Point	1	2	3	4	5	6	7
Armature Amps	0.28	1.02	1.35	1.85	2.39	2.95	3.5
R.P.M.	1783	1709	1682	1650	1611	1565	1550
Torque ( LB-FT )	0	0.188	0.375	0.562	0.75	0.937	1.125

Performance Graph at 90.0 Arm V, 0.33HP Typical performance - Not guaranteed values





CD0194



NOTES:

1. CCW ROTATION AS SHOWN FACING COMMUTATOR END. TO REVERSE MOTOR ROTATION OR TACHOMETER OUTPUT POLARITY INTERCHANGE LEADS A1(RED) & A2(BLACK)
2. LEAD COLORS FOR REFERENCE ONLY & NOT SPECIFIED BY THIS DRAWING. LEAD COLORS SPECIFIED BY LAYOUT DRAWING & BILL OF MATERIAL ONLY.

MATL: -			
REV: E	ADDED NOTE "LEAD COLORS FOR REFERENCE ONLY &..."		
761000	SCALE: -	BY: CK	REVISED: 07/28/95
	FILE: AAA00004503		TDR: 0078737

**BALDOR ELECTRIC Co.**

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194