

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CDPWD3320**

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

Part Detail							
Revision:	AA	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:	3327P	Elec. Spec:	33WGZ102	CD Diagram:	CD0194
Enclosure:	TENV	Mfg Plant:		Mech. Spec:	33-2142	Layout:	33LY2142
Frame:	56C	Mounting:	F1	Poles:	00	Created Date:	
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	08-23-2018
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:	NO FEEDBACK		
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>	Wash Down		
<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>	Shaft Slinger		
<b>Motor Standards:</b>	NEMA		

Nameplate NP1509			
CAT.NO.	CDPWD3320		
SPEC.	33-2142Z102		
HP	.33	ENCL	TENV
RPM	1750		
FRAME	56C	TYPE	3327P
ARM V	90	ARM A	3.2
FLD V		FLD A	
INSUL	F	AMB.	40
DUTY	CONT	SUPPLY	1.3
BRG/DE	6203	BRG/ODE	6203
BRUSHES	2/BP5011T01		
		BLANK	
SER.			
BLANK			
APRV-CSA	<input type="checkbox"/>	APRV-UL	<input type="checkbox"/>
		APRV-CE	<input type="checkbox"/>

Parts List		
Part Number	Description	Quantity
SA005089	SA 33-2142Z102	1.000 EA
AA002738	AA 33-2142Z102	1.000 EA
BP5011T01SP	CARBON BRUSH - 33P, 90V	1.000 EA
BP5012A04SP	BRUSH SPRING FOR DC MOTORS	1.000 EA
33CB3001B02W	CONDUIT BOX, MACH/COATED WHITE	1.000 EA
33GS1013	GASKET - CONDUIT BOX, .062 WHITE NEOPREN	1.000 EA
51XT0832A08	8-32 X 1/2 TY23 HXWS SLDSR	3.000 EA
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 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
33EP3101A13W	FR ENDPLATE, MACH W/WHITE EPOXY PAINT	1.000 EA
HW4600A54	SEAL 0.668 X 1.064 X 0.250 DOUBLE SHIELD	1.000 EA
33CB4501A04W	BRUSH INSPECTION COVER, POWDER COAT	2.000 EA
33GS1014	GASKET, BRUSH INSP. COVERTDR 11640	2.000 EA
11XT0832S07	08-32 X 7/16 HX SL WS HD, 304 STAINLESS	6.000 EA
HA6887	SHAFT PROTECTOR STAMPED STEEL 20 GA.	1.000 EA
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
33EP3302A14W	PULLEY ENDPLATE ENCL 33PM 56C W/WHITE EP	1.000 EA
HW4600A54	SEAL 0.668 X 1.064 X 0.250 DOUBLE SHIELD	1.000 EA
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 EA
11XN1032S20	10-32 X 1-1/4 HEX WASHER HEAD, SLOTTED	2.000 EA
19XA1016S06	10-16X 3/8" TYPE AB SS X	3.000 EA
WD4102A12	SR 6P-4 HEYCO STRN RELIEF OR 23MP06P40 M	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
34CB4500A10W	CONDUIT BOX LID, MACH W/WHITE EPOXY	1.000 EA
33GS1012	GASKET - CONDUIT BOX LID, MODEL 33PM	1.000 EA
11XT0832S07	08-32 X 7/16 HX SL WS HD, 304 STAINLESS	5.000 EA
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
MG1025W01	WILKOFASST, 781.01, SIGNAL WHITE #9003	0.013 GA
33RK5004SP	ROCKERARM	1.000 EA
HA3100S02	THRUBOLT - 10-32 X 9.00 SS	2.000 EA
MG1500Y02	WILKOPON PRIMER YELLOW	0.013 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
LB1164	LABEL,WARNING AND DRAIN	1.000 EA
LC0194	CONNECTION LABEL	1.000 EA
NP1509	DC, WD, UL CE CSA, W/O THERMAL	1.000 EA
27PA1001	PKG GRP, PRINT PK1027A06	1.000 EA
LB1594	MYLAR WEEE WHEELIE BIN SYMBOL FOR CE MOT	1.000 EA

**DC Motor Performance Data**

Record # 208 - Typical performance - not guaranteed values

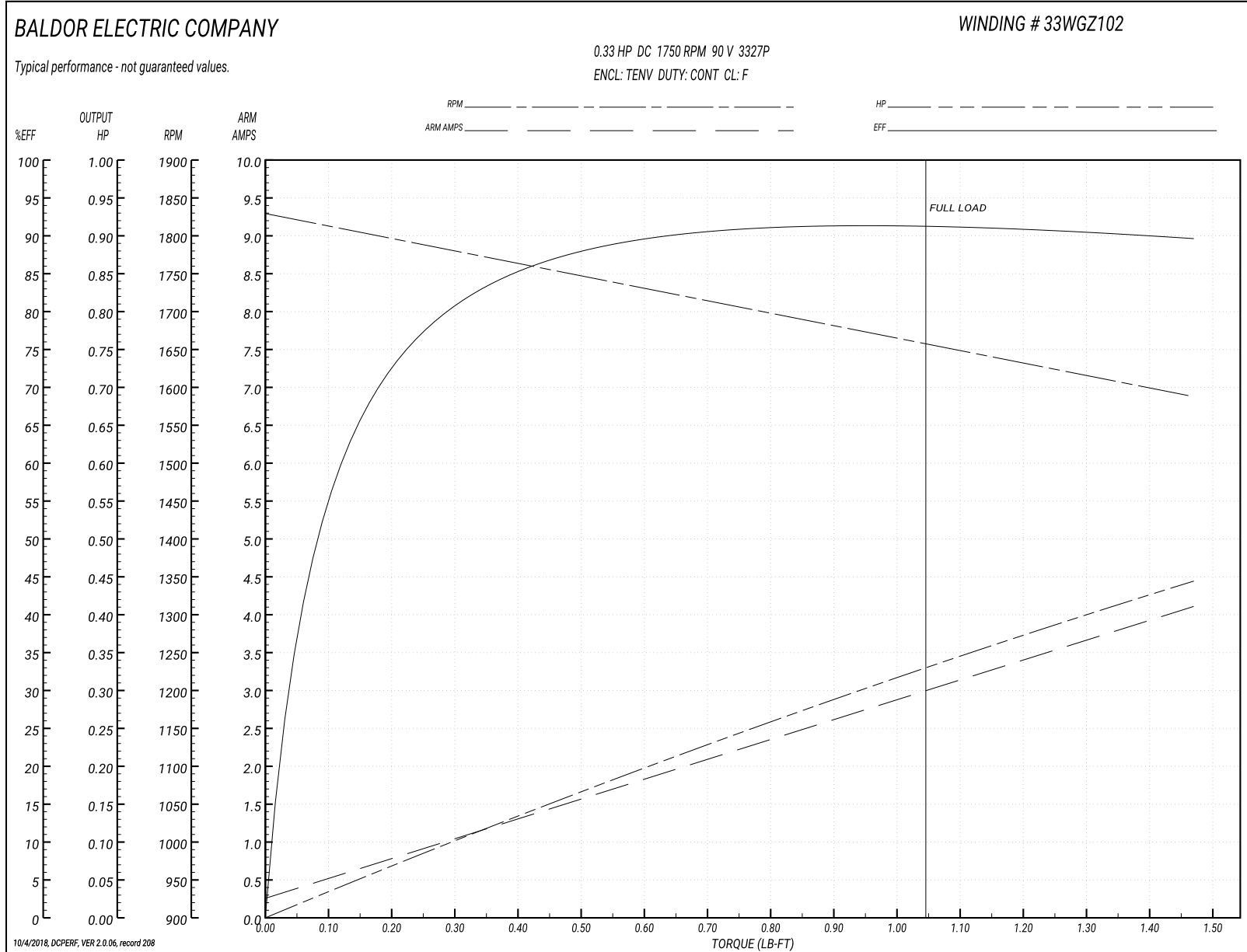
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT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

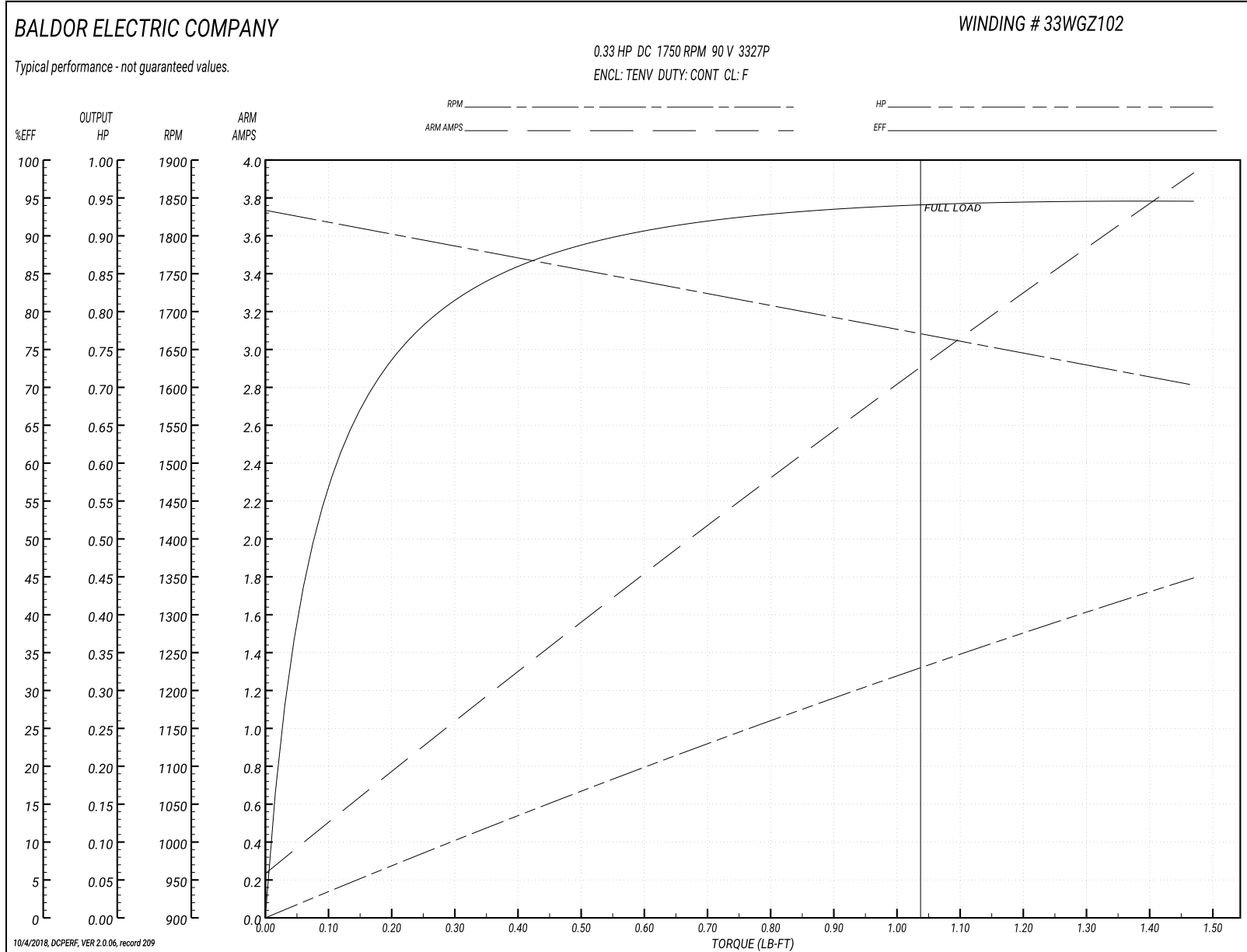
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT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

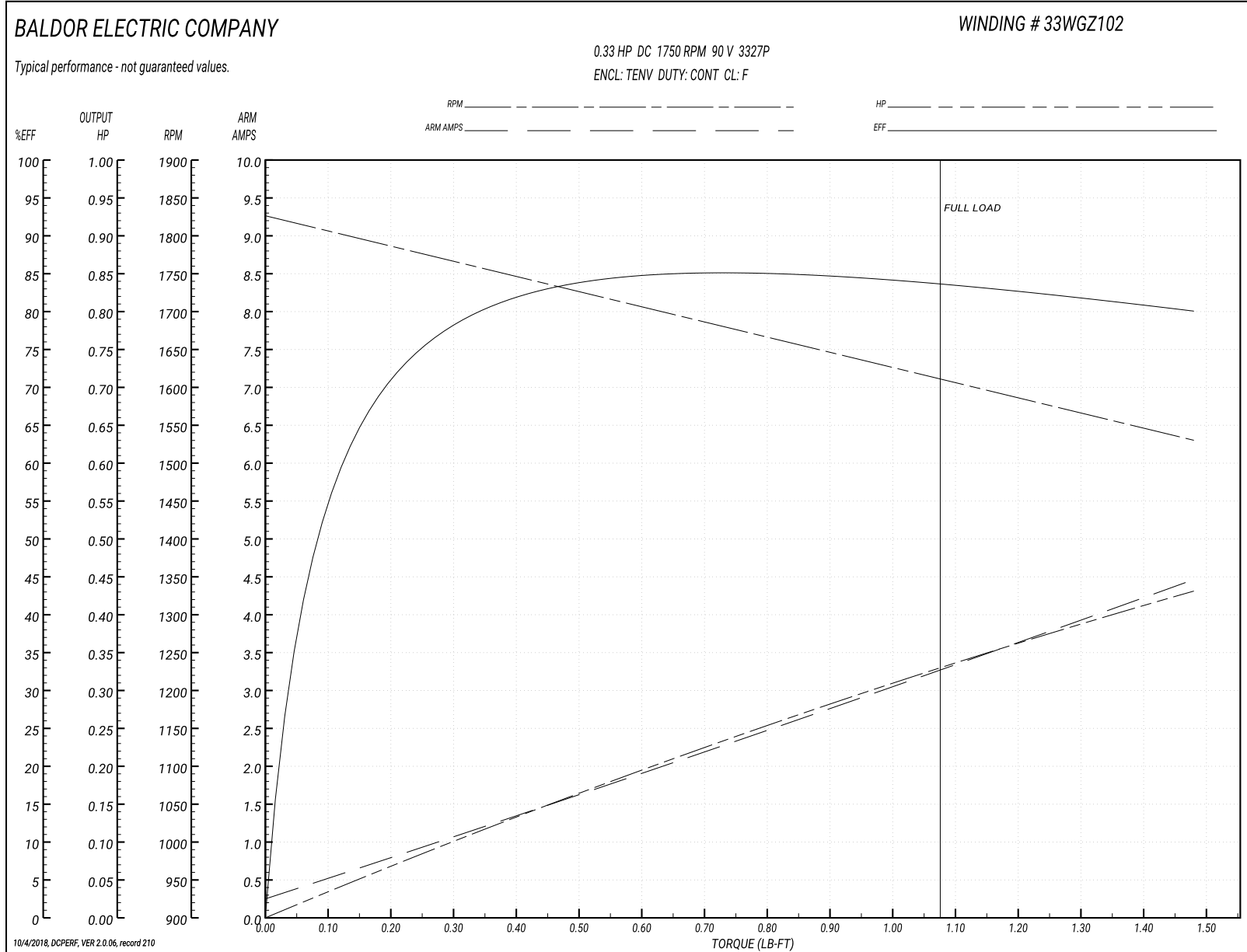
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT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

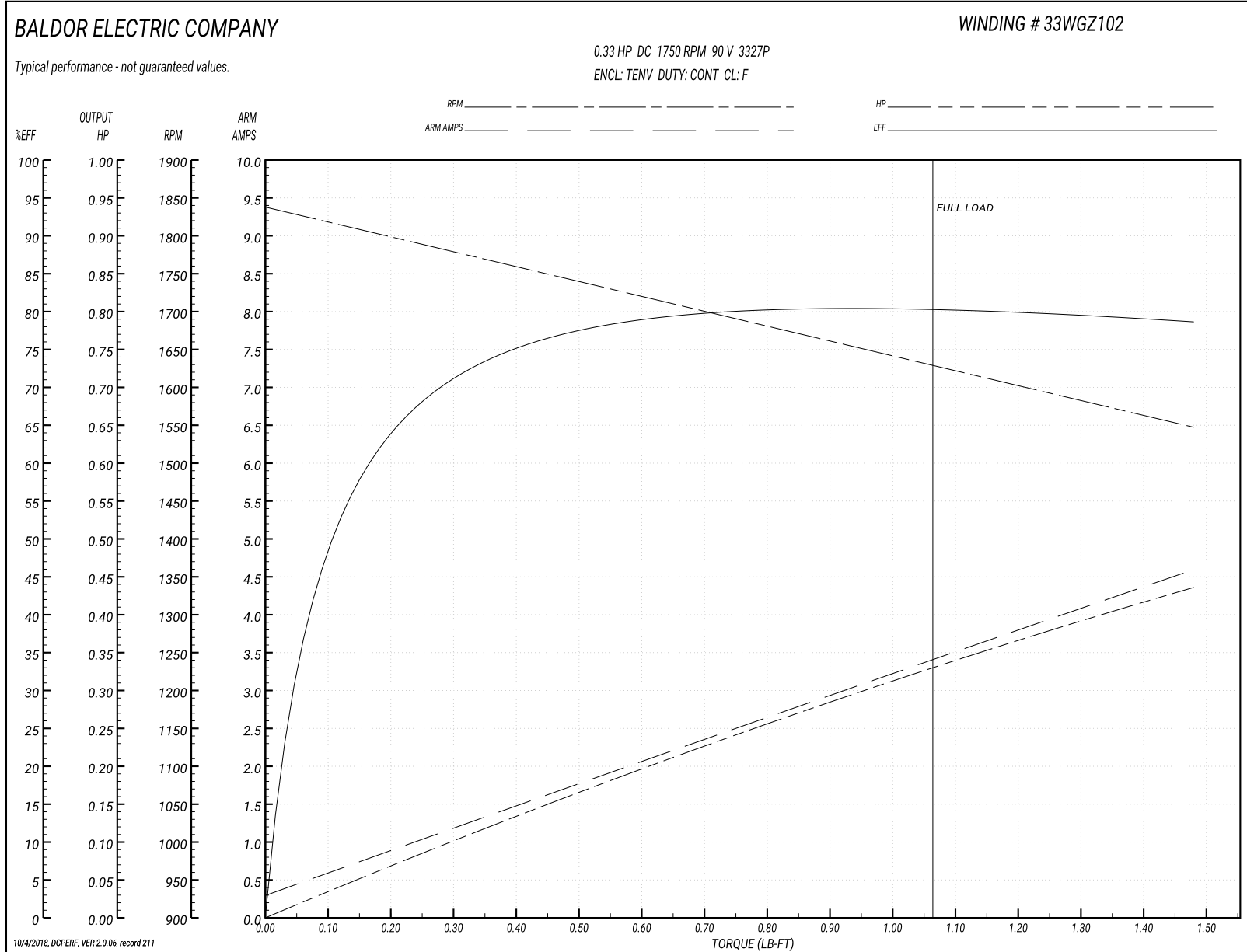
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT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

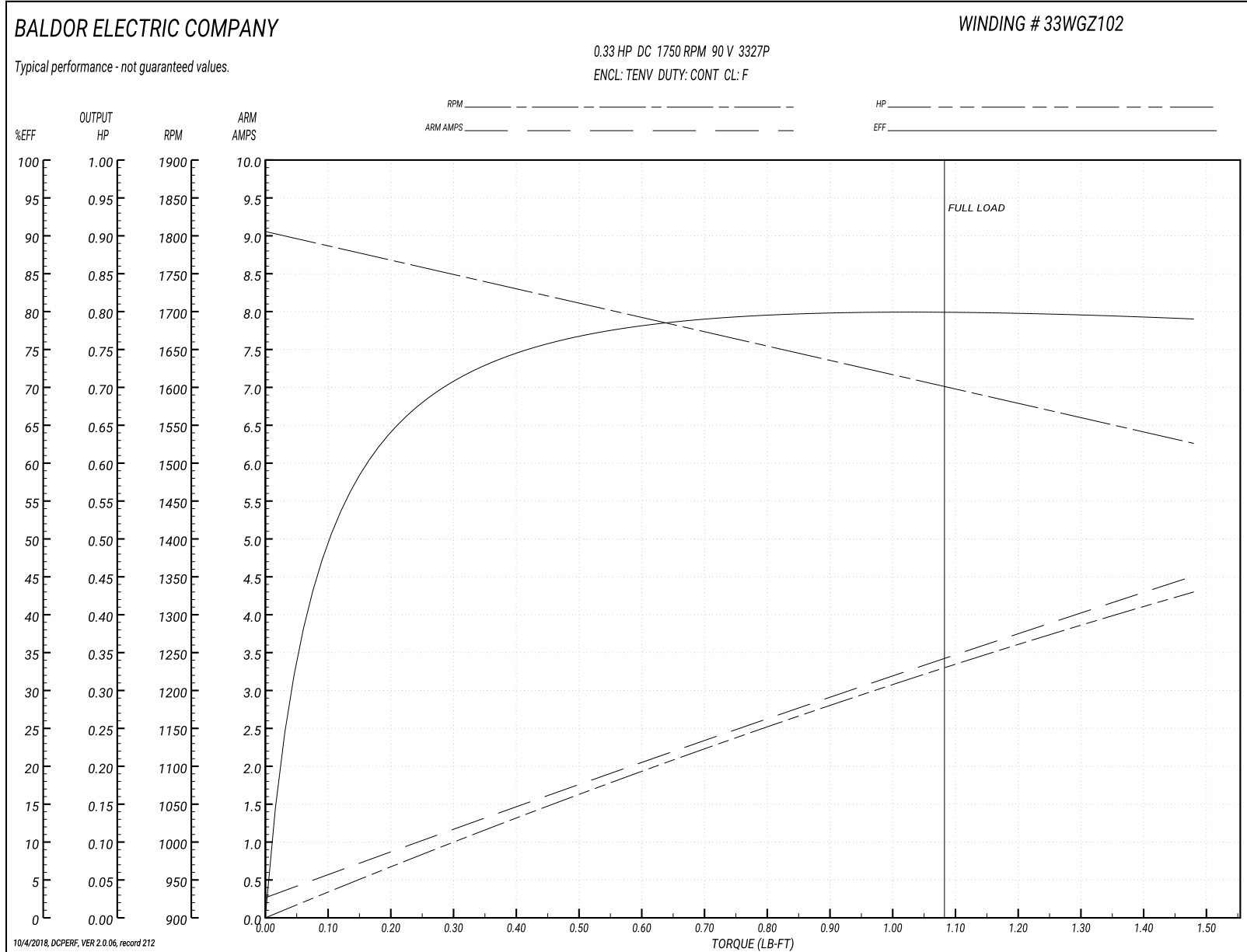
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT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

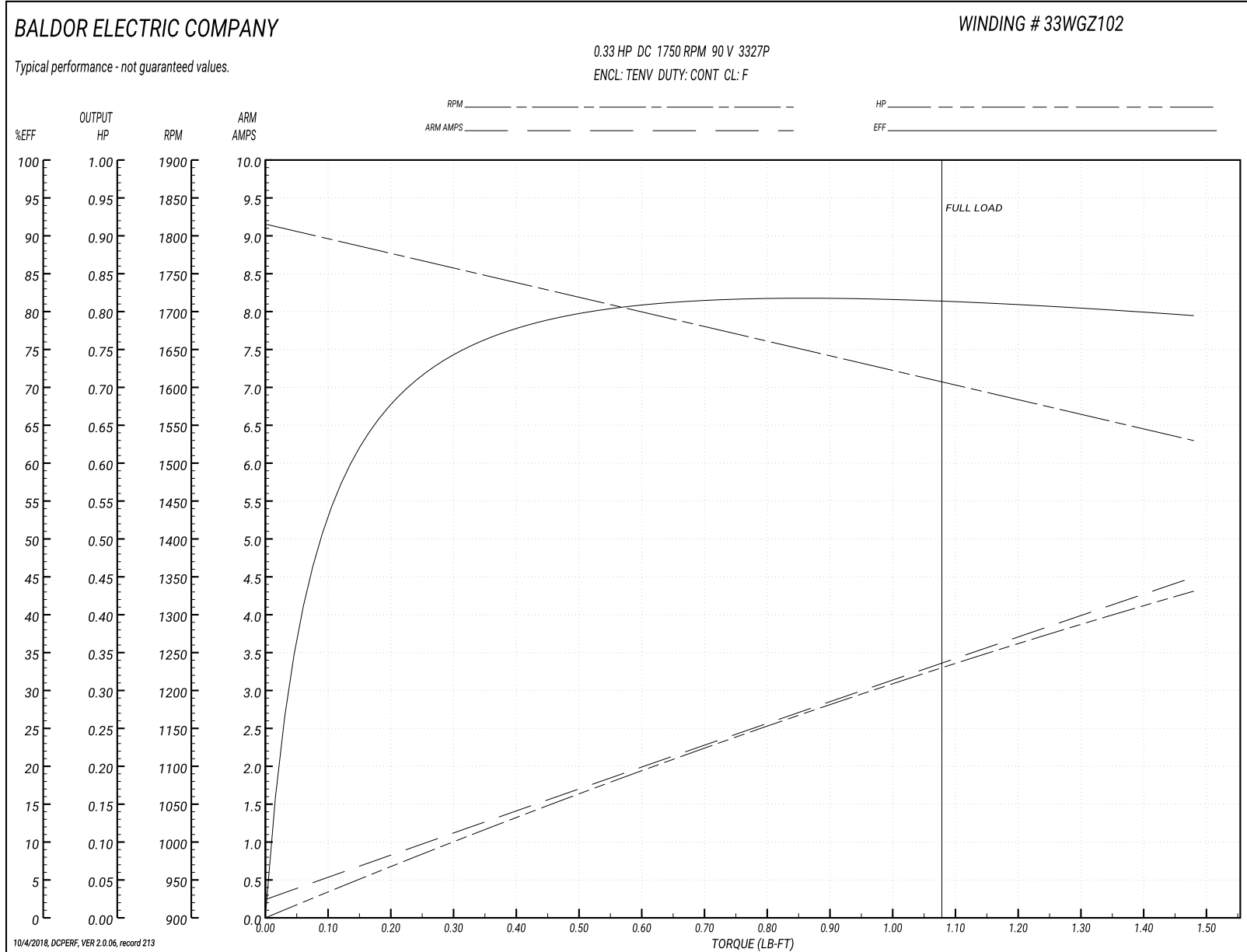
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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Nameplate Data		General Characteristics	
Rated Output (HP)	0.33		
R.P.M.	1750		
Armature Volts	90		
Armature Amps	3.2		
Field Volts			
Field Amps			
Rating - Duty	40C AMB-CONT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

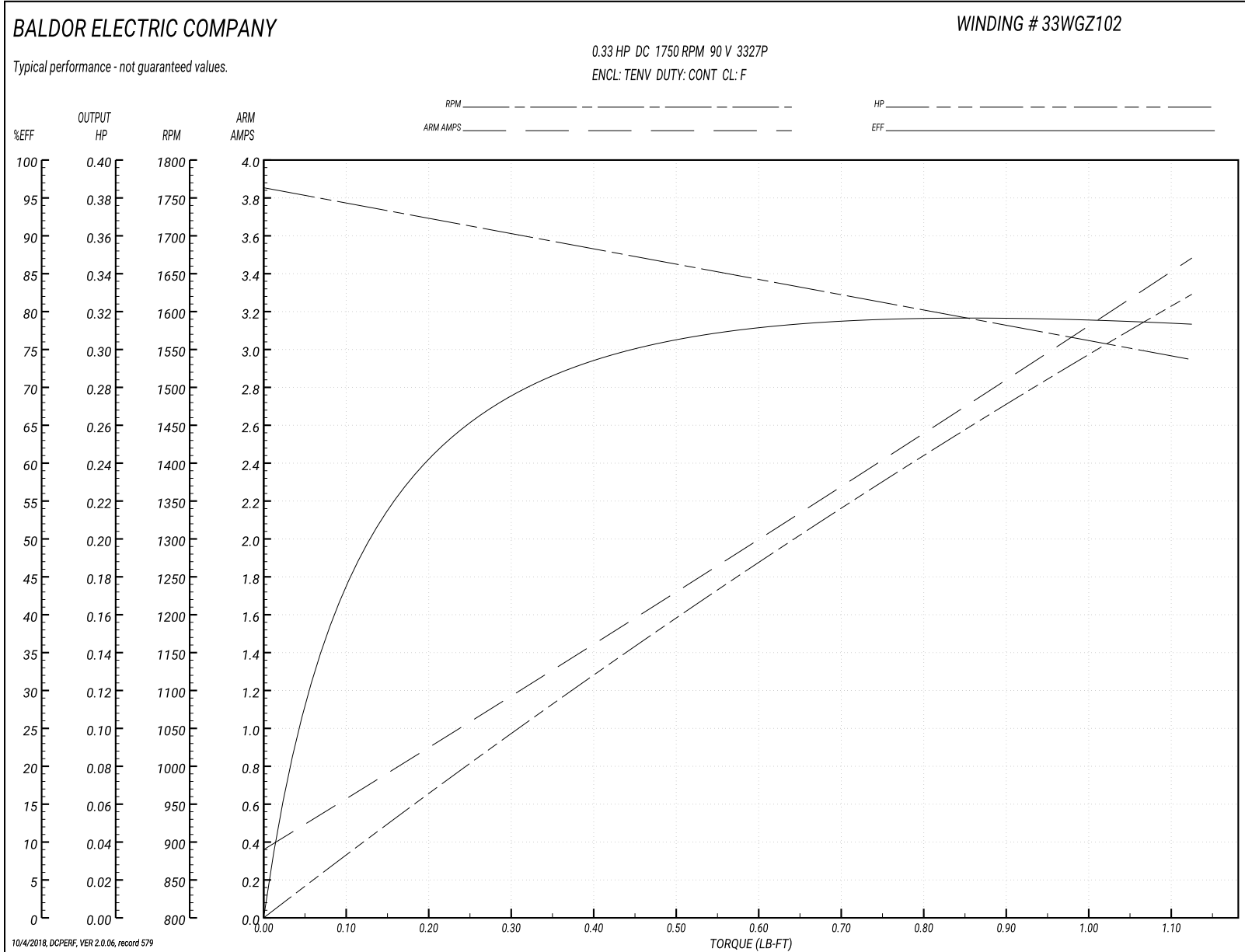
<b>Winding:</b> 33WGZ102-R001	<b>Type:</b> 3327P	<b>Enclosure:</b> TENV
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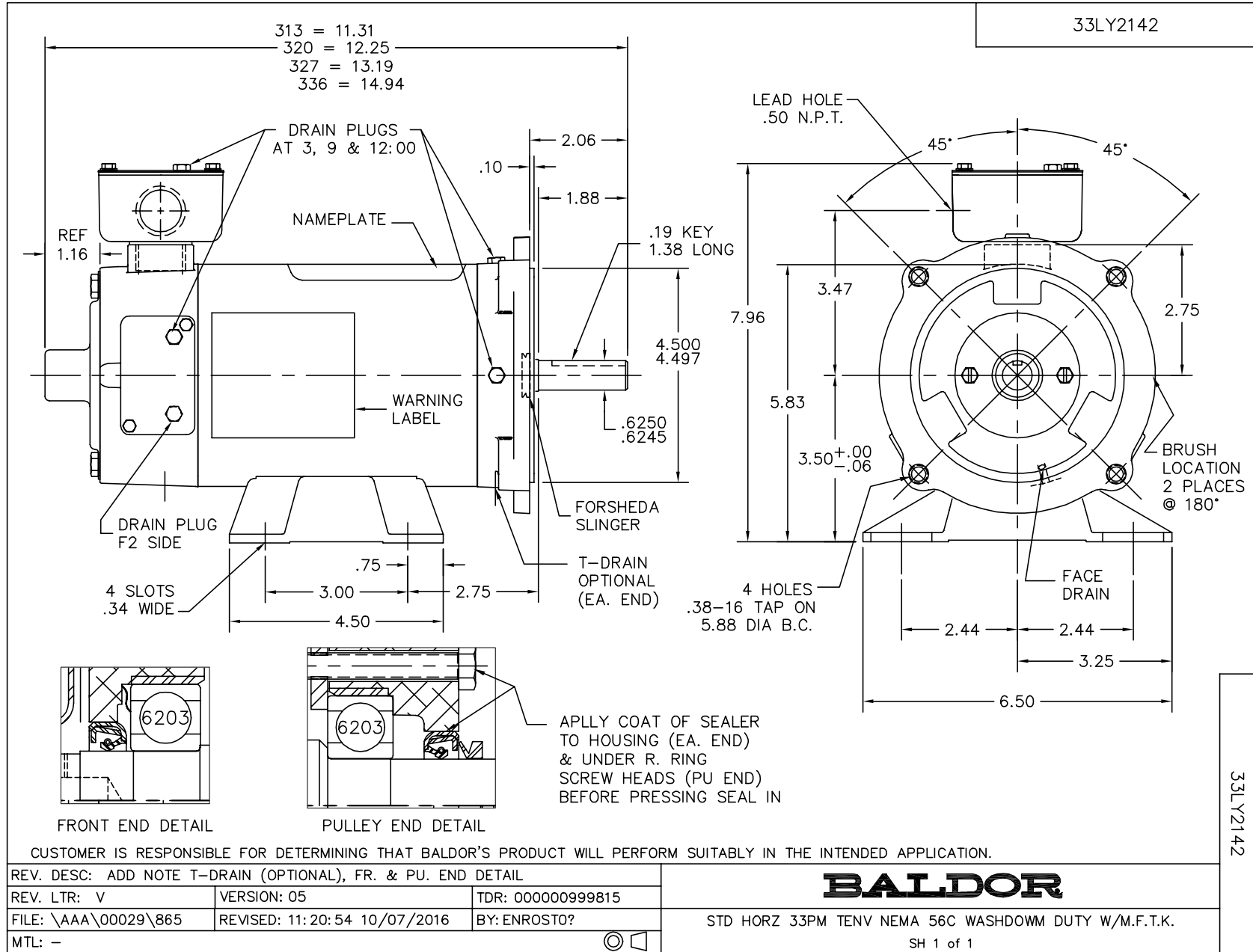
Nameplate Data		General Characteristics	
Rated Output (HP)	0.33	Armature Resistance @ 25°C	2.164 Ω
R.P.M.	1750		
Armature Volts	90	Voltage Constant	48.57 v/krpm
Armature Amps	3.2		
Field Volts			
Field Amps		Armature Inertia	10.5354 LI <sup>2</sup>
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 90 Armature Volts

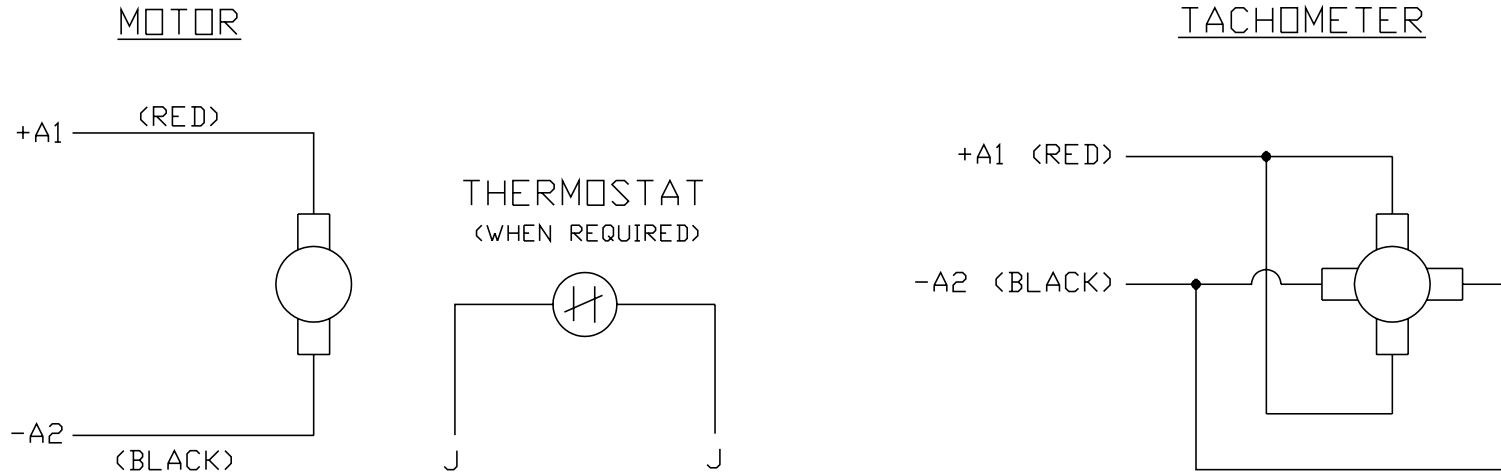
Load Point	1	2	3	4	5	6	7
Armature Amps	0.28	1.02	1.35	1.85	2.39	2.95	3.5
R.P.M.	1783	1709	1682	1650	1611	1565	1550
Torque ( LB-FT )	0	0.188	0.375	0.562	0.75	0.937	1.125

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 &..."		
CD0194	SCALE: -	BY: CK	REVISED: 07/28/95
	FILE: AAA00004503		TDR: 0078737

**BALDOR ELECTRIC Co.**

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194