

ABB BALDOR RELIANCE III

Customer information packet

CDPT3320

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

Specifications

Armature Voltage	90 V
Base Speed	1750 rpm
Enclosure	TENV
Frame	56C
Frame Material	Steel
Output Power	0.330 HP
Agency Approvals	CE CSA UR WEEE
Ambient Temperature	40 °C
Armature Current	3.2 a
Armature Inertia	10.535 lb-ft ²
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
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	14.99 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding

Part Detail

Revision	H
Type	DC
Mech. spec.	33-2657
Base	
Status	PRD/A
Elec. spec.	33WGZ102
Layout	33LY2657
Eff. date	10-24-2024
CD Diagram	CD0194
Poles	00
Leads	
Proprietary	False
Created date	06-19-2019

Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP0891L					
CAT.NO.	CDPT3320				
SPEC.	33-2657Z102				
HP	.33/KW.25	ENCL		TENV	
RPM	1750 1/MIN				
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				
	IP44	BLANK		KG13	
SER.					
BLANK	IC410				
APRV-CE	Y	APRV-CSA	Y	APRV-UL	Y

Parts List

Part number	Description	Quantity
SA370998	SA 33-2657Z102	1.000 ea
AA018057	AA 33-2657Z102	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	2.000 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
WD4100A26	HEYCO UNIVERSAL BUSHING P/N 2089, MTG HO	1.000 ea
33CB4501A01SP	BRUSH INSPECTION COVER	2.000 ea
33GS1005A01	BRUSH INSP COVER GASKET,WHITE NON-CONDUCT	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
M35000-523	TACH CALLAN 50V .625 BORE CCW	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	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 (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0194	CONNECTION LABEL	1.000 ea
NP0891L	NP STD LASER ENGRAVED DC MTRS, UL CSA CE	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea

DC Motor Performance Data

Record # 208

Typical performance - not guaranteed values

Winding: 33WGZ102-R001		Type: 3327P	Enclosure: TENV
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

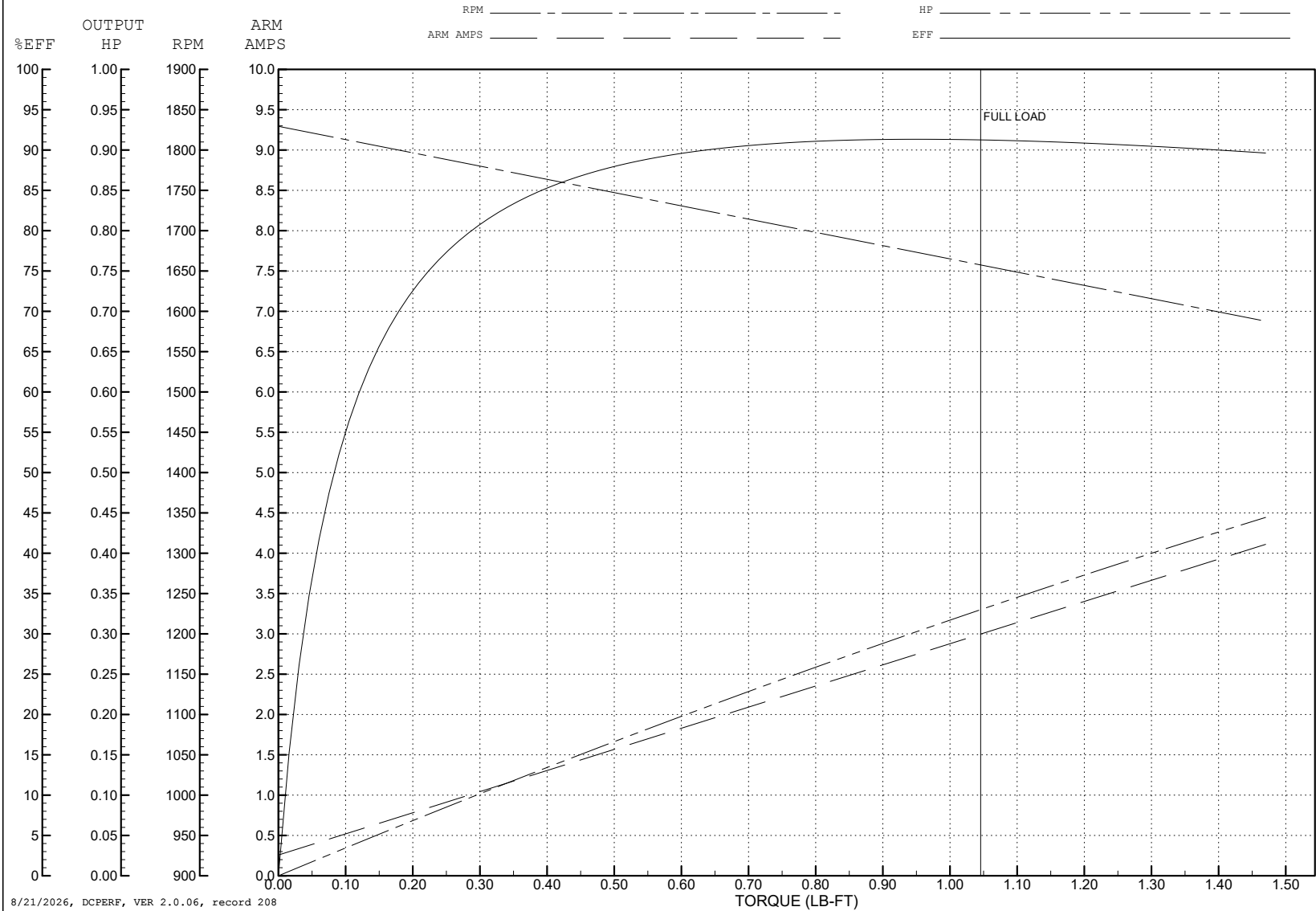
ABB Motors and Mechanical Inc.

WINDING # 33WGZ102

Typical performance - not guaranteed values.

0.33 HP DC 1750 RPM 90 V 3327P

ENCL: TENV DUTY: CONT CL: F



DC Motor Performance Data

Record # 209

Typical performance - not guaranteed values

Winding: 33WGZ102-R001		Type: 3327P	Enclosure: TENV
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

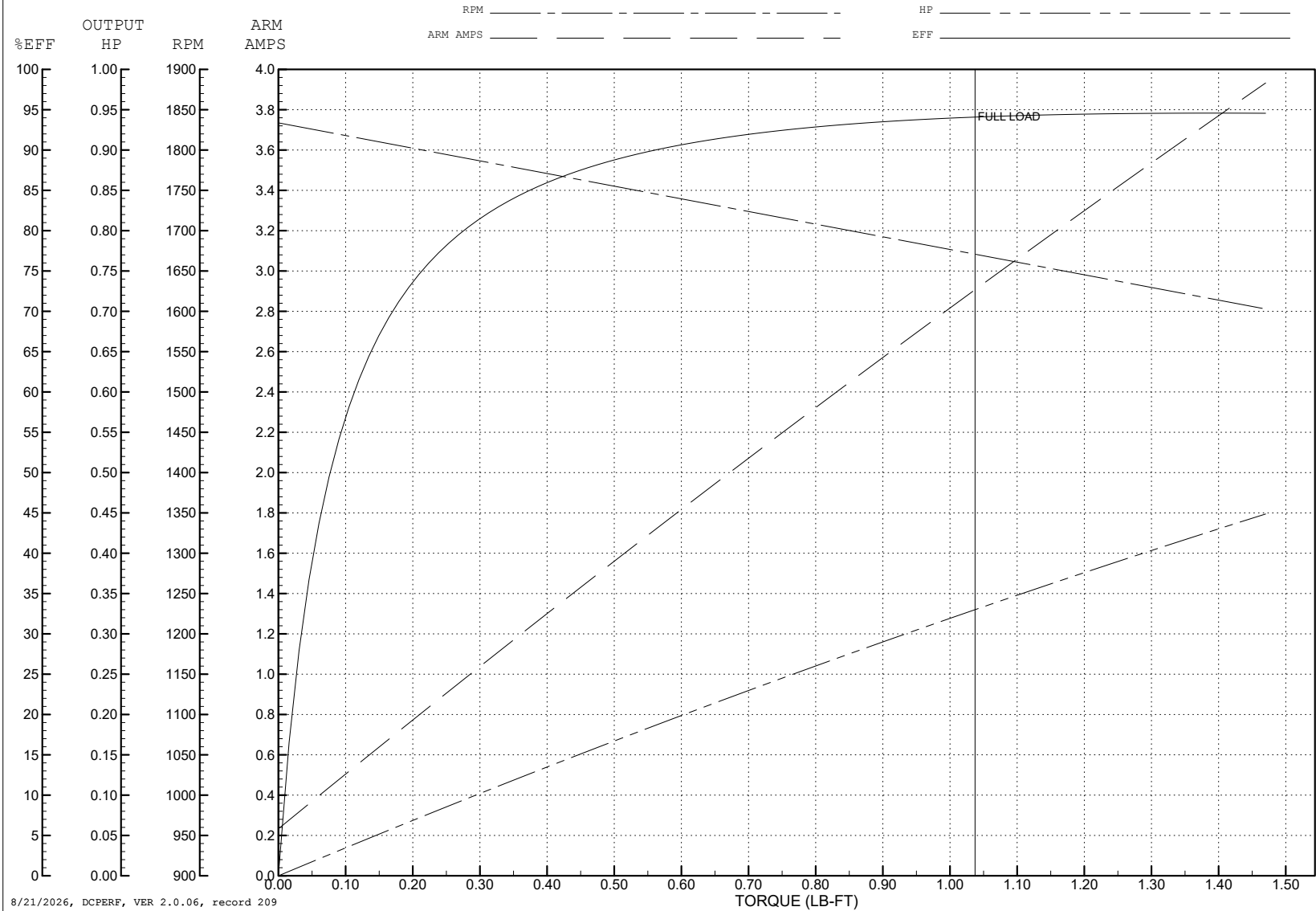
ABB Motors and Mechanical Inc.

WINDING # 33WGZ102

0.33 HP DC 1750 RPM 90 V 3327P

Typical performance - not guaranteed values.

ENCL: TENV DUTY: CONT CL: F



DC Motor Performance Data

Record # 210

Typical performance - not guaranteed values

Winding: 33WGZ102-R001		Type: 3327P	Enclosure: TENV
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

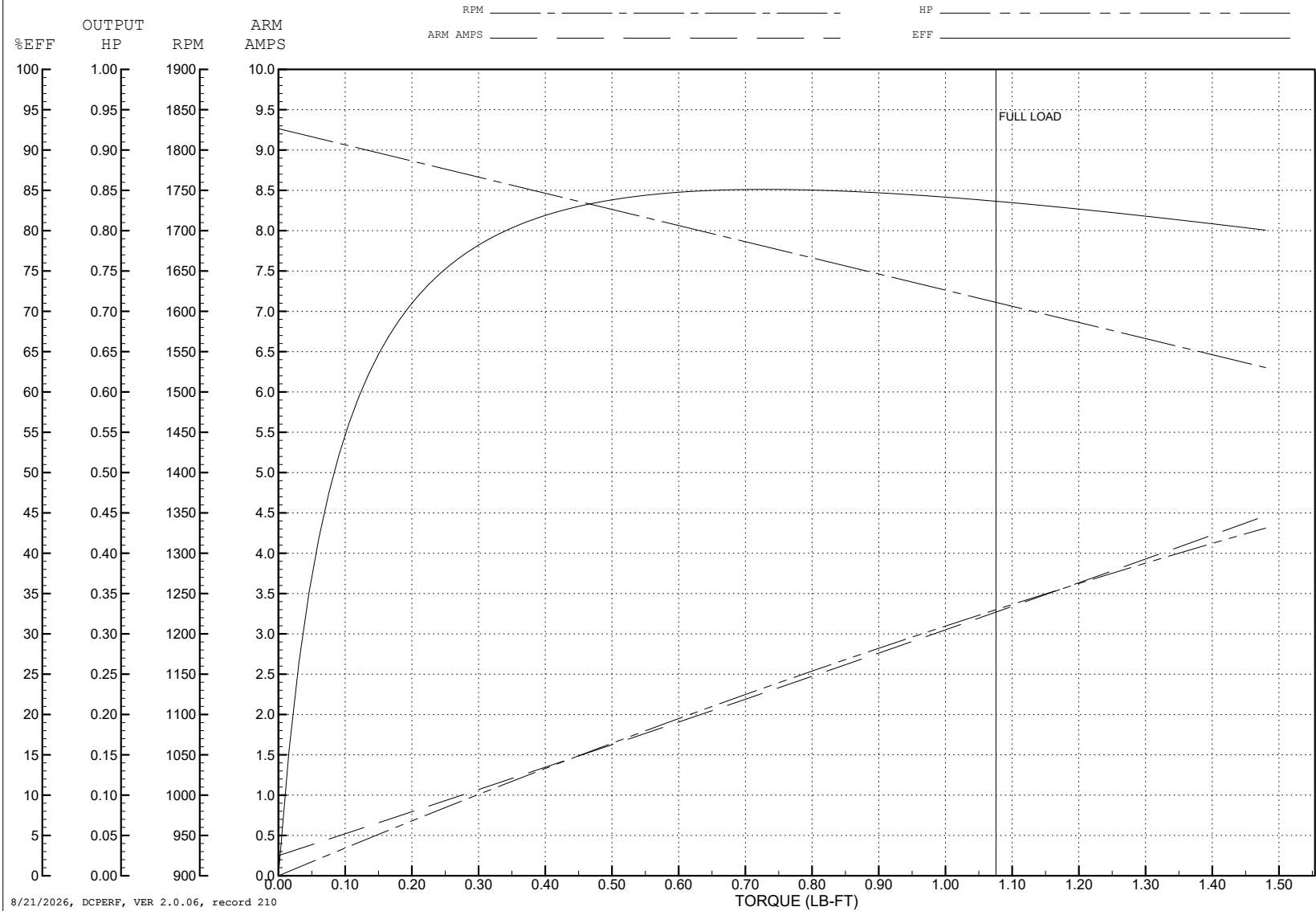
ABB Motors and Mechanical Inc.

WINDING # 33WGZ102

Typical performance - not guaranteed values.

0.33 HP DC 1750 RPM 90 V 3327P

ENCL: TENV DUTY: CONT CL: F



DC Motor Performance Data

Record # 211

Typical performance - not guaranteed values

Winding: 33WGZ102-R001		Type: 3327P	Enclosure: TENV	
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

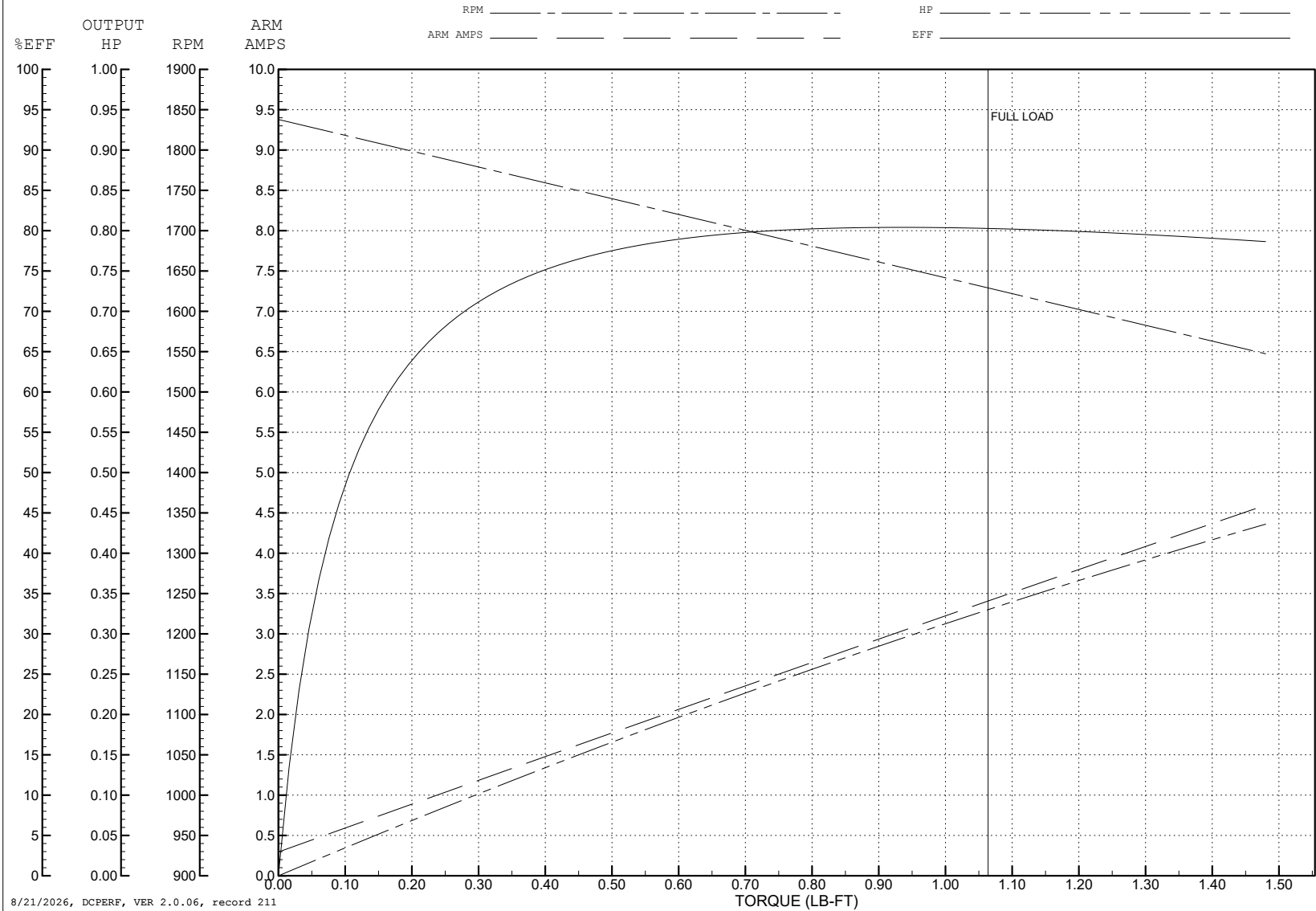
ABB Motors and Mechanical Inc.

WINDING # 33WGZ102

Typical performance - not guaranteed values.

0.33 HP DC 1750 RPM 90 V 3327P

ENCL: TENV DUTY: CONT CL: F



DC Motor Performance Data

Record # 212

Typical performance - not guaranteed values

Winding: 33WGZ102-R001		Type: 3327P	Enclosure: TENV
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

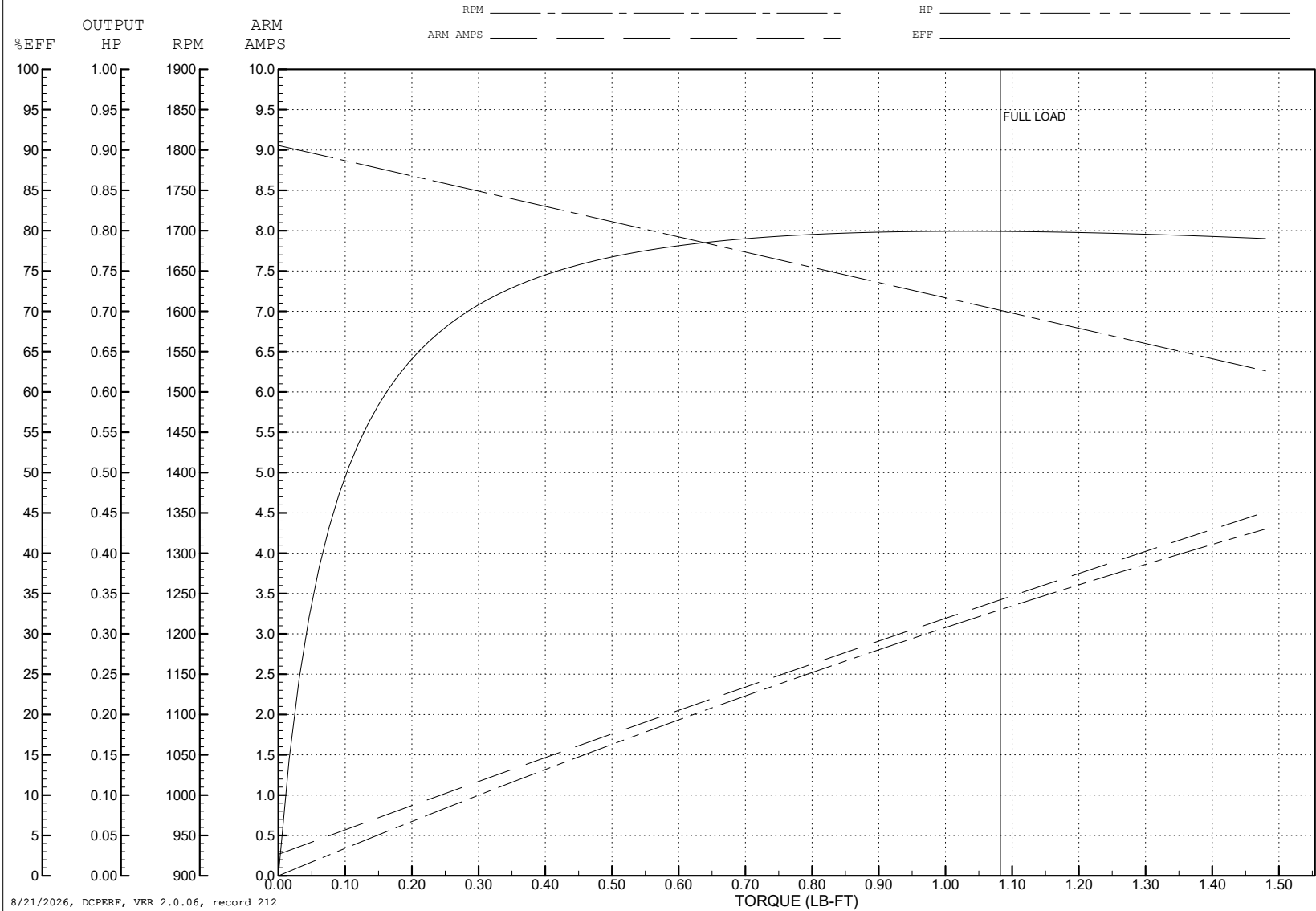
ABB Motors and Mechanical Inc.

WINDING # 33WGZ102

Typical performance - not guaranteed values.

0.33 HP DC 1750 RPM 90 V 3327P

ENCL: TENV DUTY: CONT CL: F



DC Motor Performance Data

Record # 213

Typical performance - not guaranteed values

Winding: 33WGZ102-R001		Type: 3327P	Enclosure: TENV
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

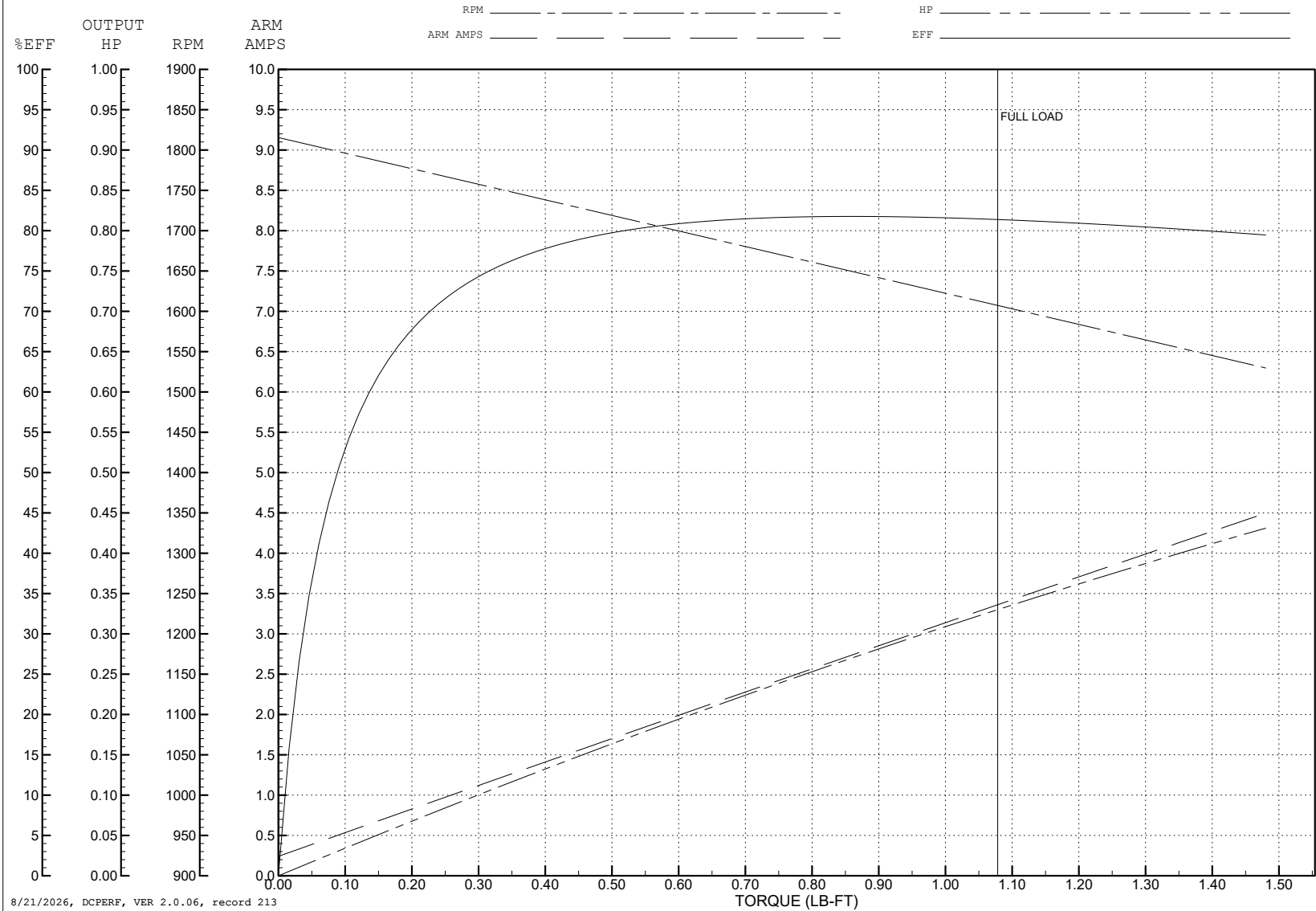
ABB Motors and Mechanical Inc.

WINDING # 33WGZ102

Typical performance - not guaranteed values.

0.33 HP DC 1750 RPM 90 V 3327P

ENCL: TENV DUTY: CONT CL: F



DC Motor Performance Data

Record # 579

Typical performance - not guaranteed values

Winding: 33WGZ102-R001		Type: 3327P	Enclosure: TENV
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 ²
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

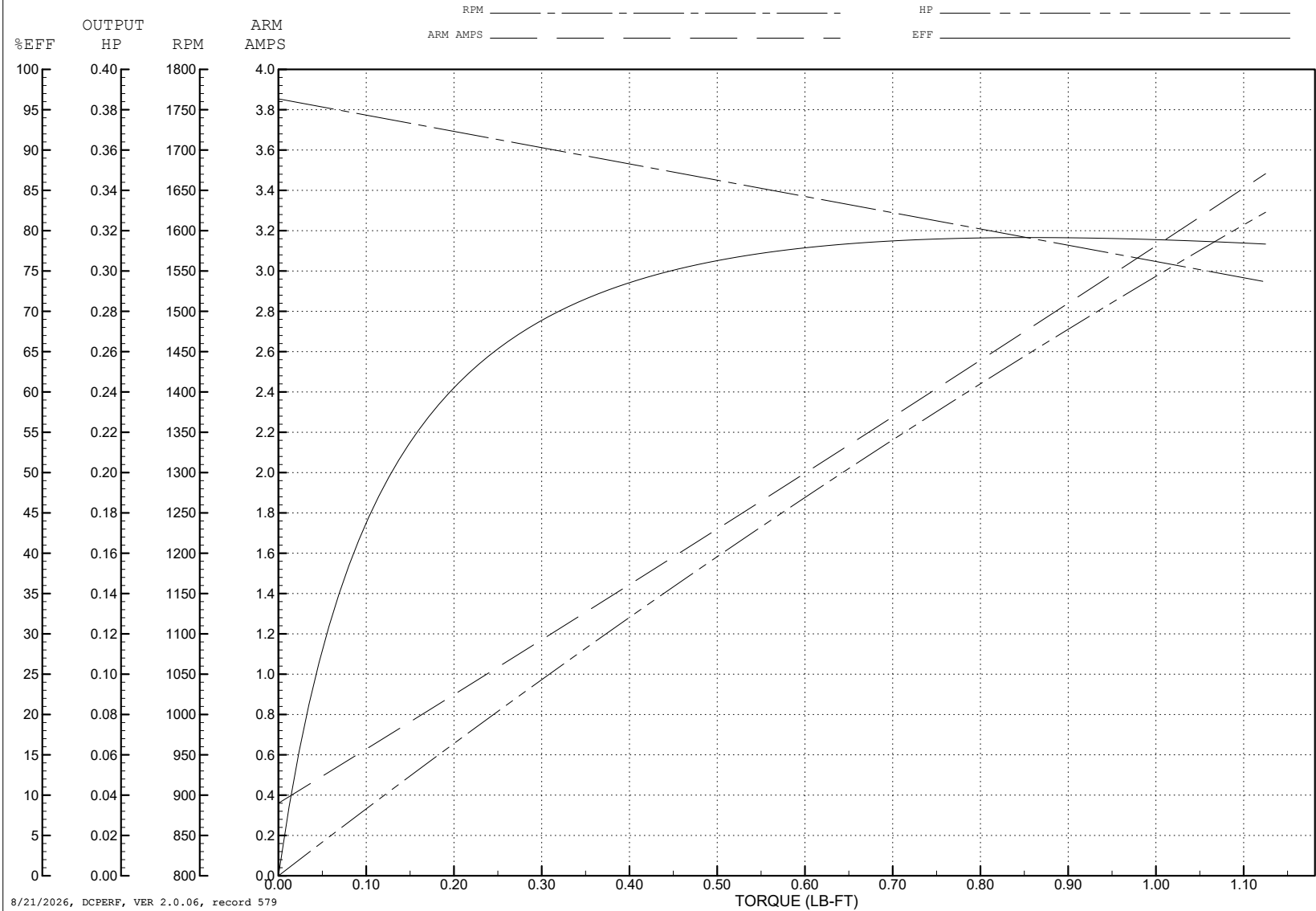
ABB Motors and Mechanical Inc.

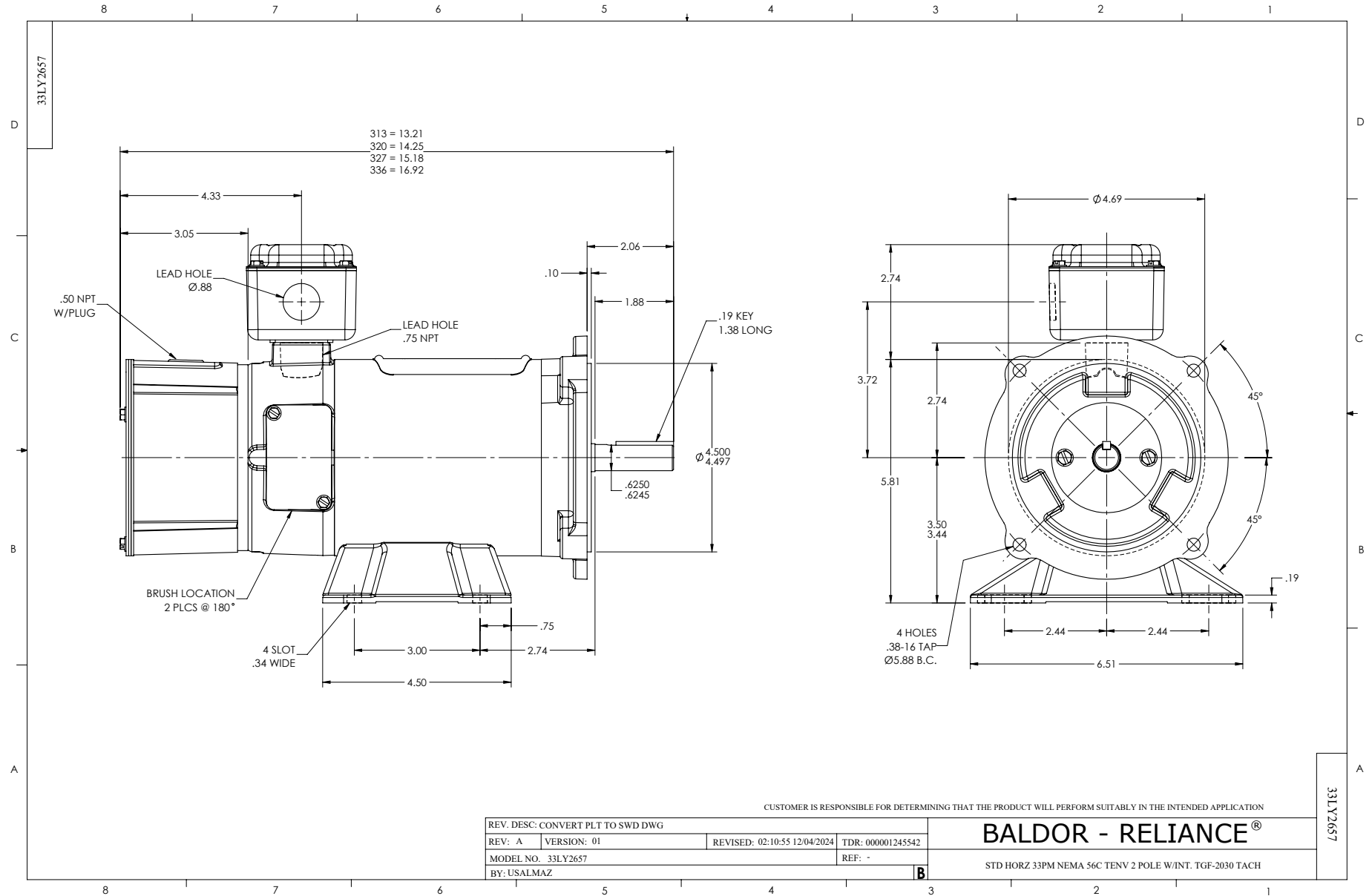
WINDING # 33WGZ102

0.33 HP DC 1750 RPM 90 V 3327P

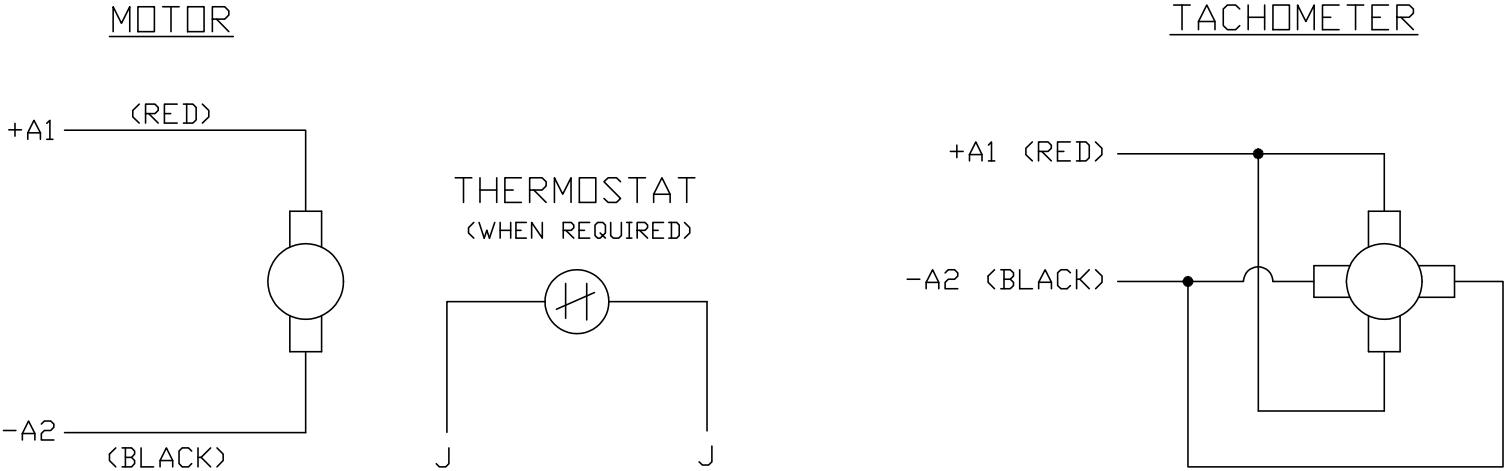
Typical performance - not guaranteed values.

ENCL: TENV DUTY: CONT CL: F





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: -					BALDOR ELECTRIC Co.	
REV:	E	ADDED NOTE "LEAD COLORS FOR REFERENCE ONLY &...				
CD0194		SCALE: -	BY: CK	REVISED: 07/28/95	CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS	
		FILE: AAA00004503		TDR: 0078737		

CD0194