ABB BALDOR RELIANCE

Customer information packet

CDPT3320

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

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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-ft2
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

DC Motor Performance Data
Record # 208
Typical performance - not guaranteed values

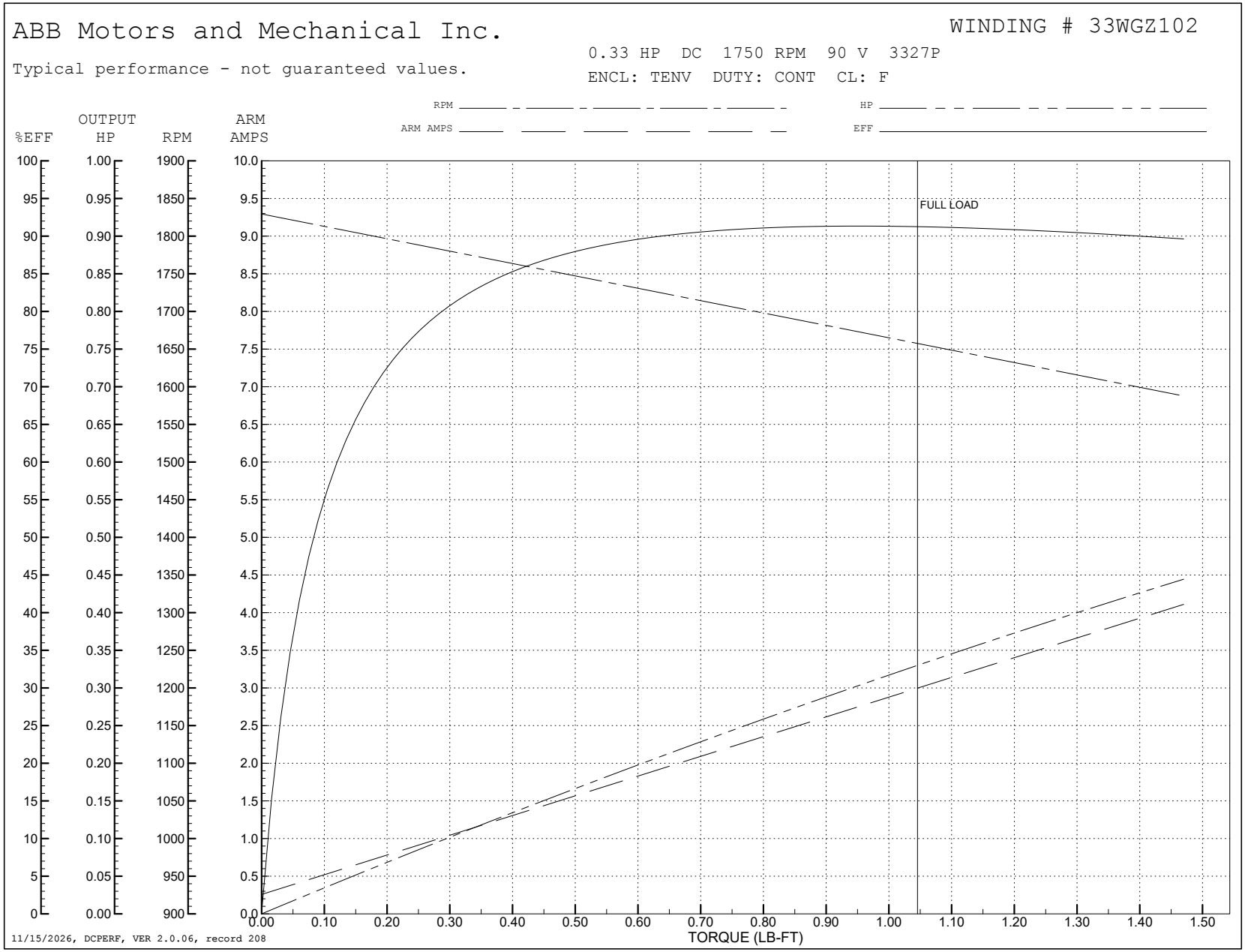
Winding: 33WGZ102-R001	**Type:** 3327P	**Enclosure:** TENV

Nameplate Data	
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

General Characteristics

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
RPM
ARM AMPS
HP
EFF
%EFF
OUTPUT HP
RPM
ARM AMPS
FULL LOAD
TORQUE (LB-FT)
11/15/2026, DCPERF, VER 2.0.06, record 208

DC Motor Performance Data
Record # 209
Typical performance - not guaranteed values

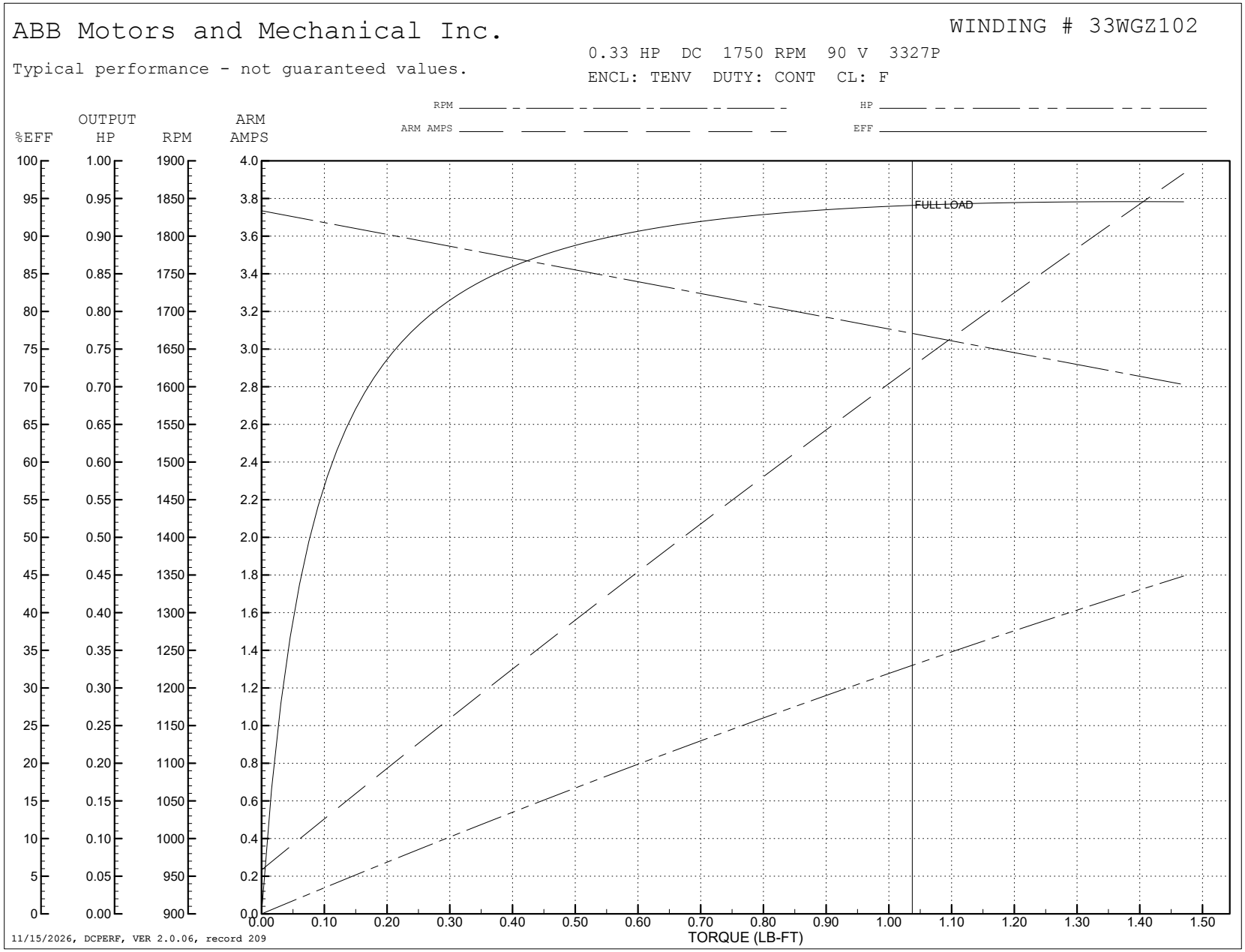
Winding: 33WGZ102-R001	**Type:** 3327P	**Enclosure:** TENV

Nameplate Data	
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

General Characteristics

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


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WINDING # 33WGZ102
Typical performance - not guaranteed values.
0.33 HP DC 1750 RPM 90 V 3327P
ENCL: TENV DUTY: CONT CL: F
RPM
HP
ARM AMPS
EFF
%EFF
OUTPUT HP
RPM
ARM AMPS
FULL LOAD
TORQUE (LB-FT)
11/15/2026, DCPERF, VER 2.0.06, record 209

DC Motor Performance Data
Record # 210
Typical performance - not guaranteed values

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

Nameplate Data	
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

General Characteristics

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

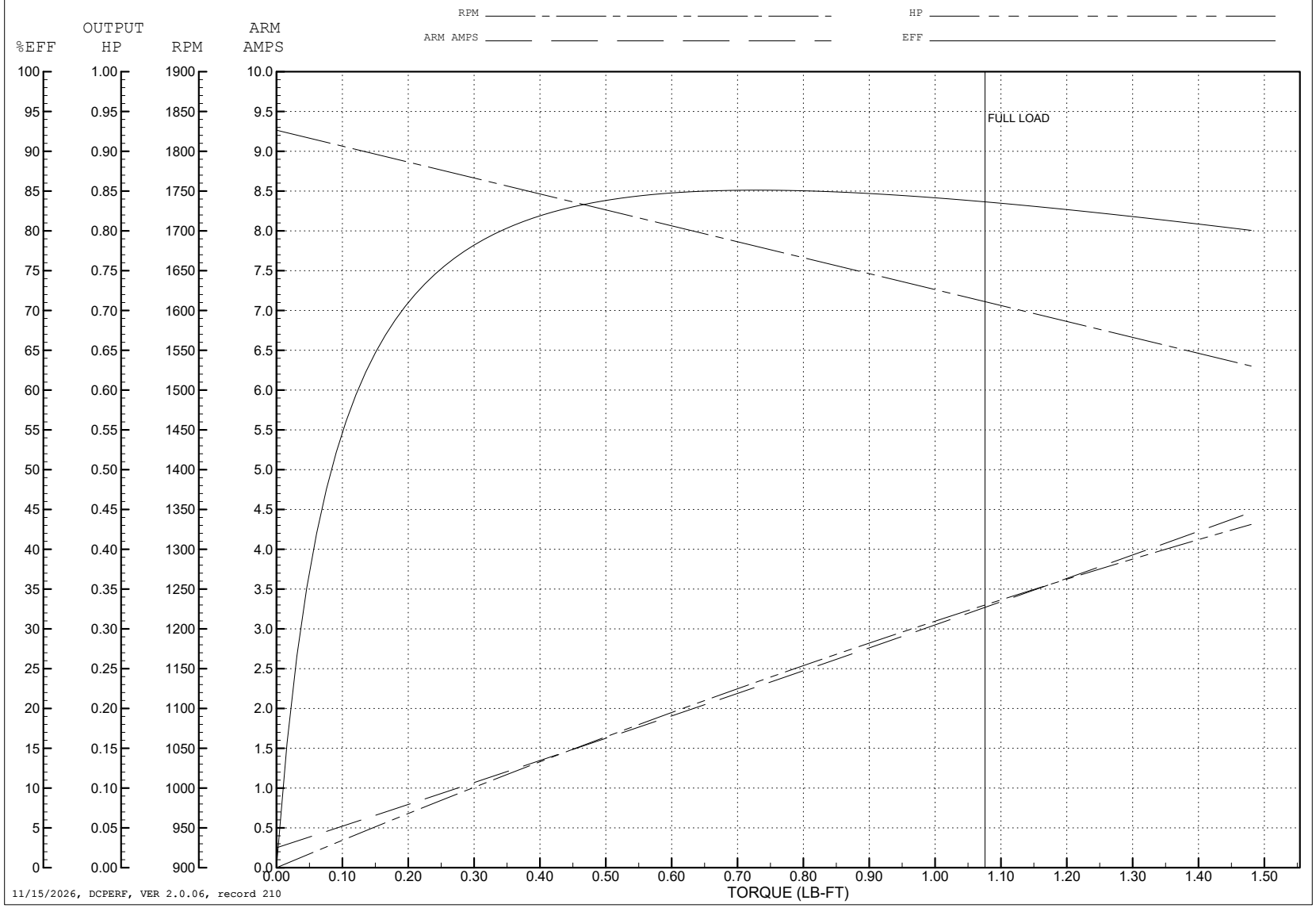
ABB Motors and Mechanical Inc.

WINDING # 33WGZ102

0.33 HP DC 1750 RPM 90 V 3327P

ENCL: TENV DUTY: CONT CL: F

Typical performance - not guaranteed values.



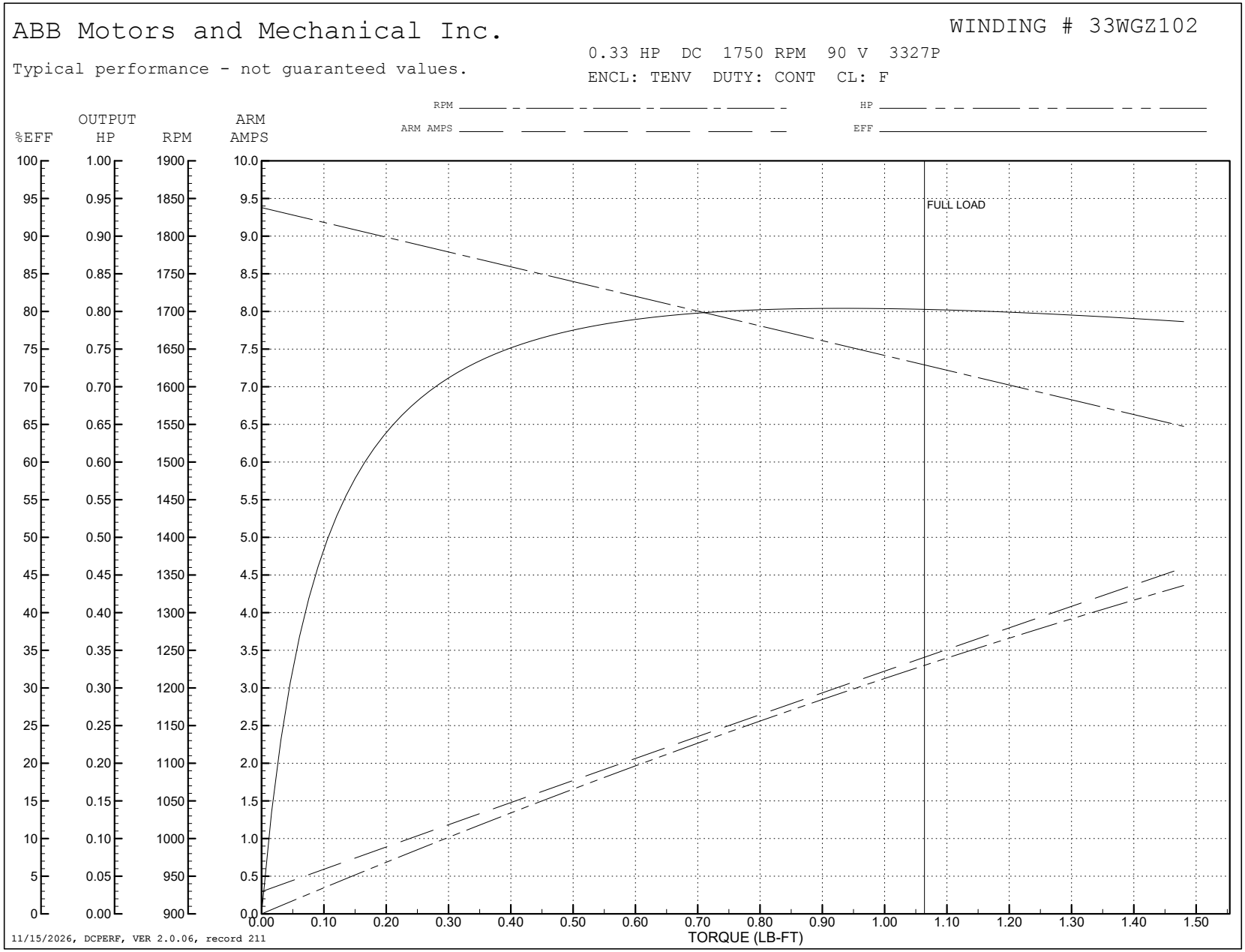
DC Motor Performance Data
Record # 211
Typical performance - not guaranteed values

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
RPM
HP
ARM AMPS
EFF
%EFF
OUTPUT HP
RPM
ARM AMPS
FULL LOAD
TORQUE (LB-FT)
11/15/2026, DCPERF, VER 2.0.06, record 211

DC Motor Performance Data
Record # 212
Typical performance - not guaranteed values

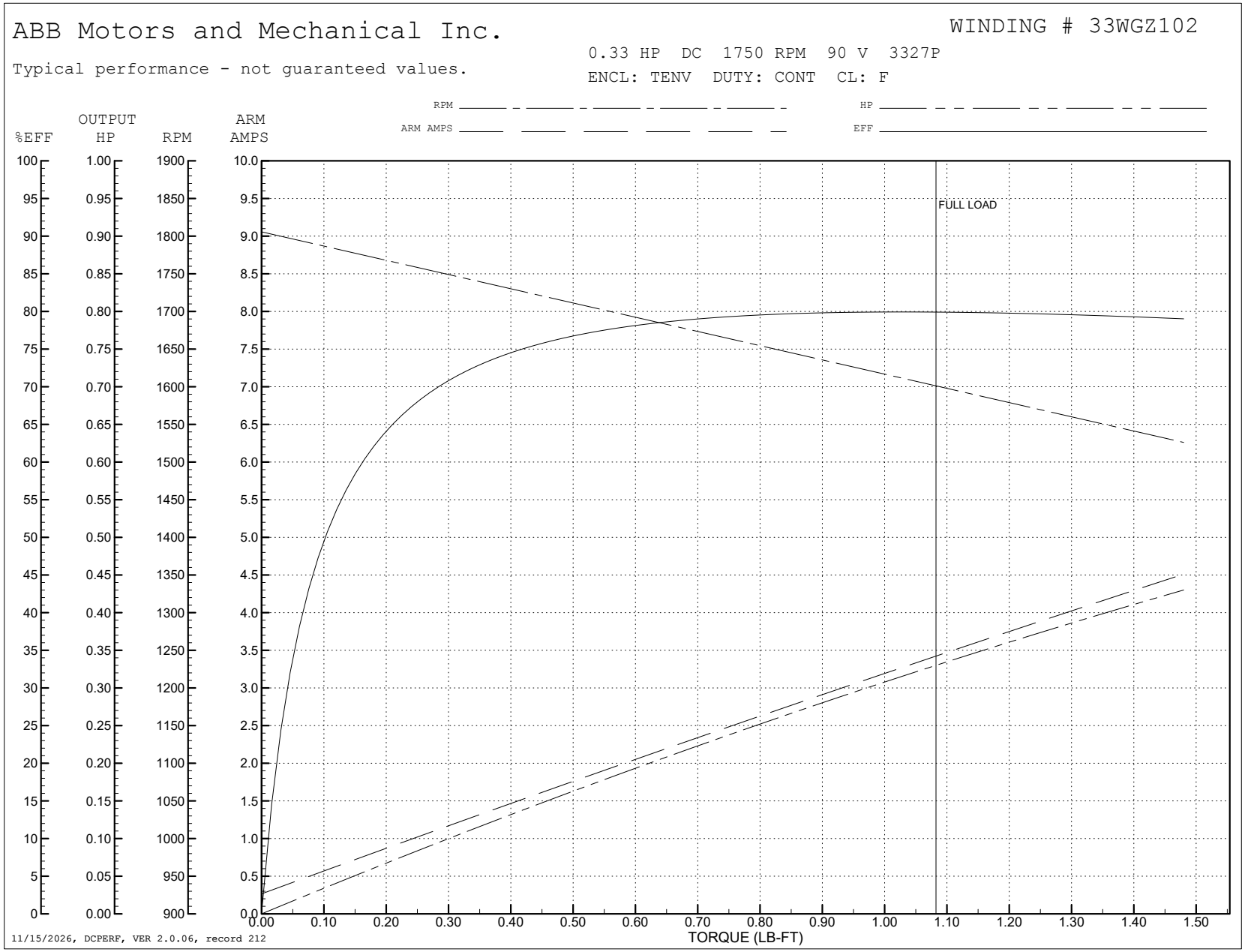
Winding: 33WGZ102-R001	**Type:** 3327P	**Enclosure:** TENV

Nameplate Data	
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

General Characteristics

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


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WINDING # 33WGZ102
Typical performance - not guaranteed values.
0.33 HP DC 1750 RPM 90 V 3327P
ENCL: TENV DUTY: CONT CL: F
RPM
HP
ARM AMPS
EFF
%EFF
OUTPUT HP
RPM
ARM AMPS
FULL LOAD
TORQUE (LB-FT)
11/15/2026, DCPERF, VER 2.0.06, record 212

DC Motor Performance Data
Record # 213
Typical performance - not guaranteed values

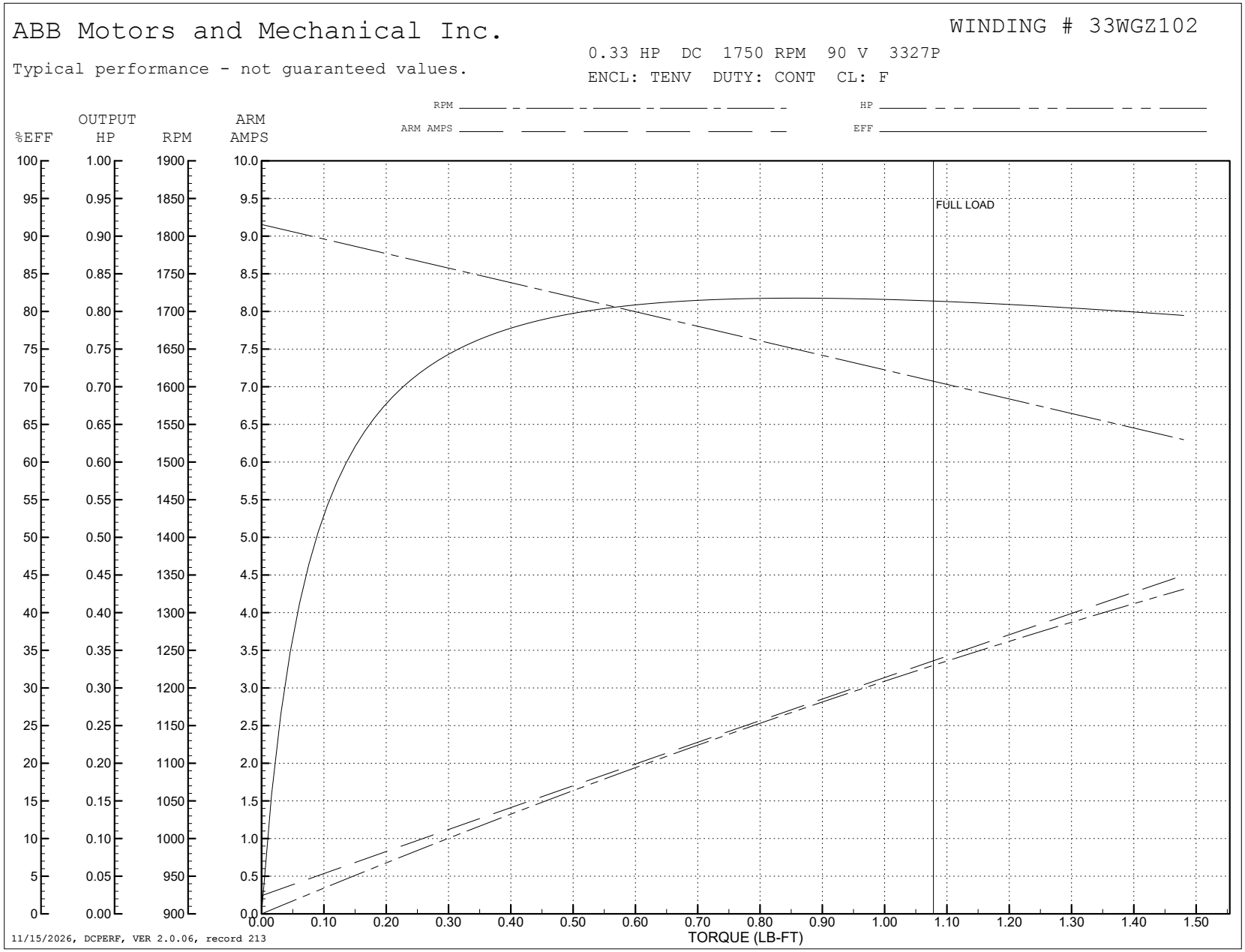
Winding: 33WGZ102-R001	**Type:** 3327P	**Enclosure:** TENV

Nameplate Data	
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

General Characteristics

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
RPM
ARM AMPS
HP
EFF
%EFF
OUTPUT HP
RPM
ARM AMPS
FULL LOAD
TORQUE (LB-FT)
11/15/2026, DCPERF, VER 2.0.06, record 213

DC Motor Performance Data
Record # 579
Typical performance - not guaranteed values

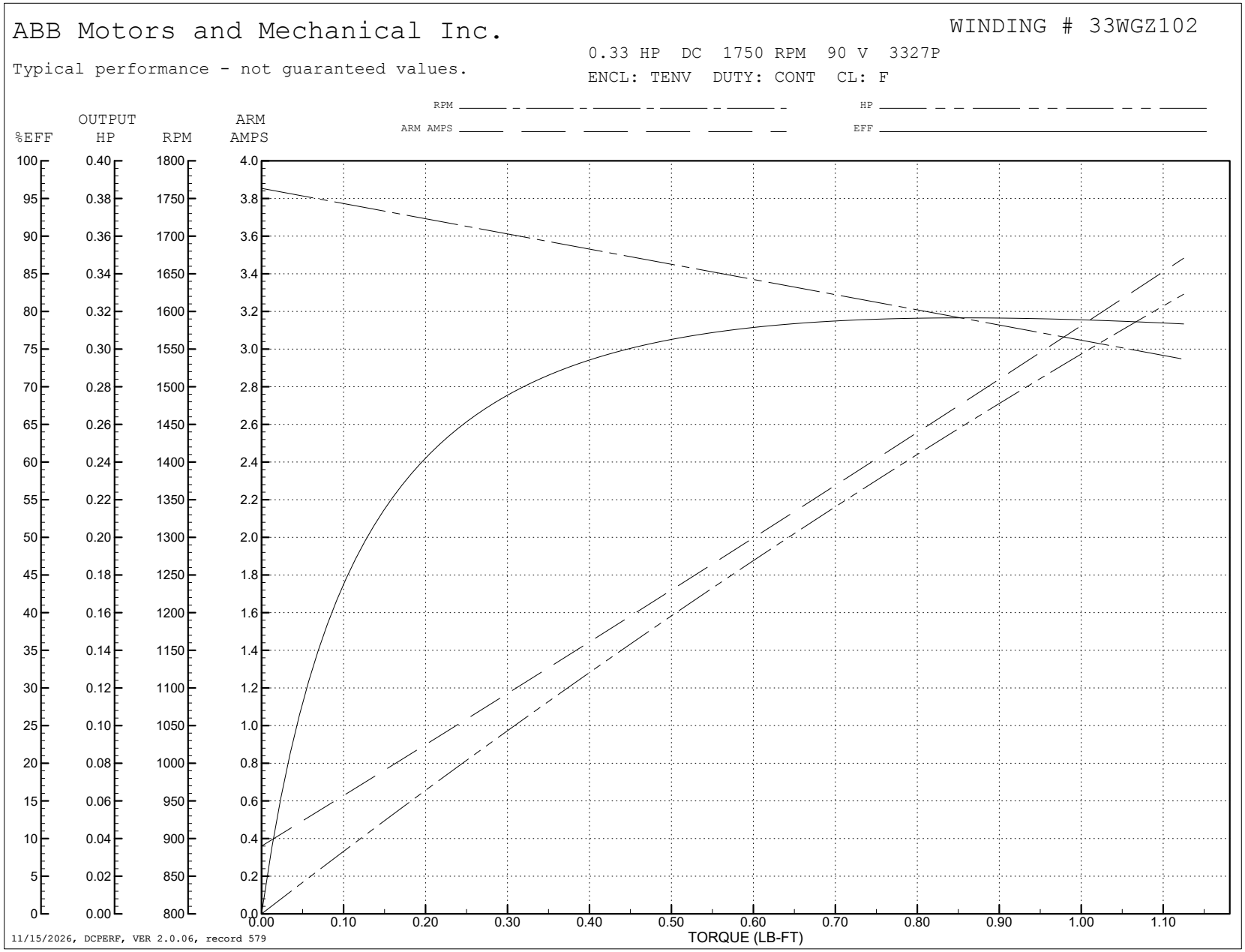
Winding: 33WGZ102-R001	**Type:** 3327P	**Enclosure:** TENV

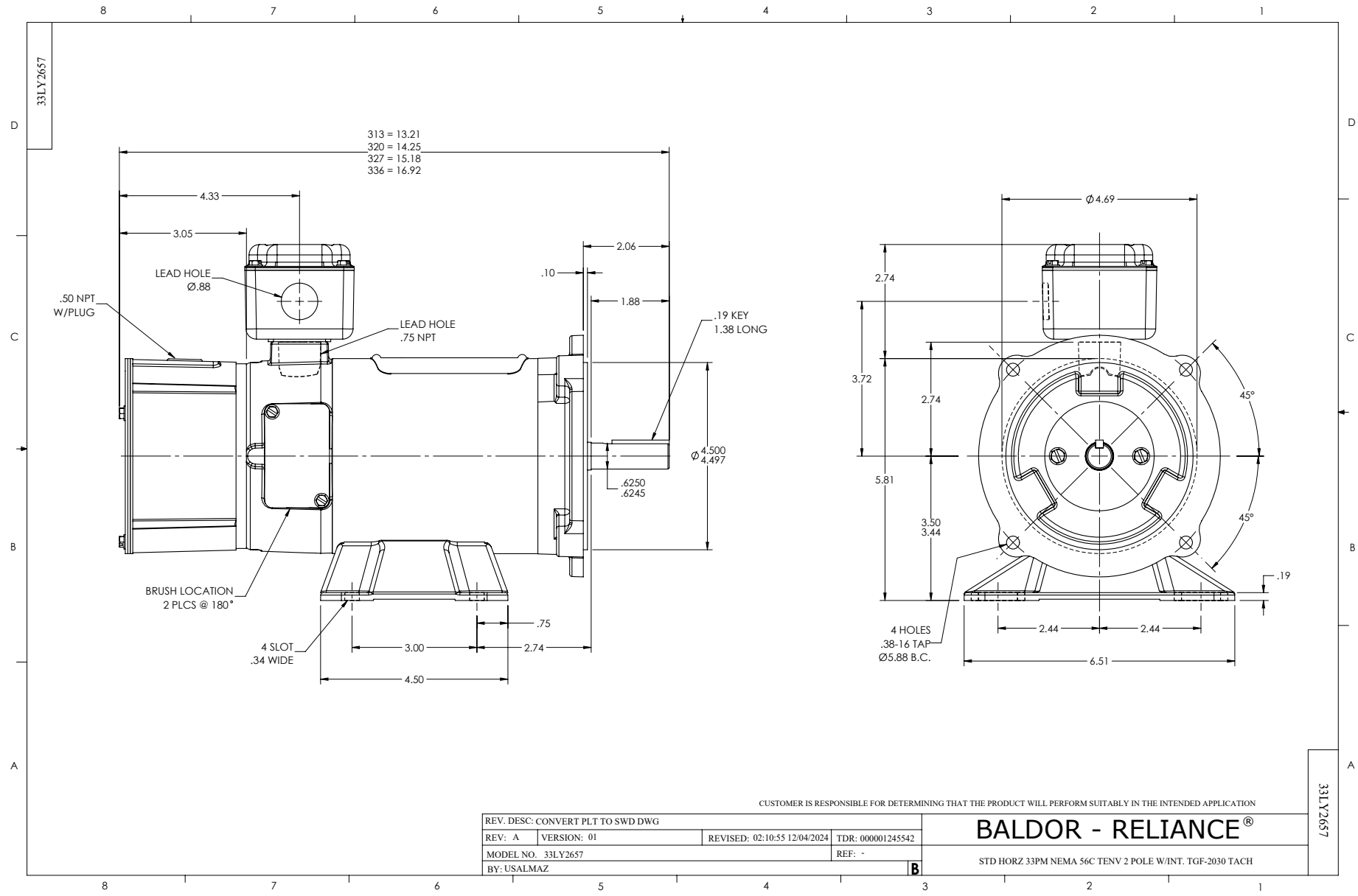
Nameplate Data	
Rated Output (HP)	0.33
R.P.M.	1750
Armature Volts	90
Armature Amps	3.2
Field Volts	
Field Amps	
Rating - Duty	40C AMB-CONT
Form Factor	1.3

General Characteristics	
Armature Resistance @ 25ºC	2.164 Ω
Voltage Constant	48.57 v/krpm
Armature Inertia	10.5354 LI²

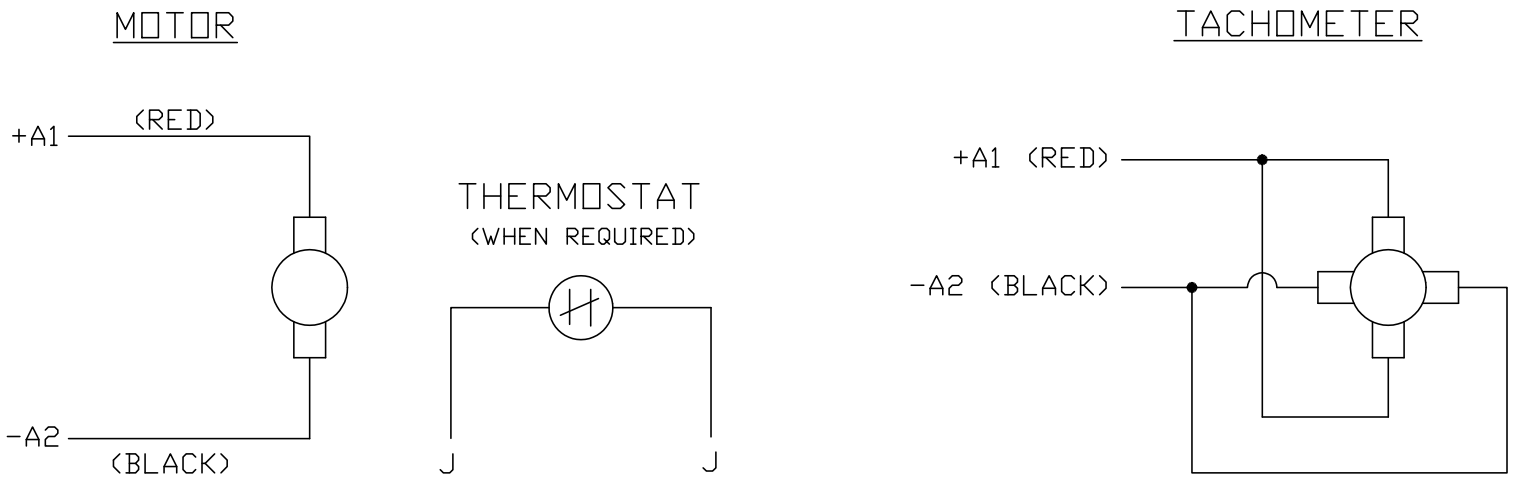
Load Characteristics at 90 Armature Volts

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
Typical performance - not guaranteed values.
0.33 HP DC 1750 RPM 90 V 3327P
ENCL: TENV DUTY: CONT CL: F
RPM
ARM AMPS
HP
EFF
%EFF
OUTPUT HP
RPM
ARM AMPS
TORQUE (LB-FT)
11/15/2026, DCPERF, VER 2.0.06, record 579


33LY2657
313 = 13.21
320 = 14.25
327 = 15.18
336 = 16.92
4.33
3.05
2.06
.10
1.88
LEAD HOLE
Ø.88
.50 NPT
W/PLUG
LEAD HOLE
.75 NPT
.19 KEY
1.38 LONG
Ø 4.500
4.497
.6250
.6245
BRUSH LOCATION
2 PLCS @ 180°
4 SLOT
.34 WIDE
.75
3.00
2.74
4.50
Ø 4.69
2.74
3.72
2.74
5.81
3.50
3.44
45°
45°
.19
4 HOLES
.38-16 TAP
Ø5.88 B.C.
2.44
2.44
6.51
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT PLT TO SWD DWG
REV: A
VERSION: 01
REVISED: 02:10:55 12/04/2024
TDR: 000001245542
MODEL NO. 33LY2657
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
STD HORZ 33PM NEMA 56C TENV 2 POLE W/INT. TGF-2030 TACH
33LY2657

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.

CD0194

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	