

BALDOR® • RELIANCE 

Product Information Packet

CDPWD3330

.5HP,1750RPM,DC,56C,3336P,TENV,F1

Part Detail							
Revision:	AS	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:	3336P	Elec. Spec:	33WGZ122	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:	02-28-2020
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		

Motor Lead Exit:	Ko Box		
Motor Lead Termination:	Flying Leads		
Mounting Arrangement:	F1		
Product Family:	Wash Down		
Pulley End Bearing Type:	Sealed Bearing		
RoHS Status:	ROHS COMPLIANT		
Shaft Extension Location:	Pulley End		
Shaft Ground Indicator:	No Shaft Grounding		
Shaft Rotation:	Reversible		
Shaft Slinger Indicator:	Shaft Slinger		
Motor Standards:	NEMA		

Nameplate NP1509			
CAT.NO.	CDPWD3330		
SPEC.	33-2142Z122		
HP	.5	ENCL	TENV
RPM	1750		
FRAME	56C	TYPE	3336P
ARM V	90	ARM A	4.8
FLD V		FLD A	
INSUL	F	AMB.	40
DUTY	CONT	SUPPLY	1.3
BRG/DE	6203	BRG/ODE	6203
BRUSHES	2/BP5011T01		
	IP55	BLANK	
SER.			
BLANK	KW.37 KG14		
APRV-CSA	Y	APRV-UL	Y
		APRV-CE	Y

Parts List		
Part Number	Description	Quantity
SA005091	SA 33-2142Z122	1.000 EA
AA002740	AA 33-2142Z122	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	10-16X3/8 SS HEX WSHR SLOT HD TYPE AB	3.000 EA
WD4102A12	SR 6P-4 HEYCO STRN RELIEF OR 23MP06P40 M	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
HA3100S03	THRUBOLT- 10-32 X 10.625 302 OR 303 SS	2.000 EA
MG1500Y02	WILKOPON (use 004824003CAH)	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) 3/19	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
LB1451	WARNING LABEL, CE WARNING SYMBOLS ONLY	1.000 EA

DC Motor Performance Data

Record # 216 - Typical performance - not guaranteed values

Winding: 33WGZ122-R001	Type: 3336P	Enclosure: TENV
-------------------------------	--------------------	------------------------

Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	1.22 Ω
R.P.M.	1750		
Armature Volts	90		
Armature Amps	4.8		
Field Volts		Armature Inductance	15.574 mH
Field Amps			
Rating - Duty	40C AMB-CONT		
Form Factor	1.3	Maximum allowable inrush amps	44

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.474	2.065	3.656	5.247	6.838	8.429	10.02
R.P.M.	1995	1920	1846	1772	1698	1624	1550
Torque (LB-FT)	0	0.5	1	1.5	2	2.5	3

Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values

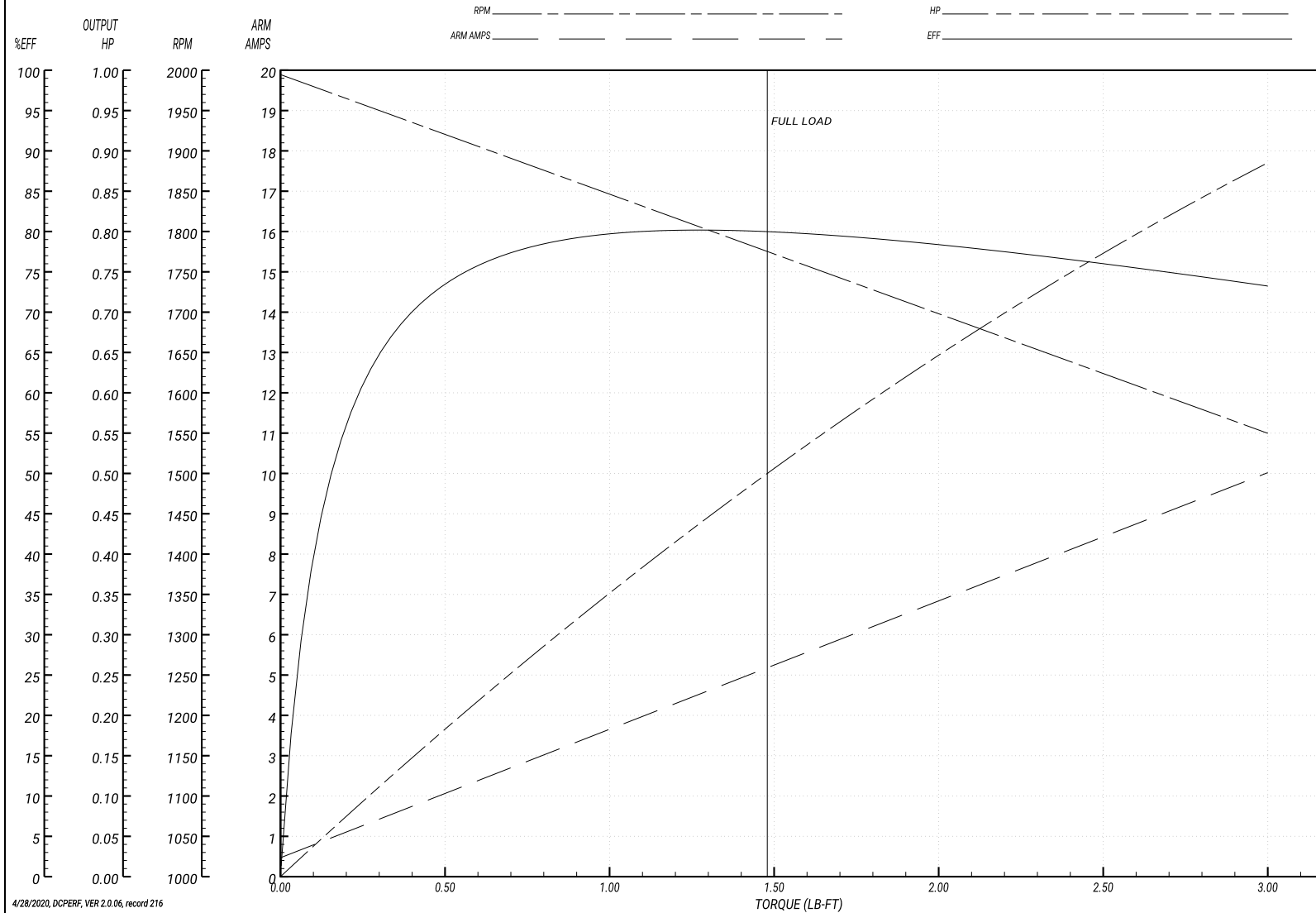
ABB Motors and Mechanical Inc.

WINDING # 33WGZ122

Typical performance - not guaranteed values.

0.5 HP DC 1750 RPM 90 V 3336P

ENCL: TENV DUTY: CONT CL: F



4/28/2020, DCPERF, VER 2.0.06, record 216

DC Motor Performance Data

Record # 515 - Typical performance - not guaranteed values

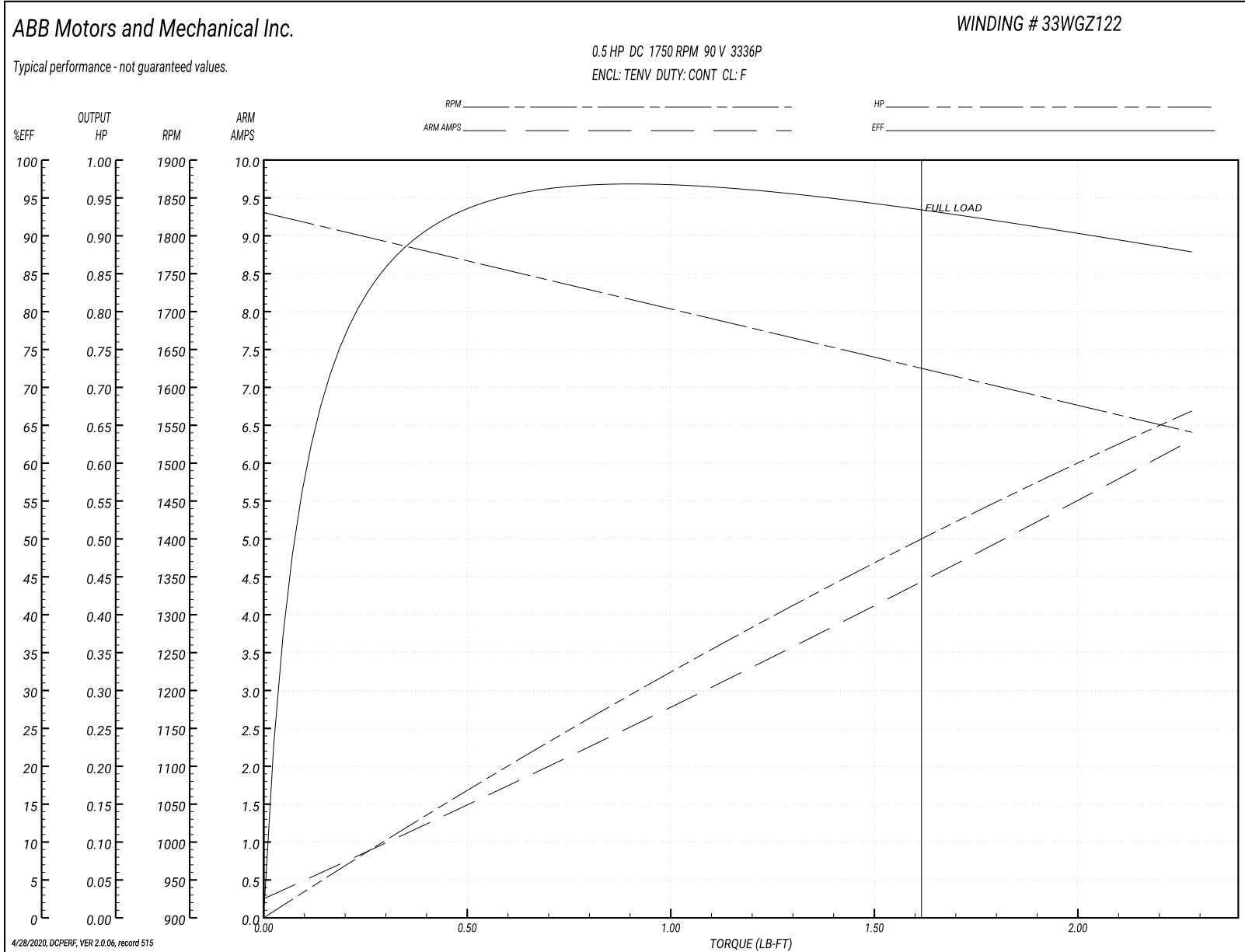
Winding: 33WGZ122-R001	Type: 3336P	Enclosure: TENV
-------------------------------	--------------------	------------------------

Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	1.2779 Ω
R.P.M.	1750		
Armature Volts	90		
Armature Amps	4.8		
Field Volts		Armature Inductance	15.798 mH
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	0.24	1.25	2.1	3.15	4.05	5.36	6.25
R.P.M.	1835	1793	1721	1672	1648	1584	1549
Torque (LB-FT)	0	0.38	0.76	1.14	1.5	1.9	2.28

Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values



DC Motor Performance Data

Record # 516 - Typical performance - not guaranteed values

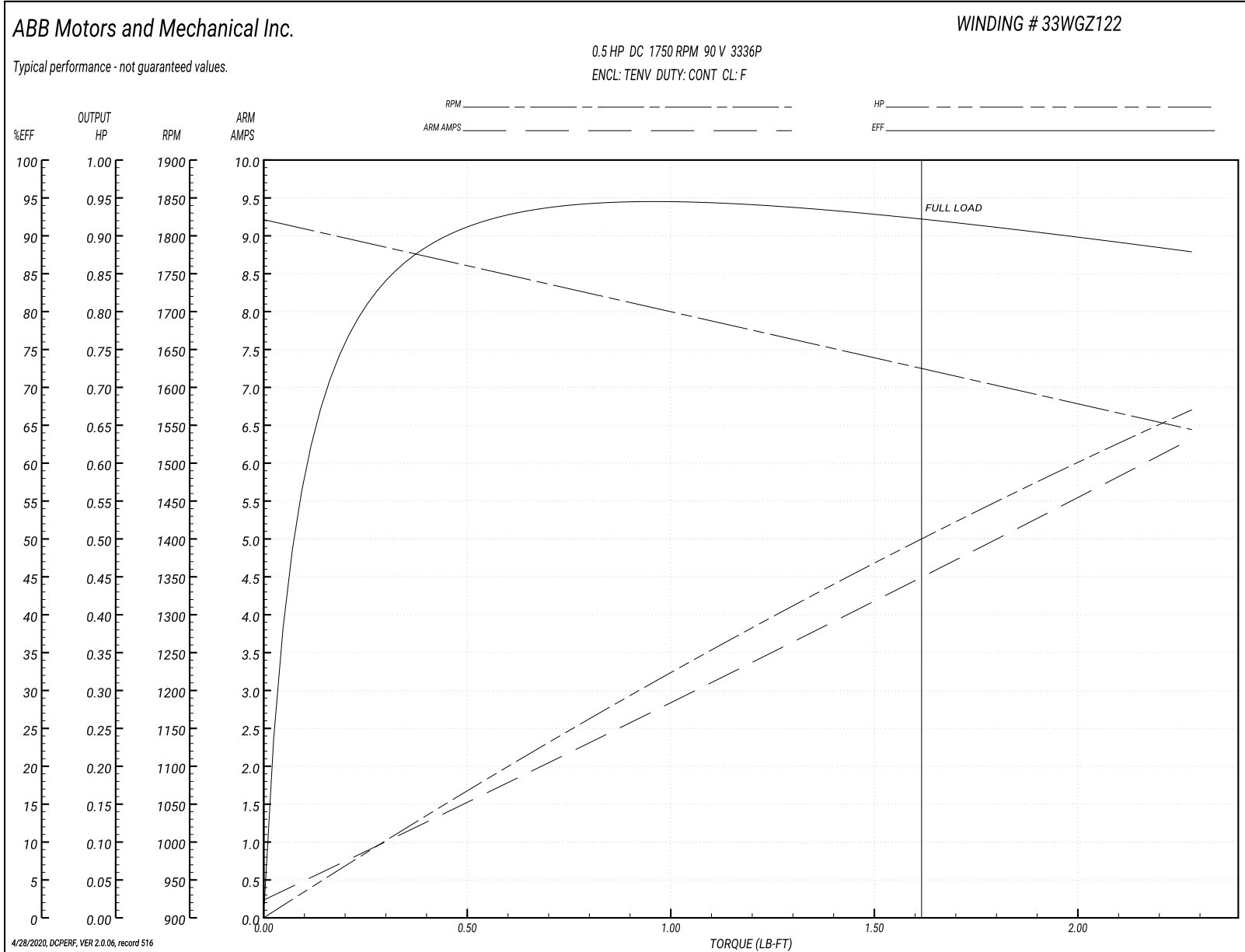
Winding: 33WGZ122-R001	Type: 3336P	Enclosure: TENV
-------------------------------	--------------------	------------------------

Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	1.2525 Ω
R.P.M.	1750		
Armature Volts	90		
Armature Amps	4.8		
Field Volts		Armature Inductance	15.413 mH
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	0.24	1.15	2.35	3.16	4.07	5.37	6.3
R.P.M.	1835	1770	1723	1683	1624	1588	1559
Torque (LB-FT)	0	0.38	0.76	1.14	1.5	1.9	2.28

Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values



DC Motor Performance Data

Record # 1619 - Typical performance - not guaranteed values

Winding: 33WGZ122-R001	Type: 3336P	Enclosure: TENV
-------------------------------	--------------------	------------------------

Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	1.22 Ω
R.P.M.	1750		
Armature Volts	90	Voltage Constant	44.63 v/krpm
Armature Amps	4.8		
Field Volts		Armature Inductance	15.574 mH
Field Amps		Armature Inertia	14.0472 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	0.32	6.51	12.7	18.89	25.08	31.28	39.3
R.P.M.	2000	1682	1365	1047	729	412	0.1
Torque (LB-FT)	0	2	4	6	8	10	12.59

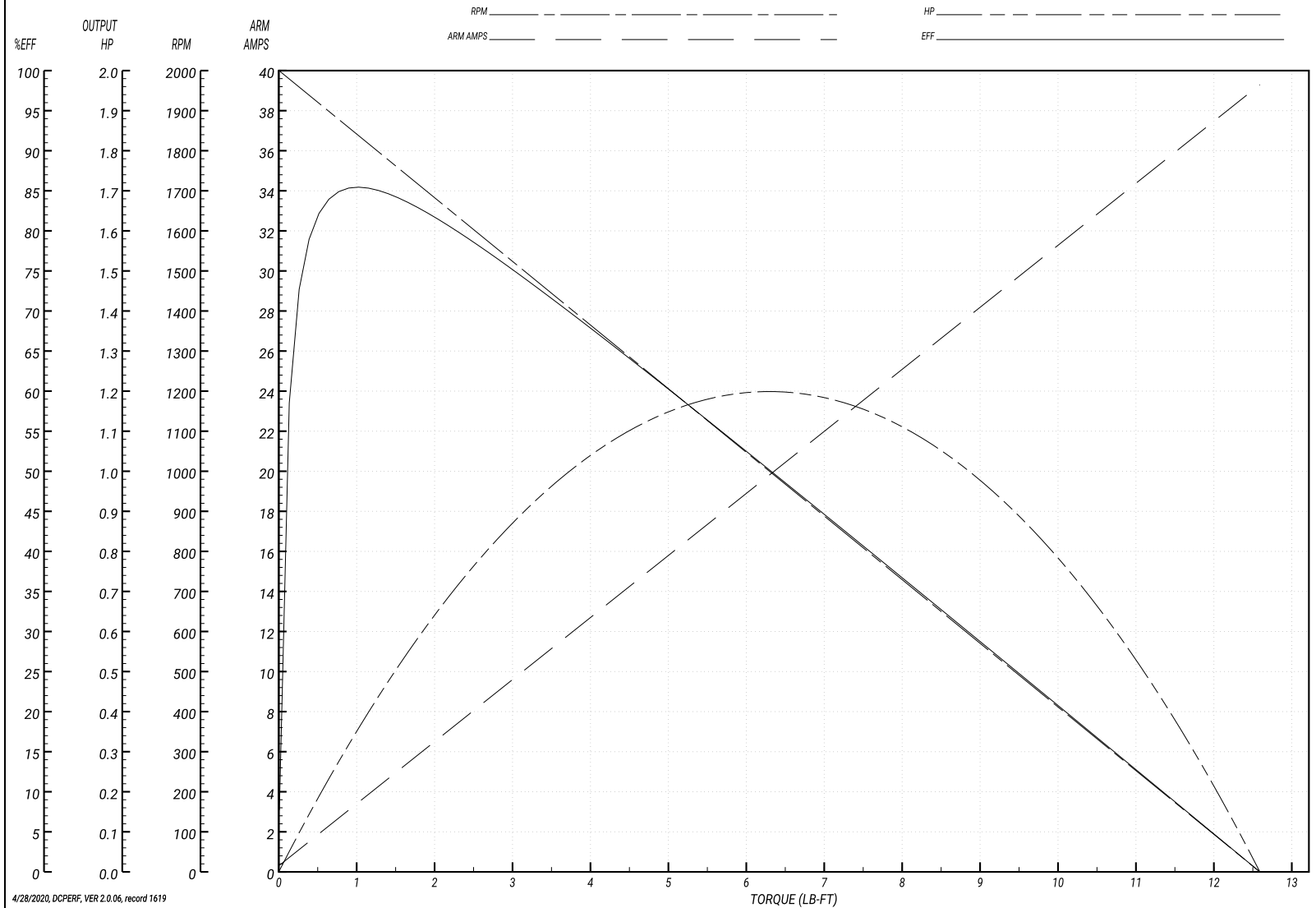
Performance Graph at 90.0 Arm V, 0.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

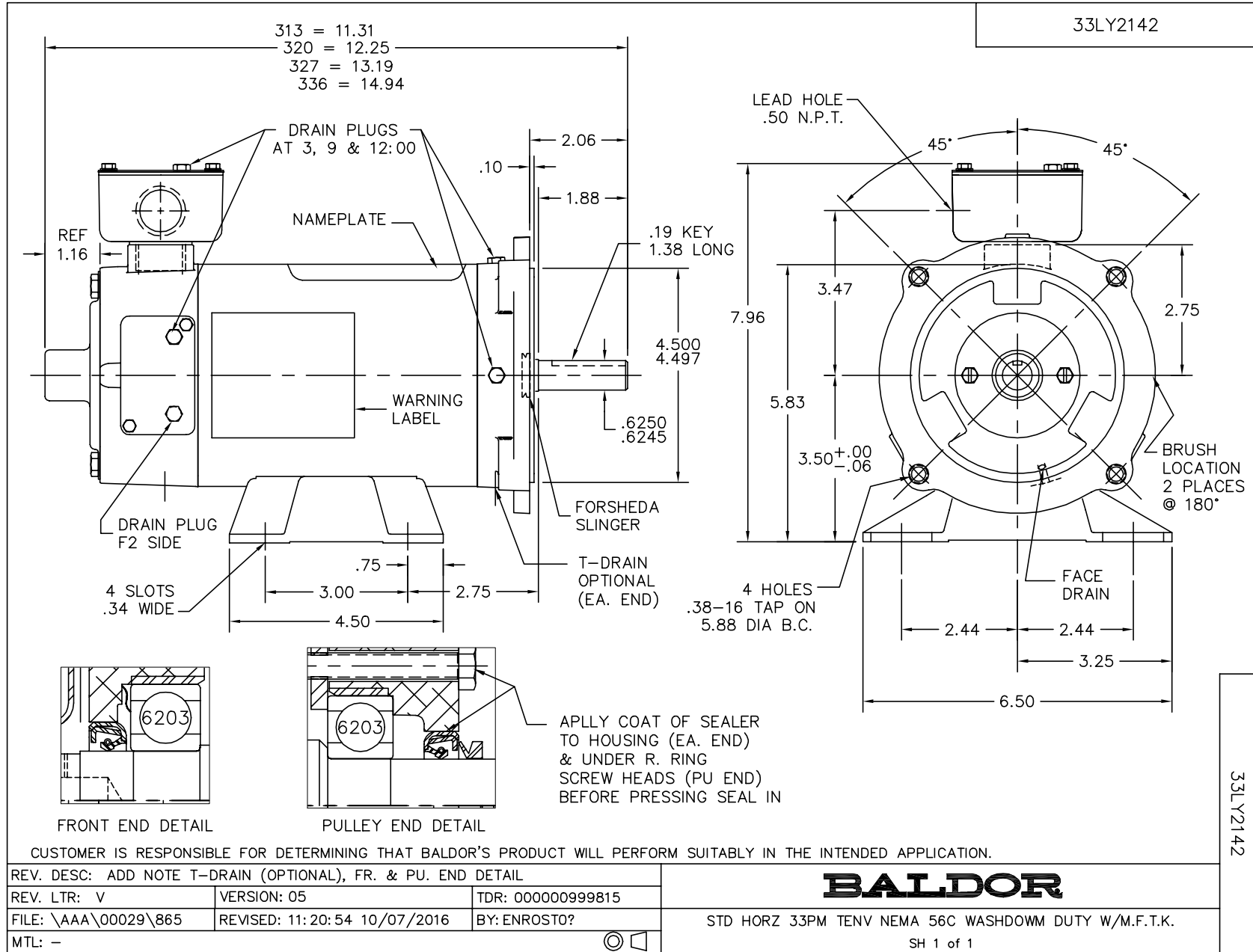
WINDING # 33WGZ122

Typical performance - not guaranteed values.

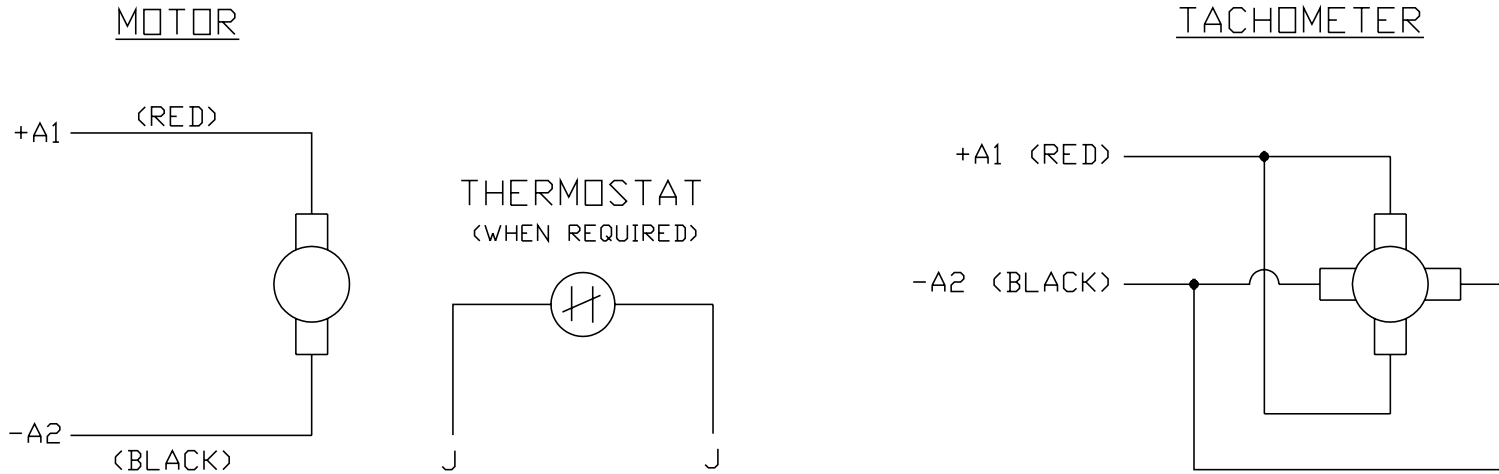
0.5 HP DC 1750 RPM 90 V 3336P
ENCL: TENV DUTY: CONT CL: F



4/28/2020, DCPERF, VER 2.0.06, record 1619



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