

ABB BALDOR RELIANCE III

Customer information packet

CDPWD3330

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

Specifications

Armature Voltage	90 V
Base Speed	1750 rpm
Enclosure	TENV
Frame	56C
Frame Material	Steel
Output Power	0.500 HP
Agency Approvals	CE
	CSA
	UR
Ambient Temperature	40 °C
Armature Current	4.8 a
Armature Inertia	14.047 lb-ft ²
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
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 18 AWG, A
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	14.94 IN
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding

Part Detail

Revision	AZ
Type	DC
Mech. spec.	33-2142
Base	
Status	PRD/A
Elec. spec.	33WGZ122
Layout	33LY2142
Eff. date	08-20-2024
CD Diagram	CD0194
Poles	00
Leads	2#18 A Y
Proprietary	False
Created date	01-01-0001

Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger

Nameplate

NP1509					
CAT.NO.	CDPWD3330				
SPEC.	33-2142Z122				
HP	.5	ENCL		TENV	
RPM	1750 1/MIN				
FRAME	56C	TYPE		3336P	
ARM V	90	ARM A		4.8	
FLD V		FLD A			
INSUL	F	AMB.		40	
DUTY	S1 CONT	SUPPLY		1.3	
BRG/DE	6203	BRG/ODE		6203	
BRUSHES	2/BP5011T01				
	IP55	BLANK			
SER.					
BLANK	KW.37 KG14 IC410				
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
33CB3001B02G	CONDUIT BOX, MACH/COATED LIGHT GRAY PRIM	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
11XA1016S06	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
34CB4500A10G	CONDUIT BOX LID,MACH W/GRAY EPOXY POWDER	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	WILKOFAS, 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 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 (2500 bx)11/25	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
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

DC Motor Performance Data

Record # 2408

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	1.163 Ω
R.P.M.	1750		
Armature Volts	90	Voltage Constant	47.81 v/krpm
Armature Amps	4.8		
Field Volts		Armature Inductance	14.506 mH
Field Amps		Armature Inertia	14.05 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	0.26	1.45	2.56	3.62	4.65	5.79	7
R.P.M.	1853	1777	1721	1658	1629	1579	1519
Torque (LB-FT)	0	0.38	0.76	1.14	1.5	1.9	2.28

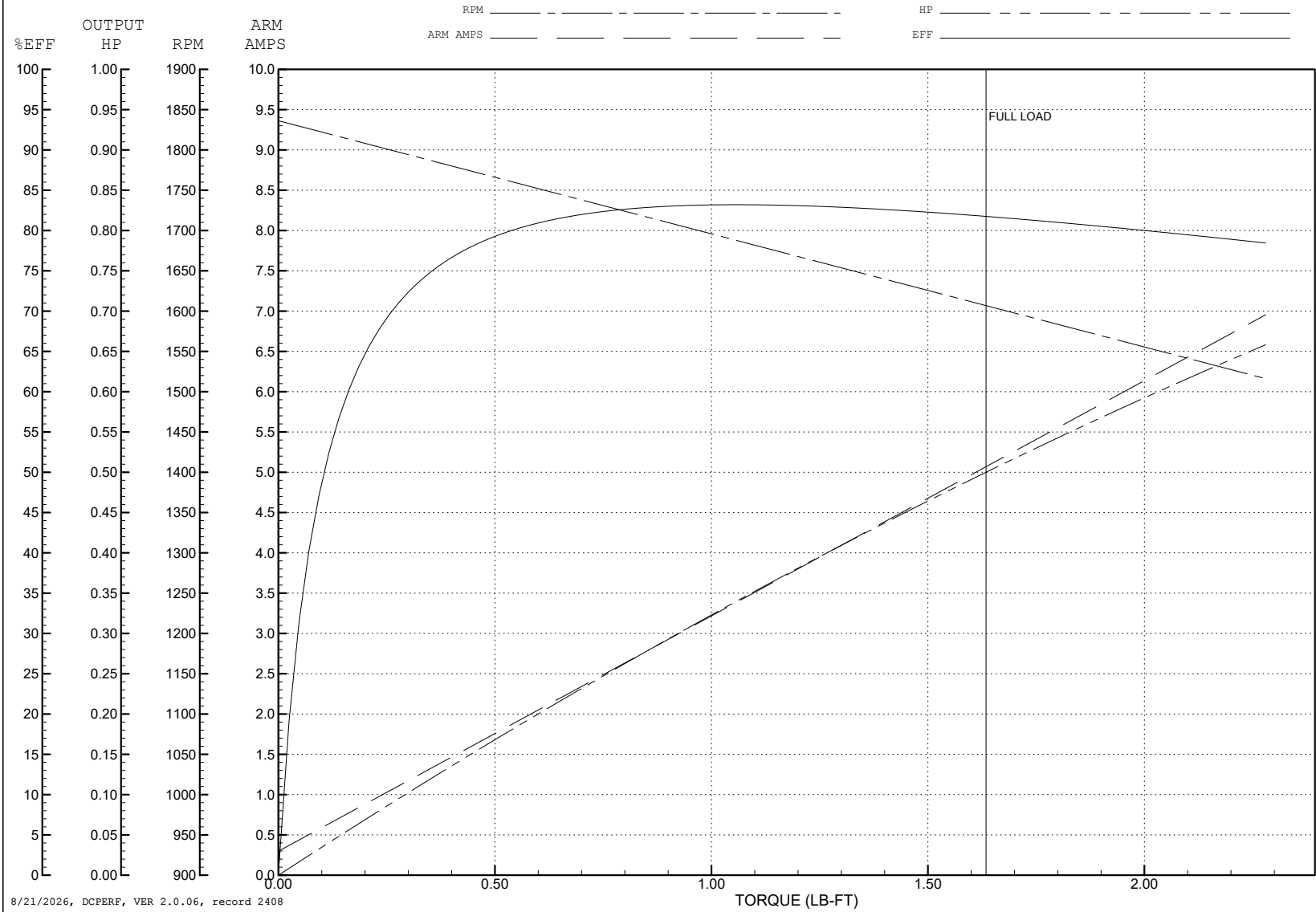
ABB Motors and Mechanical Inc.

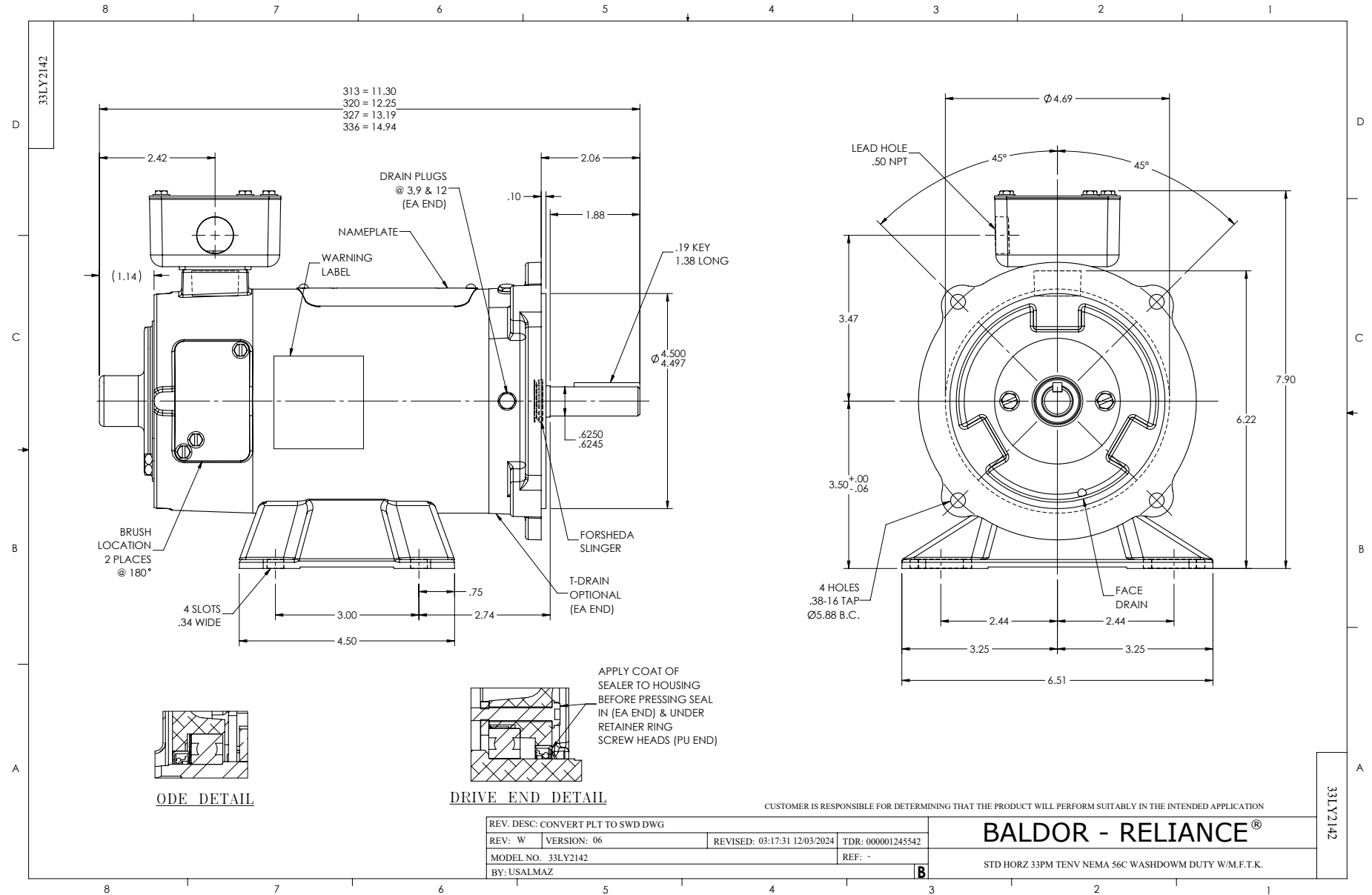
WINDING # 33WGZ122

Typical performance - not guaranteed values.

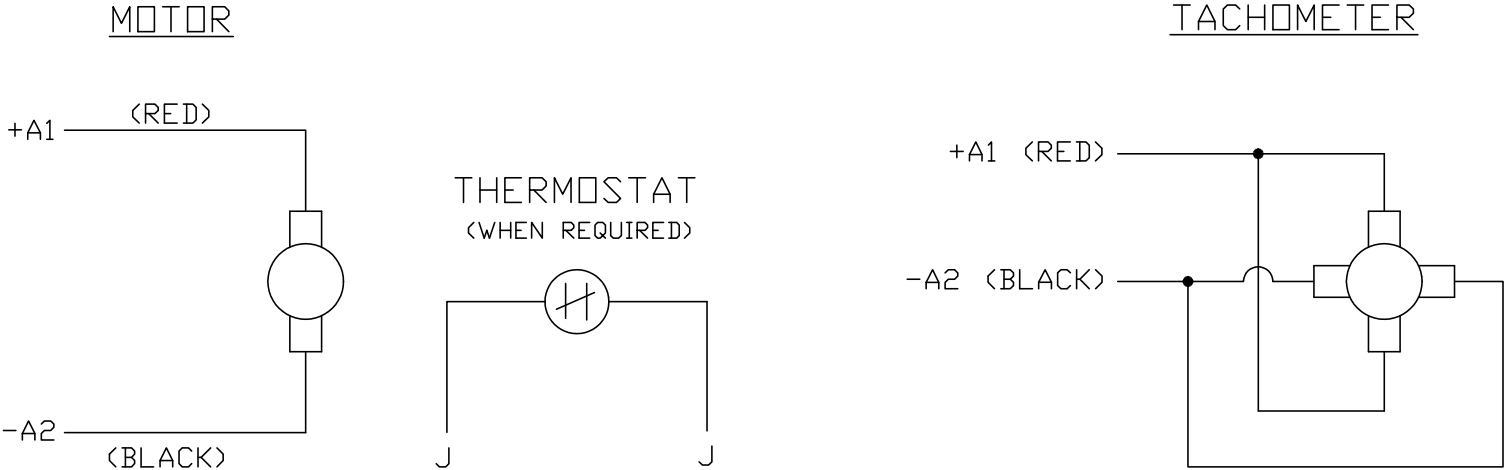
0.5 HP DC 1750 RPM 90 V 3336P

ENCL: TENV DUTY: CONT CL: F





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