

ABB BALDOR RELIANCE III

Customer information packet

VP3311D

.18/.25HP, 1750RPM, DC, D71D, 3320P, TENV, F2

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TENV
Frame	D71D
Frame Material	Steel
Output Power	0.250 HP
Agency Approvals	CE CSA UR
Ambient Temperature	40 °C
Armature Current	1.3 a
Armature Inertia	4.680 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
Frame Prefix	D
Heater Indicator	No Heater
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Mounting Arrangement	B35
Overall Length	11.60 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	0.552 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding

Part Detail

Revision	S
Type	DC
Mech. spec.	33-2370
Base	
Status	PRD/A
Elec. spec.	33WGZ132
Layout	33LY2370
Eff. date	10-24-2024
CD Diagram	CD0194
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP1049L				
CAT.NO.	VP3311D			
SPEC.	33-2370Z132			
KW/HP	.18/.25 TE	I.P.	54	
RPM	1750 1/MIN TE			
IEC FRAME	D71D	TYPE	3320P	
ARM V	180	ARM A	1.25	
FLD V		FLD A		
INSUL	F	AMB.	40	
DUTY	CONT	SUPPLY	1.3	
BRG/DE	6203	BRG/ODE	6203	
BRUSHES	2/BP5011CV01			
		BLANK		
SER.				
BLANK	KG10 IC410			
APRV-CE	Y	APRV-CSA	Y	APRV-UL Y

Parts List

Part number	Description	Quantity
SA050926	SA 33-2370Z132	1.000 ea
AA005787	AA 33-2370Z132	1.000 ea
BP5011CV01SP	CARBON BRUSH - 33P, 180V	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
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
33EP3101A04	FR ENDPLATE, MACH	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
33CB4501A01SP	BRUSH INSPECTION COVER	2.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
33GS1005A01	BRUSH INSP COVER GASKET,WHITE NON-CONDUCT	2.000 ea
33EP2501A05	33DC MACH'G IEC 71 B5 FLG PU-E.P. W/LOCK	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA6887	SHAFT PROTECTOR STAMPED STEEL 20 GA.	1.000 ea
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 ea
WD4102A12	SR 6P-4 HEYCO STRN RELIEF OR 23MP06P40 M	1.000 ea
34CB4500SP	CONDUIT BOX LID, 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
HW4600A54	SEAL 0.668 X 1.064 X 0.250 DOUBLE SHIELD	1.000 ea
HW2504D08	KEY, 5 MM X .875	1.000 ea
HA7000A10	KEY RETAINER 0.563 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.013 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
33RK5004SP	ROCKERARM	1.000 ea
HA3100S01	THRUBOLT- 10-32 X 8.187 302 OR 303 SS	2.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0194	CONNECTION LABEL	1.000 ea
NP1049L	NP STD LASER ENGRAVED IEC DC MOTORS, UL	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

Accessories

Part number	Description	Multiplier
TK3300	TACHO MOUNTING KIT TK3300	A8
TK3300-HPU	HPU10 MOUNTING KIT 33P/34P TENV	

DC Motor Performance Data

Record # 2012

Typical performance - not guaranteed values

Winding: 33WGZ132-R006		Type: 3320P	Enclosure: TENV
Nameplate Data		General Characteristics	
Rated Output (HP)	0.25	Armature Resistance @ 25°C	8.54 Ω
R.P.M.	1750		
Armature Volts	180	Voltage Constant	98.01 v/krpm
Armature Amps	1.25		
Field Volts		Armature Inductance	60.59301 mH
Field Amps		Armature Inertia	4.68 LI ²
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		

Load Characteristics at 180 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.1	0.35	0.61	0.87	1.15	1.43	1.68
R.P.M.	1830	1821	1779	1750	1720	1690	1673
Torque (LB-FT)	0	0.193	0.387	0.559	0.752	0.945	1.117

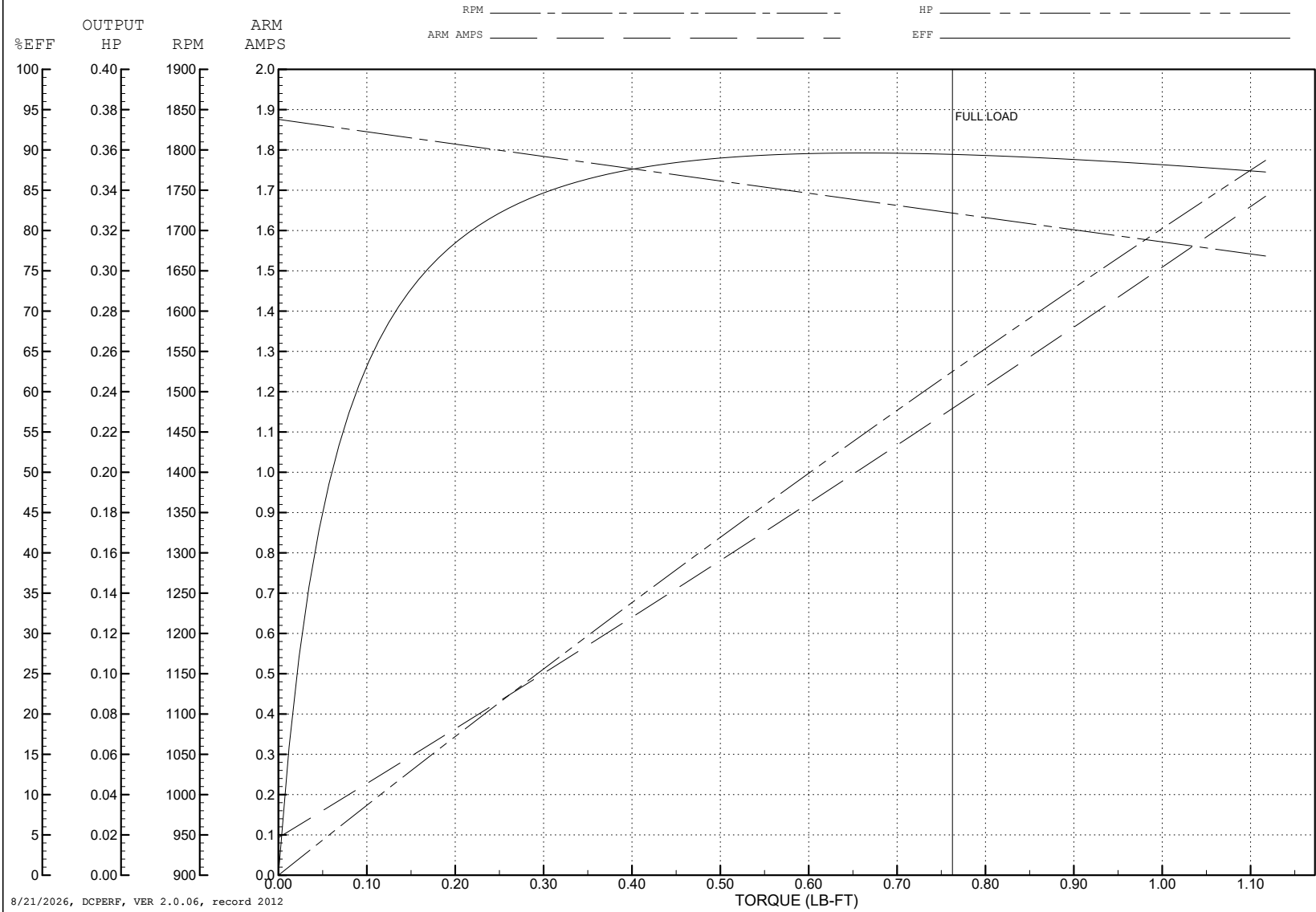
ABB Motors and Mechanical Inc.

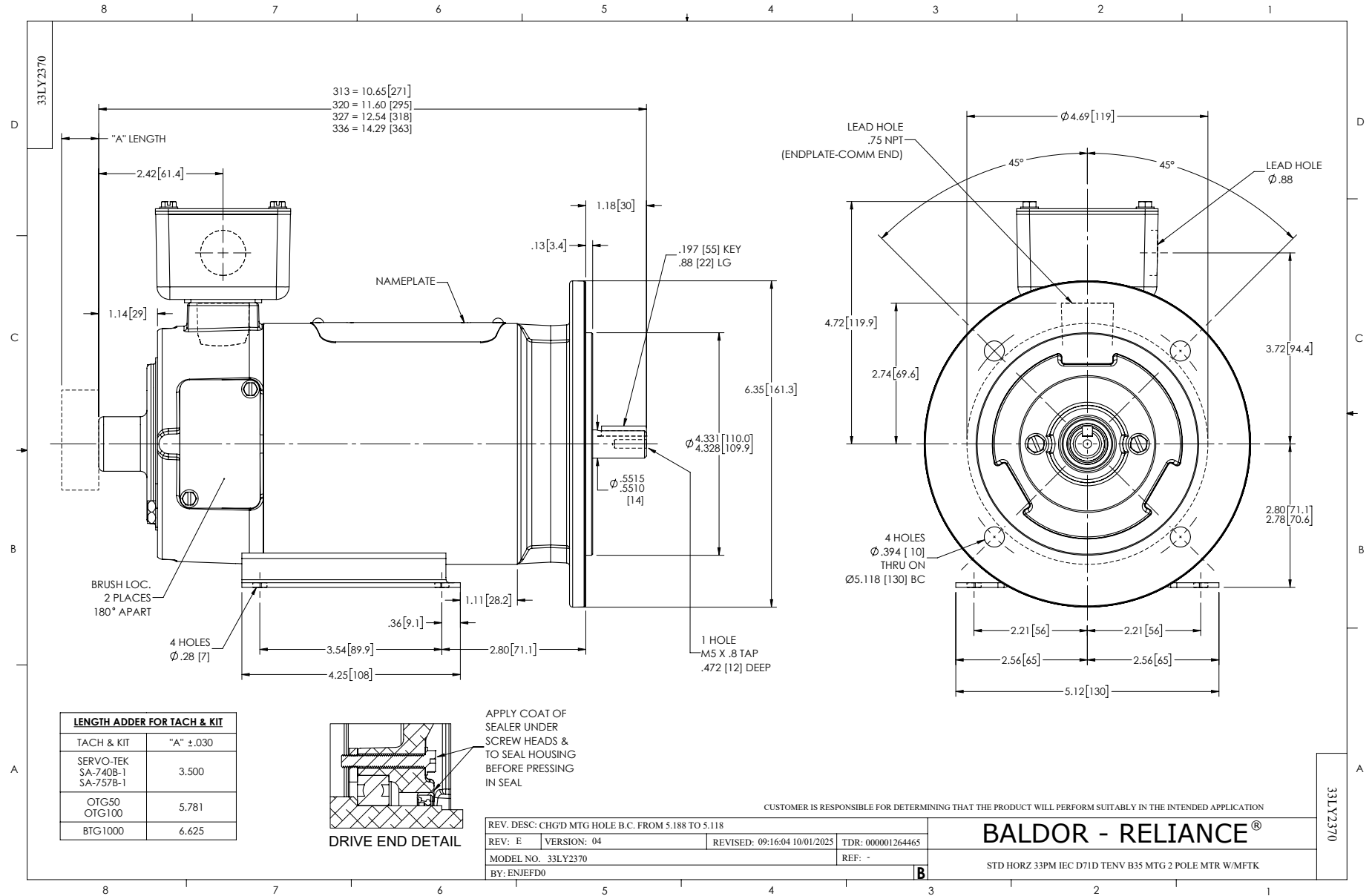
WINDING # 33WGZ132

Typical performance - not guaranteed values.

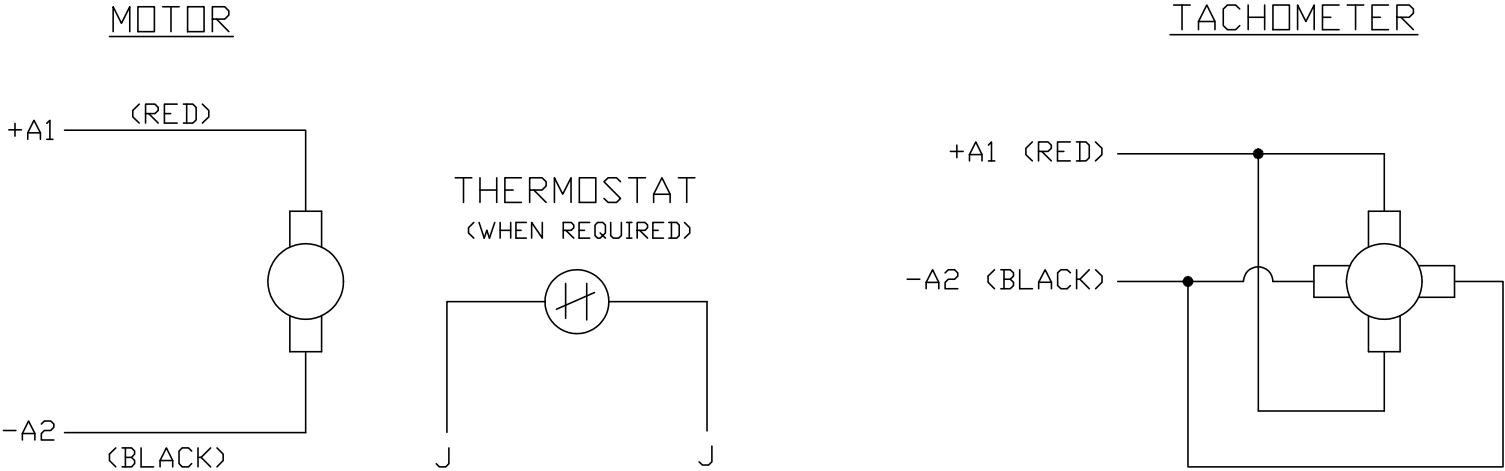
0.25 HP DC 1750 RPM 180 V 3320P

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: -			
REV:	E	ADDED NOTE "LEAD COLORS FOR REFERENCE ONLY &..."	
CD0194		SCALE: -	BY: CK
		FILE: AAA00004503	TDR: 0078737

BALDOR ELECTRIC Co.

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194