

ABB BALDOR RELIANCE III

Customer information packet CDP3335

.5HP, 2500RPM, DC, 56C, 3327P, TENV, F1

Specifications

Armature Voltage	90 V
Base Speed	2500 rpm
Enclosure	TENV
Frame	56C
Frame Material	Steel
Output Power	0.500 HP
Agency Approvals	CE
	CSA
	UR
Ambient Temperature	40 °C
Armature Current	5.0 a
Armature Inertia	6.318 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	13.19 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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding

Part Detail

Revision	AF
Type	DC
Mech. spec.	33-2123
Base	
Status	PRD/A
Elec. spec.	33WGZ148
Layout	33LY2123
Eff. date	10-24-2024
CD Diagram	CD0194
Poles	00
Leads	2#18 A Y
Proprietary	False
Created date	01-01-0001

Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP0891L					
CAT.NO.	CDP3335				
SPEC.	33-2123Z148				
HP	.5/.37KW	ENCL		TENV	
RPM	2500 1/MIN				
FRAME	56C	TYPE		3327P	
ARM V	90	ARM A		5	
FLD V		FLD A			
INSUL	F	AMB.		40	
DUTY	S1 CONT	SUPPLY		1.3	
BRG/DE	6203	BRG/ODE		6203	
BRUSHES	2/BP5011CV01				
		BLANK			
SER.					
BLANK	IP44 IC410 12KG				
APRV-CE	Y	APRV-CSA	Y	APRV-UL	Y

Parts List

Part number	Description	Quantity
SA005082	SA 33-2123Z148	1.000 ea
AA002731	AA 33-2123Z148	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
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
33EP3101A04	FR ENDPLATE, MACH	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
HA6887	SHAFT PROTECTOR STAMPED STEEL 20 GA.	1.000 ea
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 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
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.013 ga
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
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
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

NP0891L	NP STD LASER ENGRAVED DC MTRS, UL CSA CE	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 # 352

Typical performance - not guaranteed values

Winding: 33WGZ148-R002		Type: 3327P	Enclosure: TENV
Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	0.664 Ω
R.P.M.	2500		
Armature Volts	90	Voltage Constant	35.76 v/krpm
Armature Amps	5		
Field Volts		Armature Inductance	5.119 mH
Field Amps		Armature Inertia	6.318 LI ²
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		
		Temp. Rise @ Rated Load	79°C

Load Characteristics at 90 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.5	2.5	3.5	4.6	5.4	6.7	8.8
R.P.M.	2526	2469	2447	2426	2415	2375	2332
Torque (LB-FT)	0	0.5	0.75	1	1.25	1.5	2

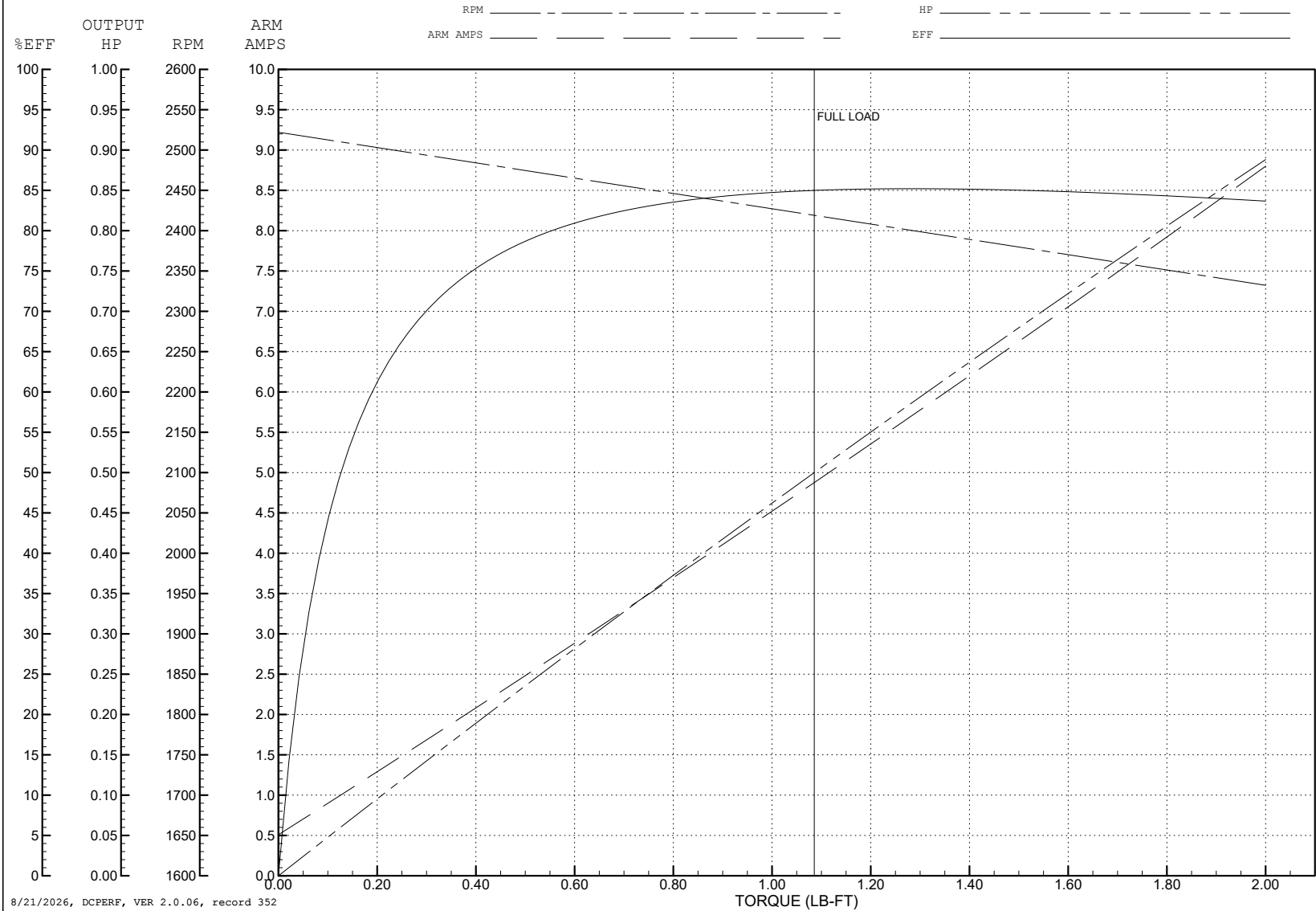
ABB Motors and Mechanical Inc.

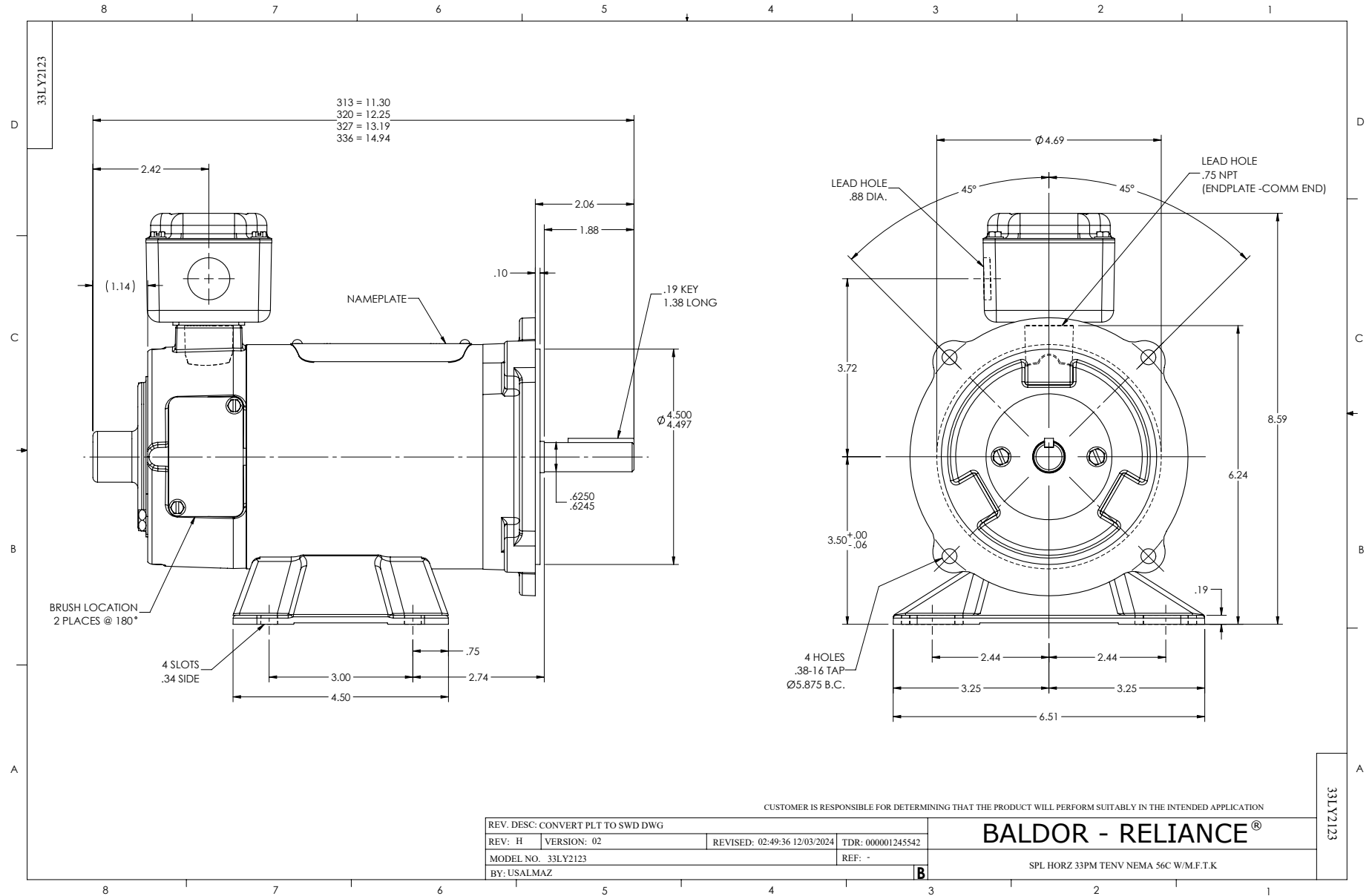
WINDING # 33WGZ148

Typical performance - not guaranteed values.

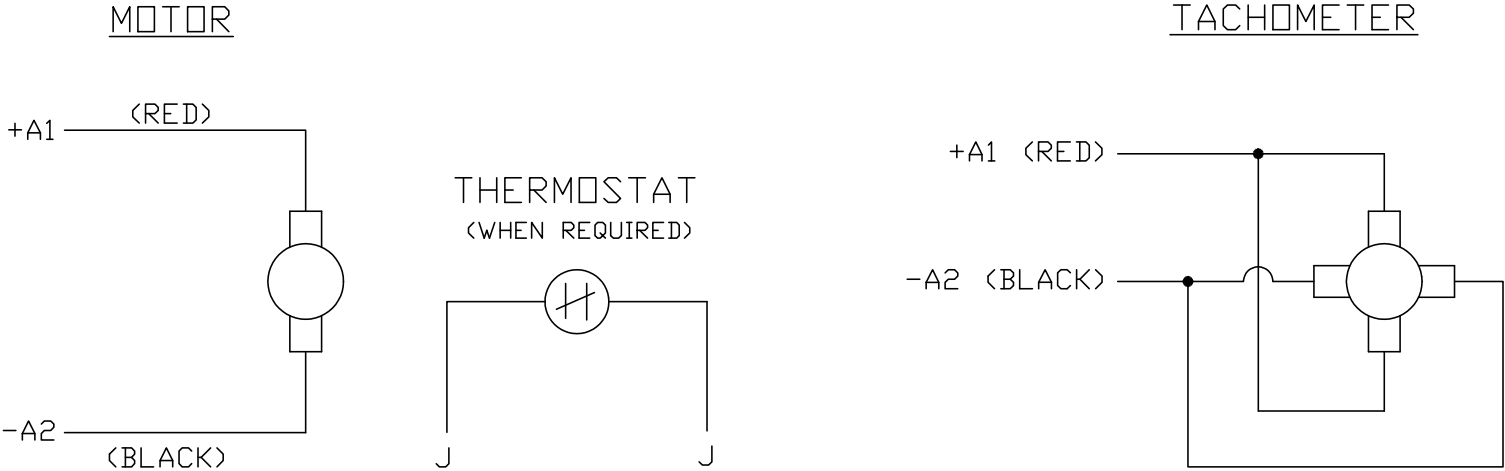
0.5 HP DC 2500 RPM 90 V 3327P

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

REVISED: 07/28/95

FILE: AAA00004503

TDR: 0078737

BALDOR ELECTRIC Co.

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194