

ABB BALDOR RELIANCE III

Customer information packet

VP3439-14

.75HP/.56KW/3000RPM/TEFC/D80C MOTOR

Class - None

Division - Not Applicable

Specifications

Armature Voltage	180 V
Base Speed	3000 rpm
Enclosure	TEFC
Frame	D80C
Haz Area Class and Group	None
Output Power	0.750 HP
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Armature Current	3.6 a
Armature Inertia	7.804 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
Haz Area Division	Not Applicable
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Mounting Arrangement	B34
Overall Length	14.35 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	0.748 IN
Shaft Extension Location	Pulley End

Part Detail

Revision	AD
Type	DC
Mech. spec.	34-6243
Base	
Status	PRD/A
Elec. spec.	34WG5699
Layout	34LY6243
Eff. date	10-25-2024
CD Diagram	CD0194
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP1049L					
CAT.NO.	VP3439-14				
SPEC.	34-6243-5699				
KW/HP	.56/.75 TE			I.P.	44
RPM	3000 1/MIN				
IEC FRAME	D80C	TYPE		3420P	
ARM V	180			ARM A	3.6
FLD V				FLD A	
INSUL	F	AMB.		40	
DUTY	CONT			SUPPLY	1.5
BRG/DE	6205	BRG/ODE		6203	
BRUSHES	2/BP5000AW14				
				BLANK	KG16 IC411
SER.					
BLANK	IEC60034-1;-5				
APRV-CE	Y	APRV-CSA	Y	APRV-UL	Y

Parts List

Part number	Description	Quantity
SA018707	SA 34-6243-5699	1.000 ea
AA003899	AA 34-6243-5699	1.000 ea
BP5000AW14SP	CARBON BRUSH - 33P, 180 VOLTS	1.000 ea
HA3210B66	.125 DIA X .281 (AUTO)	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
34EP3103B14	FR ENDPLATE MACH 34PM TEFC F-2 MTG W/PG-	1.000 ea
WD4100A109	PLUG STIMPSON D3550	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3303A04	PU-E.P. IEC-D80C FLANGE PER B14 34DC/PM	1.000 ea
HW4600H11	SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB	1.000 ea
51XN1032A22	10-32 X 1 3/8 HX WS SL SR	2.000 ea
BP5201A11SP	BRUSH HOLDER ASSY W/BP4511A01, BP3000A01	1.000 ea
80XN1032J03	10-32 X 3/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH5002A01SP	FAN COVER ASSY W/SHAFT COVER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34CB4504SP	CONDUIT BOX LID, STAMPED	1.000 ea
34GS1011SP	GASKET, CONDUIT BOX LID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW2504E10	KEY, 6 MM X 1.000	1.000 ea
HA7000A11	KEY RETAINER 0.750 DIA SHAFTS	1.000 ea
WD4102A01	SR-6L-1 HEYCO STRN RELIEF OR 23MPO6L10 M	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.001 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA3100A47	THRUBOLT 10-32 X 7.625	4.000 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
27PA1001	PKG GRP, PRINT PK1027A06	1.000 ea

Accessories

Part number	Description	Multiplier
TK3400	TACHO MOUNTING KIT FOR TK3400	A8
TK3400-HPU	HPU10 MOUNTING KIT 34P/35P TEFC	

DC Motor Performance Data

Record # 536

Typical performance - not guaranteed values

Winding: 34WG5699-R001		Type: 3420P	Enclosure: TEFC
Nameplate Data		General Characteristics	
Rated Output (KW)	0.56	Armature Resistance @ 25°C	2.1453 Ω
R.P.M.	3000		
Armature Volts	180	Voltage Constant	59.12 v/krpm
Armature Amps	3.6		
Field Volts		Armature Inductance	16.1557 mH
Field Amps		Armature Inertia	7.804 LI ²
Rating - Duty	40C AMB-CONT		
Form Factor	1.5		

Load Characteristics at 180 Armature Volts

Load Point	1	2	3	4	5	6
Armature Amps	0.4	1.6	2.3	3	3.6	4.3
R.P.M.	3028	2961	2919	2879	2859	2827
Torque (LB-FT)	0	0.559	0.859	1.117	1.396	1.697

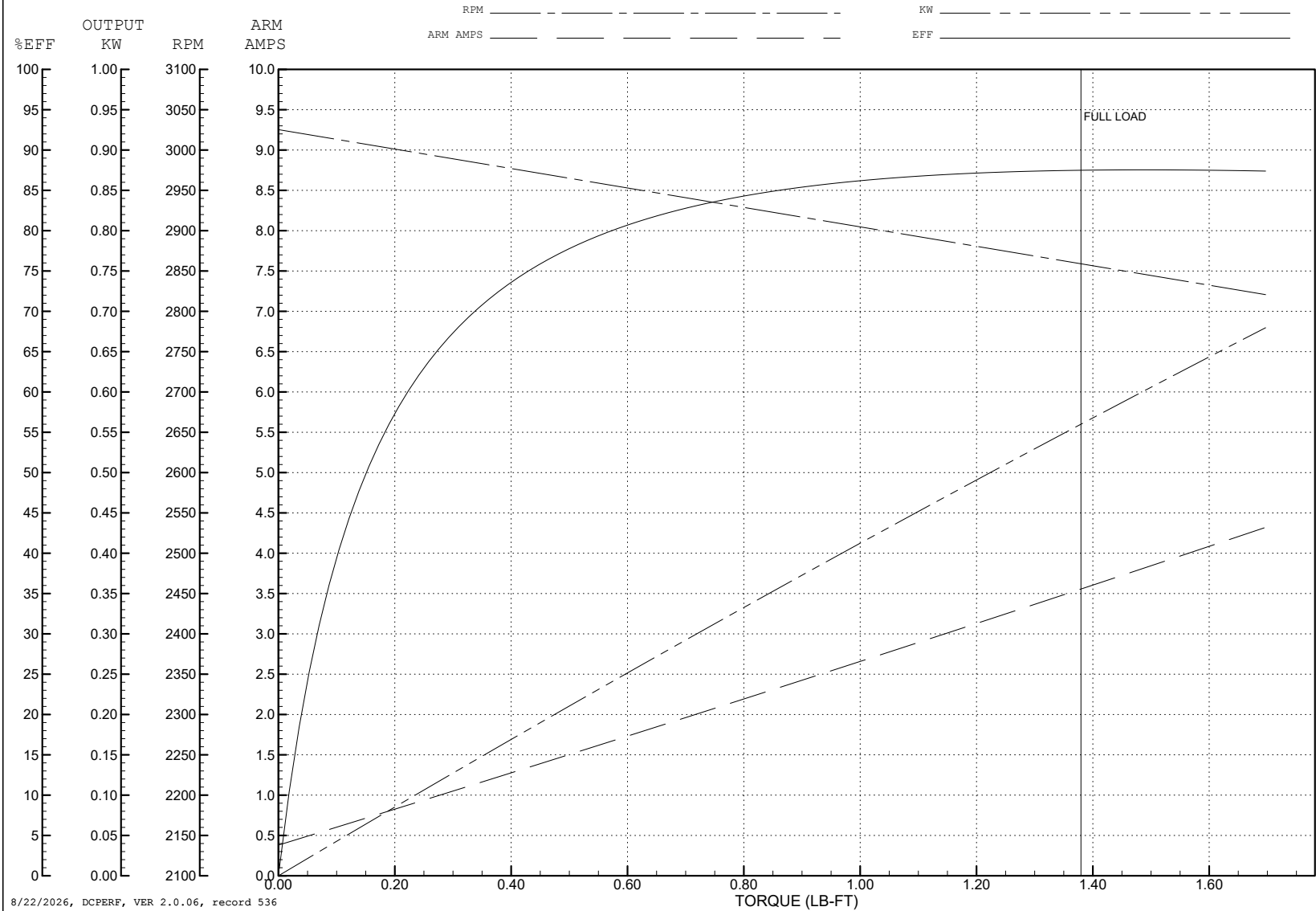
ABB Motors and Mechanical Inc.

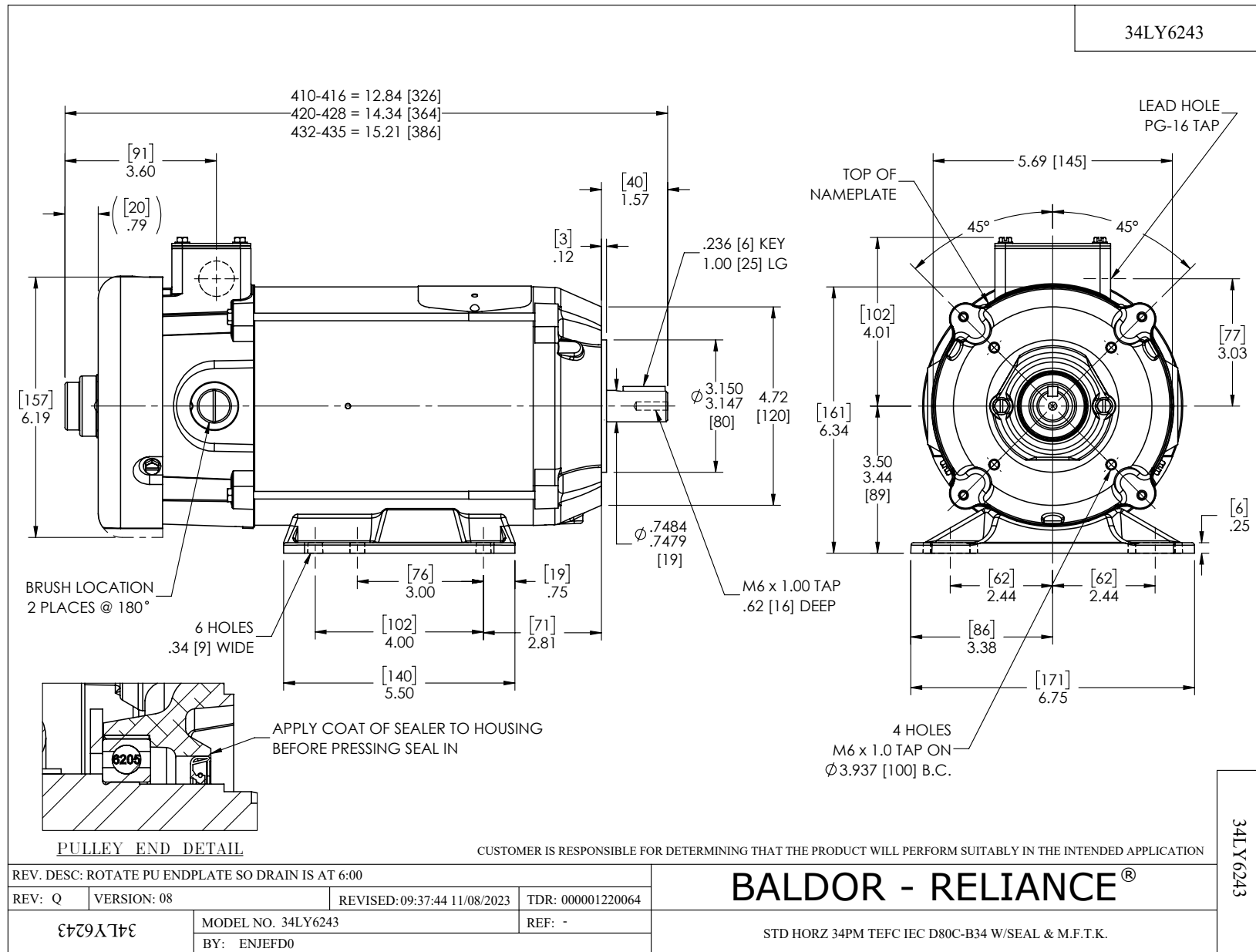
WINDING # 34WG5699

Typical performance - not guaranteed values.

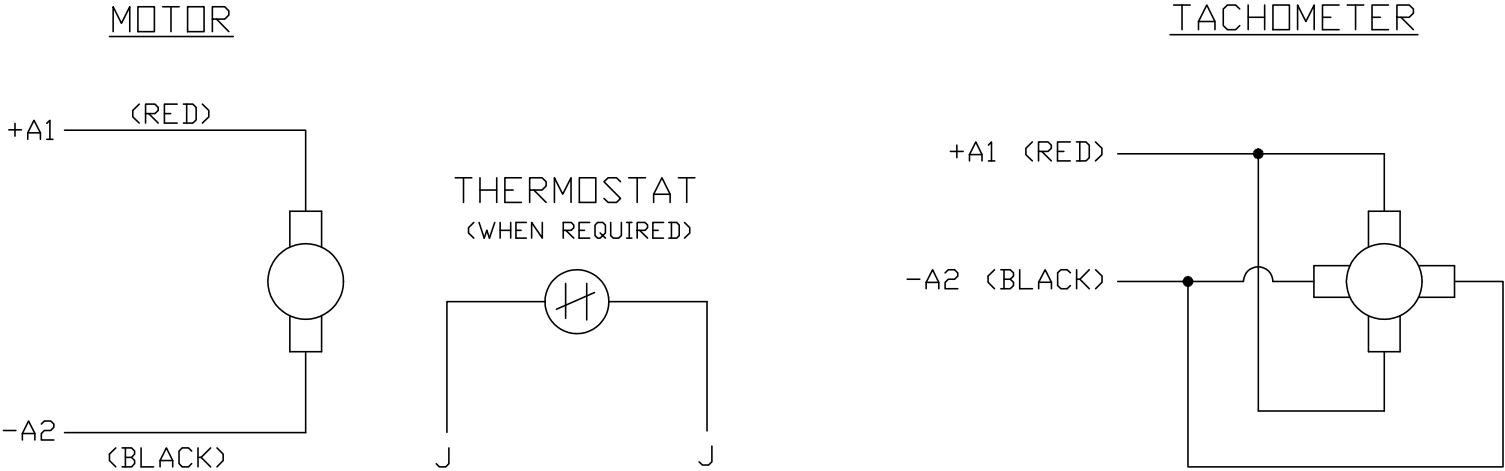
0.56 KW DC 3000 RPM 180 V 3420P

ENCL: TEFC 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