

ABB BALDOR RELIANCE III

Customer information packet

VP3585-14

1.5/2HP, 1750RPM, DC, D90C, 3548P, TEFC, F2

Class - None

Division -

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TEFC
Frame	D90C
Frame Material	Steel
Haz Area Class and Group	None
Output Power	2.000 HP
Agency Approvals	CE CSA UR
Ambient Temperature	40 °C
Armature Current	9.6 a
Armature Inertia	40.456 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 @ 14 AWG, A
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Mounting Arrangement	B34
Overall Length	18.69 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	0.945 IN
Shaft Extension Location	Pulley End

Part Detail

Revision	AM
Type	DC
Mech. spec.	35P454
Base	
Status	PRD/A
Elec. spec.	35WGZ170
Layout	35LYP454
Eff. date	10-28-2024
CD Diagram	CD0194
Poles	00
Leads	2#14 A Y
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.	VP3585-14			
SPEC.	35P454Z170			
KW/HP	1.5/2 TE		I.P.	54
RPM	1750 TE			
IEC FRAME	D90C	TYPE	3548P	
ARM V	180		ARM A	9.6
FLD V			FLD A	
INSUL	F	AMB.	40	
DUTY	CONT		SUPPLY	K
BRG/DE	6206	BRG/ODE		6205
BRUSHES	2/BP5000T15			
			BLANK	
SER.				
BLANK	1/MIN IC411 36KG			
APRV-CE		APRV-CSA		APRV-UL

Parts List

Part number	Description	Quantity
SA005514	SA 35P454Z170	1.000 ea
AA003163	AA 35P454Z170	1.000 ea
BP5000T15	CARBON BRUSH-35P,180VOLTS	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
35EP3110A04	STD FR EP TEFC F2 MTG FOR EXT T'BOLT 35P	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP1512A03	PU ENDPLATE IEC D90C B14 MTG 206 BRG -E	1.000 ea
HW4600H12	SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB	1.000 ea
51XN1032A24	10-32 X 1 1/2 HX WS SL SR	2.000 ea
BP5201A14SP	BRUSH HOLDER ASSY	1.000 ea
80XN1032J03	10-32 X 3/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.001 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH5001A10SP	FAN COVER ASS'Y TEFC HORZ	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
WD4102A01	SR-6L-1 HEYCO STRN RELIEF OR 23MPO6L10 M	1.000 ea
WD4100A17	PLUG STIMPSON D4036	1.000 ea
35CB4506	CONDUIT BOX LID, STAMPED	1.000 ea
35GS1010	CONDUIT BOX LID, GASKET	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW2505A14	KEY, 8 X 7 MM 1.50 INCHES	1.000 ea
HA7000A12	KEY RETAINER 0.945-1.00 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA3101A25	THRUBOLT 1/4-20 X 11.000 OHIO ROD	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
35PA1007	PKG GRP, PRINT PK1034A07	1.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.017 ga

Accessories

Part number	Description	Multiplier
TK3500	TACHO MOUTING KIT TK3500	A8

DC Motor Performance Data

Record # 2081

Typical performance - not guaranteed values

Winding: 35WGZ170-R001		Type: 3548P	Enclosure: TEFC
Nameplate Data		General Characteristics	
Rated Output (HP)	2	Armature Resistance @ 25°C	0.8093 Ω
R.P.M.	1750		
Armature Volts	180	Voltage Constant	98.25 v/krpm
Armature Amps	9.6		
Field Volts		Armature Inductance	11.508 mH
Field Amps		Armature Inertia	40.456 LI ²
Rating - Duty	40C AMB-CONT		
Power Supply Code	K		

Load Characteristics at 180 Armature Volts

Load Point	1	2	3	4	5	6	7
Armature Amps	0.2	2.4	4.7	6.8	9	11.3	13.5
R.P.M.	1806	1796	1770	1741	1707	1671	1663
Torque (LB-FT)	0	1.5	3	4.5	6	7.5	9

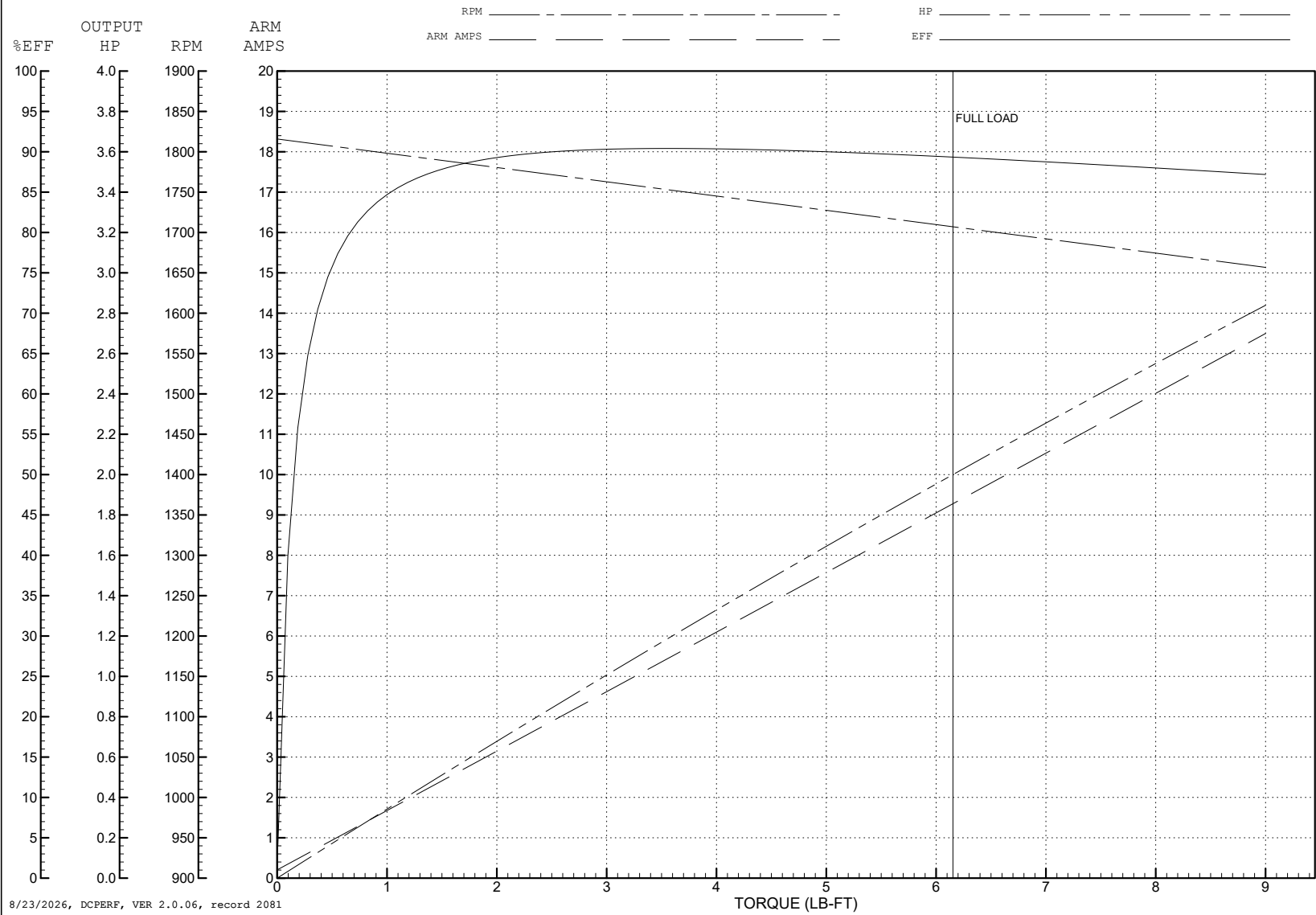
ABB Motors and Mechanical Inc.

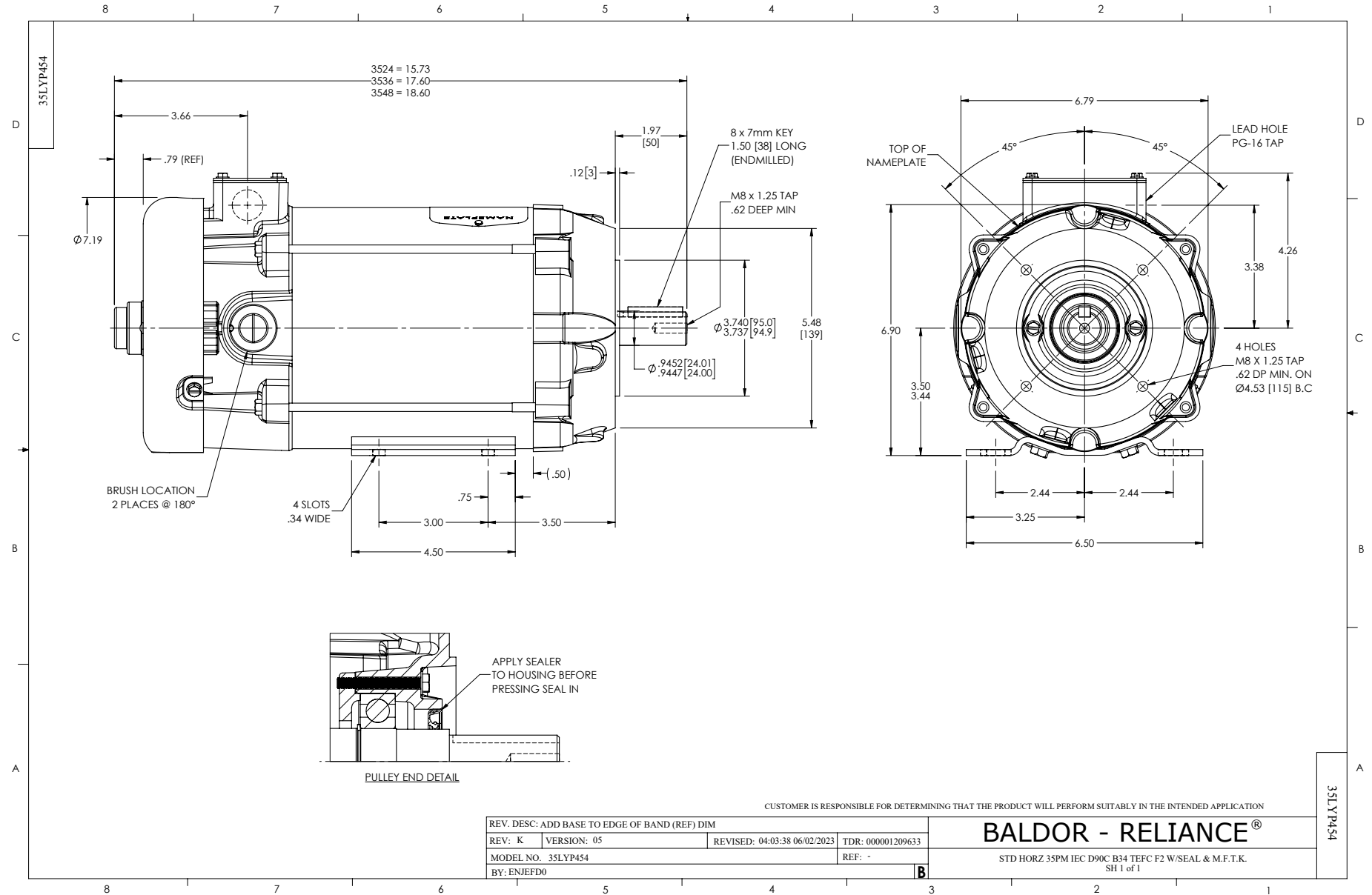
WINDING # 35WGZ170

Typical performance - not guaranteed values.

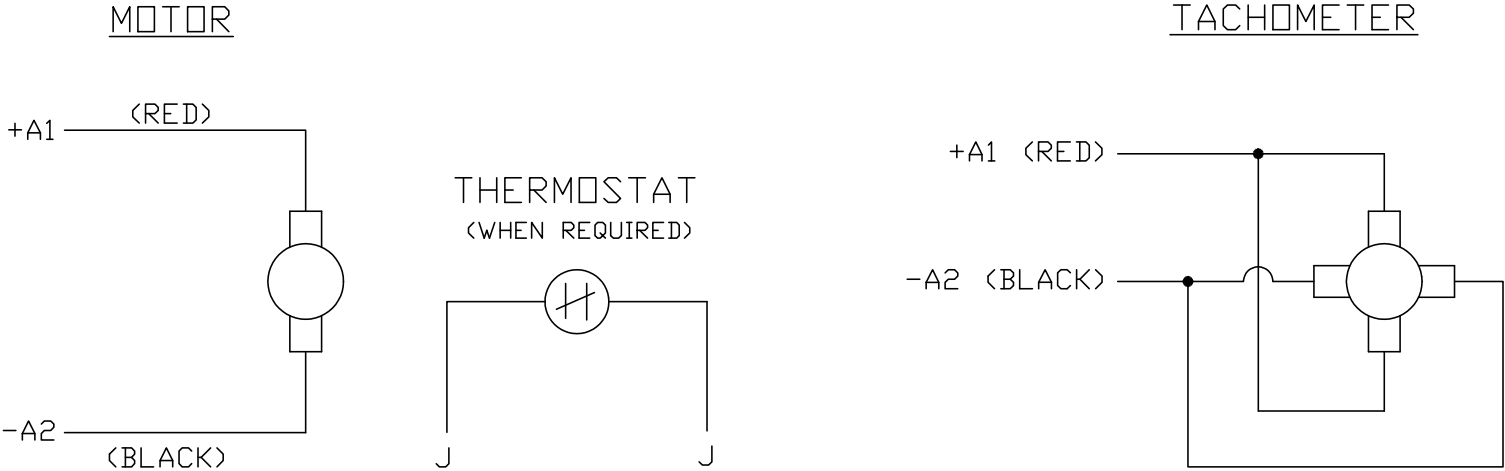
2 HP DC 1750 RPM 180 V 3548P

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