

ABB BALDOR RELIANCE III

Customer information packet

VP3605D

3.7KW, 1750RPM, DC, D112D, 3681P, TEFC, F1

Class - None

Division -

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TEFC
Frame	D112D
Frame Material	Steel
Haz Area Class and Group	None
Output Power	5.000 HP
Agency Approvals	CE CSA UR
Ambient Temperature	40 °C
Armature Current	24.5 a
Armature Inertia	177.060 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	Standard Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Mounting Arrangement	B35
Overall Length	28.56 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	1.103 IN
Shaft Extension Location	Pulley End

Part Detail

Revision	AB
Type	DC
Mech. spec.	36P184
Base	
Status	PRD/A
Elec. spec.	36WGZ509
Layout	36LYP184
Eff. date	03-19-2026
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

NP0891L					
CAT.NO.	VP3605D				
SPEC.	36P184Z509				
HP	3.7KW	ENCL		TEFC	
RPM	1750 1/MIN				
FRAME	D112D	TYPE		3681P	
ARM V	180	ARM A		24.5	
FLD V		FLD A			
INSUL	F	AMB.		40	
DUTY	CONT	SUPPLY		K	
BRG/DE	6206	BRG/ODE			
BRUSHES	2/BP5027A01				
		BLANK		IP44	
SER.					
BLANK	IC411 30KG				
APRV-CE	Y	APRV-CSA	Y	APRV-UL	Y

Parts List

Part number	Description	Quantity
SA103086	SA 36P184Z509	1.000 ea
AA009386	AA 36P184Z509	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
HW1000A38	WASHER, 3/8" FLAT, SAE Z/P	2.000 ea
19XW3118A08	.31-18 X .50 HEX WASHER HEAD TAPTITE II	8.000 ea
36CB3000SP	CONDUIT BOX, CAST	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP3402A03	SPL FR. E.P. MACH'G 36PM FOR (681P) STAC	1.000 ea
26XW1032A08	10-32 X 1/2 PHILLIPS HEAD TAPTITE-II (SI	4.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
36EP1506A01	SPL FLANGE , 36PM IEC D100SD-D100MD-D112	1.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW4600H12	SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB	1.000 ea
36FN3000A01SP	EXFN, PLASTIC, 7.00 OD, .912 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
36FH5000A11	FAN COVER/TACH. ACC. ASSY.08 45823107	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4514	35 LIPPED CB LID	1.000 ea
36GS1001A08	GASKET, CONDUIT BOX LID WHITE NON-CONduc	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
36CB4500SP	CONDUIT BOX LID, STAMPED	2.000 ea
36GS1001A08	GASKET, CONDUIT BOX LID WHITE NON-CONduc	2.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	8.000 ea
HW2505A14	KEY, 8 X 7 MM 1.50 INCHES	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
WD1000D04	T&B C26M,NON-INS RING, 12-10 GA, #10 BOL	2.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.019 ga

85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
NP0891L	NP STD LASER ENGRAVED DC MTRS, UL CSA CE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
MG5010A01	TRICKLE VARNISH (PEDIGREE 600 S)	0.005 ga
MG5010Z01	488 (TPB) CATALYST	0.001 lb
36RK5008A01	ROCKERARM ASSY-GRADE E45	1.000 ea
HA3101A63	THRUBOLT- 1/4-20 X 15.500	4.000 ea
LC0194	CONNECTION LABEL	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
37PA1039	PALLET PACK GROUP, BLANK PK1148	1.000 ea

Accessories

Part number	Description	Multiplier
TK3600PM	TACHO MOUNTING KIT FOR TK3600PM	A8

DC Motor Performance Data

Record # 312

Typical performance - not guaranteed values

Winding: 36WGZ509-R001		Type: 3681P	Enclosure: TEFC
Nameplate Data		General Characteristics	
Rated Output (HP)	5	Armature Resistance @ 25°C	0.16 Ω
R.P.M.	1750		
Armature Volts	180	Voltage Constant	91.78 v/krpm
Armature Amps	24.5		
Field Volts		Armature Inductance	3.677 mH
Field Amps		Armature Inertia	177.0597 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	1.1	7.1	12.8	18.4	24.1	29.9	35.99
R.P.M.	1931	1915	1886	1870	1850	1832	1815
Torque (LB-FT)	0	3.8	7.57	11.39	15.18	19	22.81

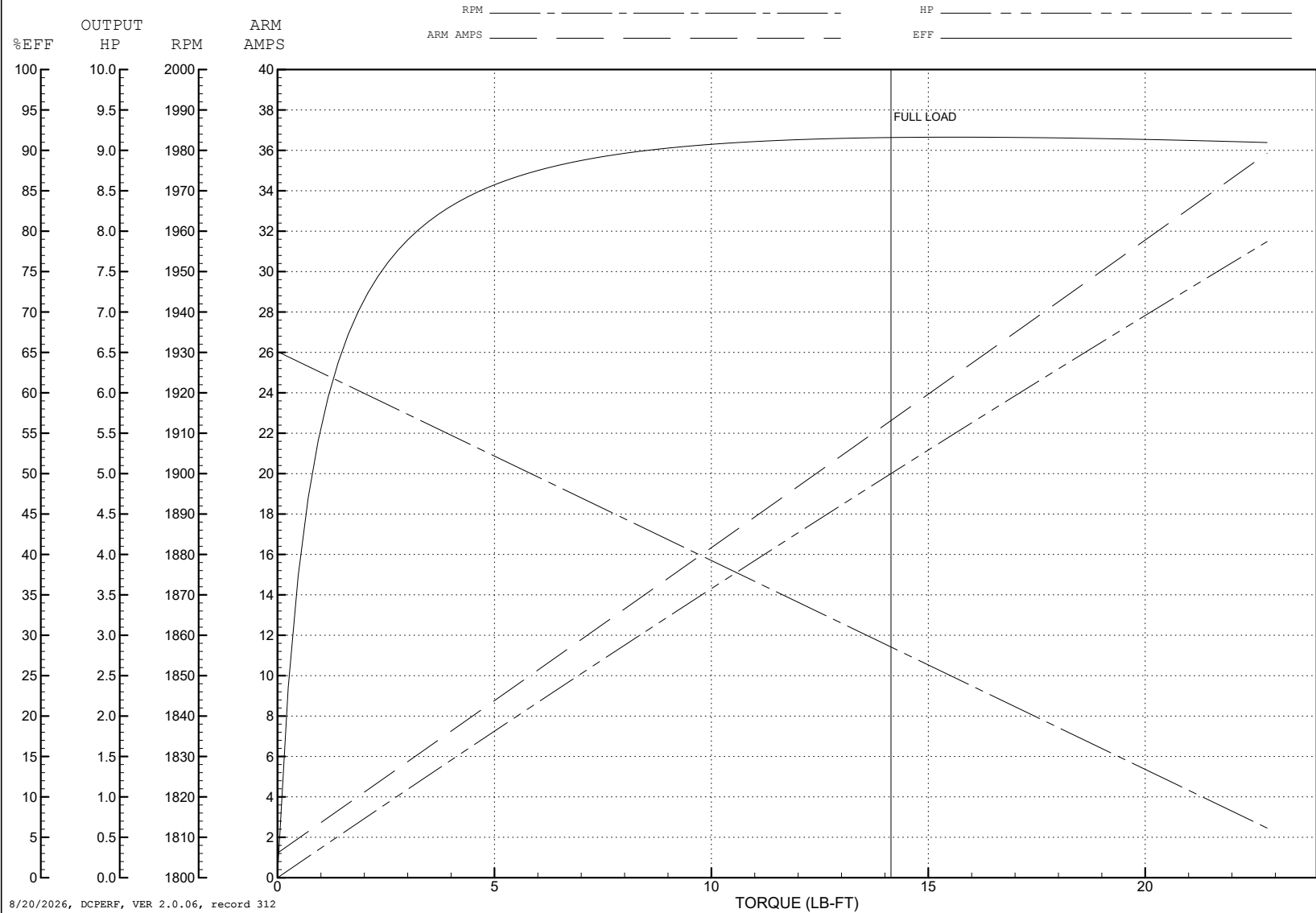
ABB Motors and Mechanical Inc.

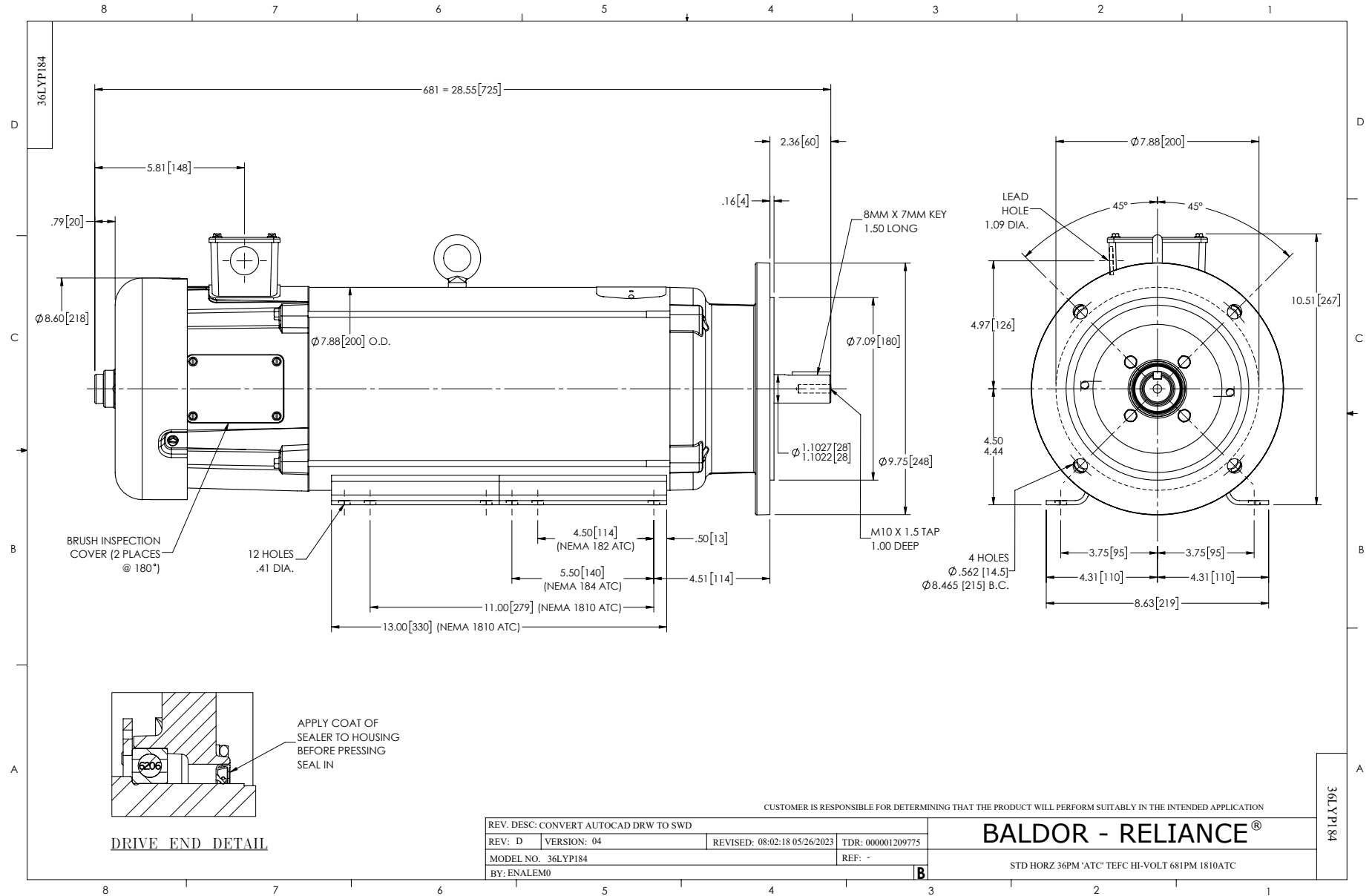
WINDING # 36WGZ509

Typical performance - not guaranteed values.

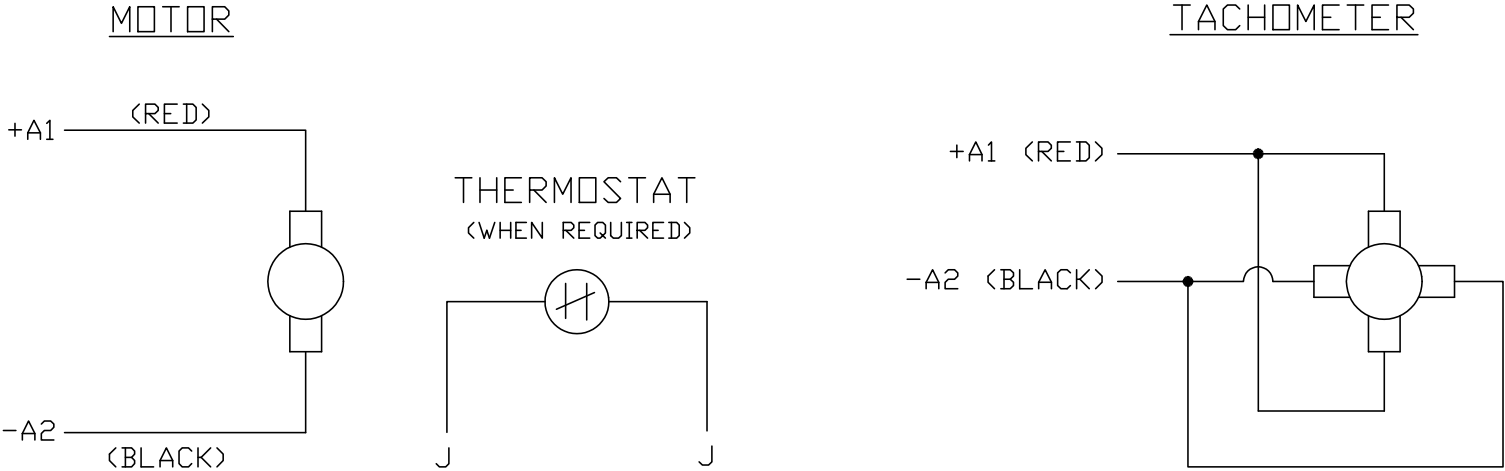
5 HP DC 1750 RPM 180 V 3681P

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

REVISED: 07/28/95

FILE: AAA00004503

TDR: 0078737

BALDOR ELECTRIC Co.

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194