

**BALDOR • RELIANCE**

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# 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 <sup>2</sup>
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	Z
Type	DC
Mech. spec.	36P184
Base	
Status	PRD/A
Elec. spec.	36WGZ509
Layout	36LYP184
Eff. date	06-05-2024
CD Diagram	CD0194
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

<b>Shaft Ground Indicator</b>	<b>No Shaft Grounding</b>
<b>Shaft Rotation</b>	<b>Reversible</b>
<b>Shaft Slinger Indicator</b>	<b>No Slinger</b>

**Nameplate**

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

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
TK3600PM	TACHO MOUNTING KIT FOR TK3600PM	A8

**DC Motor Performance Data**

Record # 312

Typical performance - not guaranteed values

<b>Winding: 36WGZ509-R001</b>		<b>Type: 3681P</b>	<b>Enclosure: TEFC</b>
<b>Nameplate Data</b>		<b>General Characteristics</b>	
<b>Rated Output (HP)</b>	5	<b>Armature Resistance @ 25°C</b>	0.16 Ω
<b>R.P.M.</b>	1750	<b>Voltage Constant</b>	91.78 v/krpm
<b>Armature Volts</b>	180	<b>Armature Inductance</b>	3.677 mH
<b>Armature Amps</b>	24.5	<b>Armature Inertia</b>	177.0597 LI <sup>2</sup>
<b>Field Volts</b>			
<b>Field Amps</b>			
<b>Rating - Duty</b>	40C AMB-CONT		
<b>Power Supply Code</b>	K		

**Load Characteristics at 180 Armature Volts**

<b>Load Point</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Armature Amps</b>	1.1	7.1	12.8	18.4	24.1	29.9	35.99
<b>R.P.M.</b>	1931	1915	1886	1870	1850	1832	1815
<b>Torque ( LB-FT )</b>	0	3.8	7.57	11.39	15.18	19	22.81

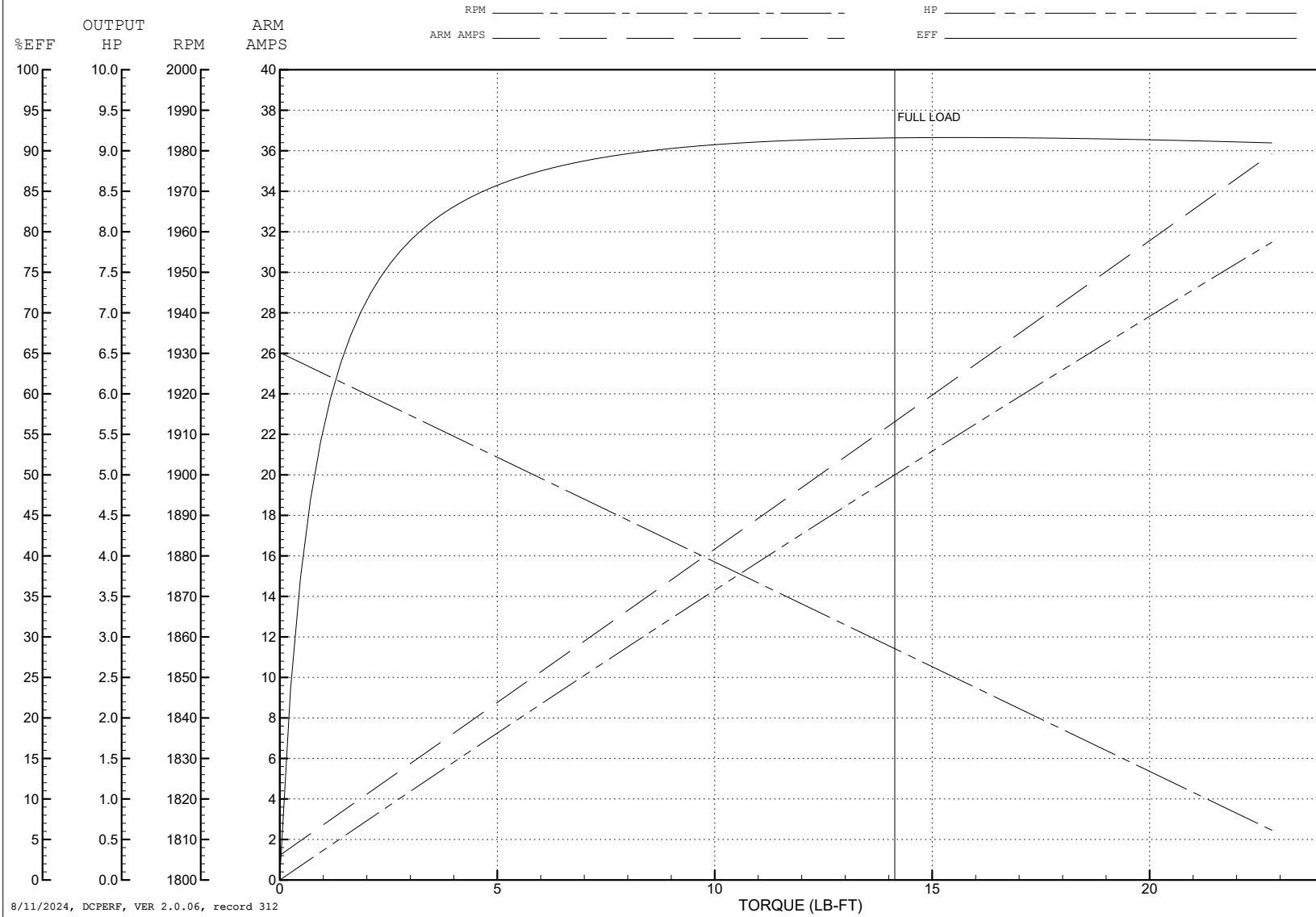
ABB Motors and Mechanical Inc.

WINDING # 36WGZ509

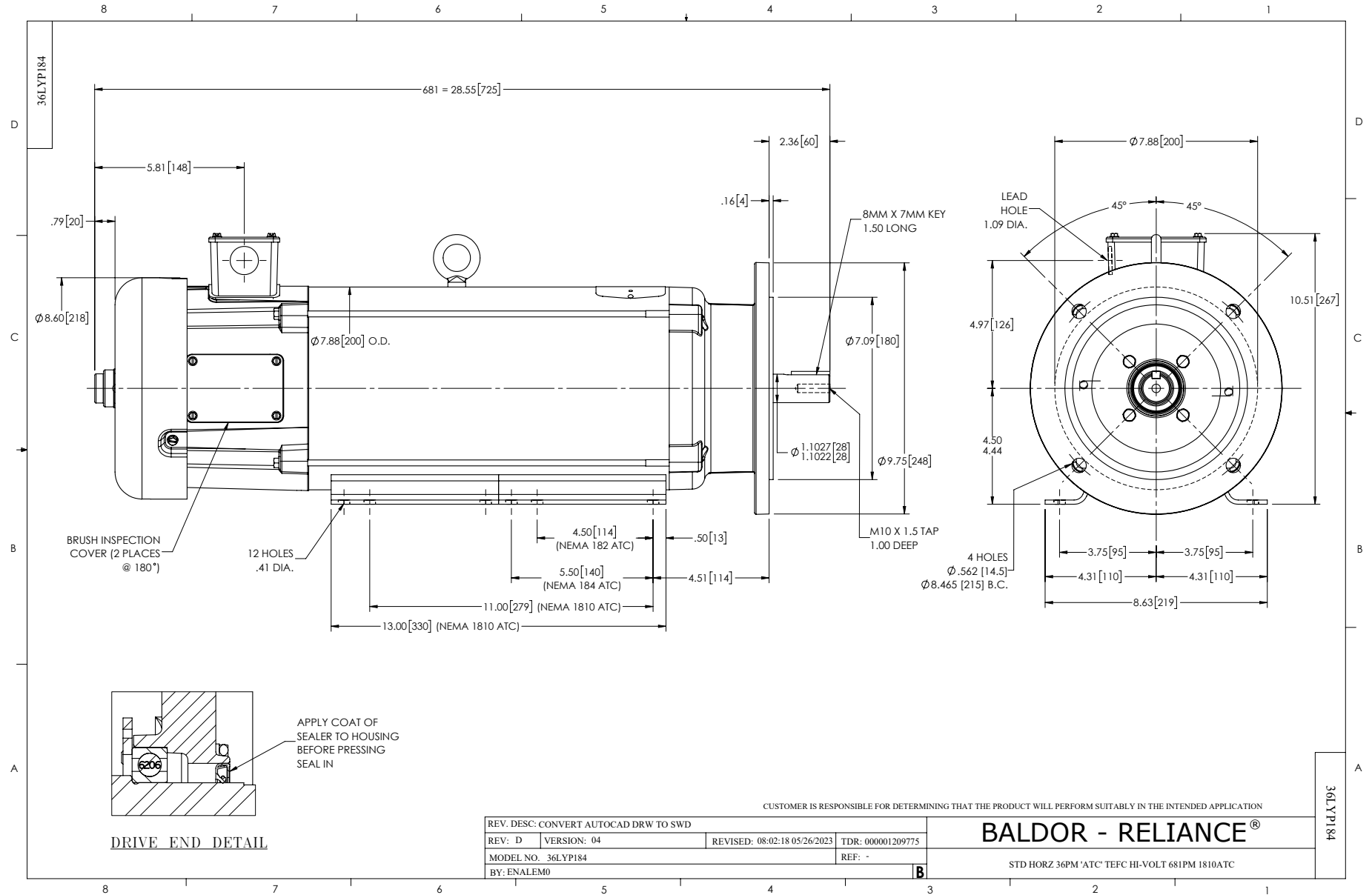
Typical performance - not guaranteed values.

5 HP DC 1750 RPM 180 V 3681P

ENCL: TEFC DUTY: CONT CL: F

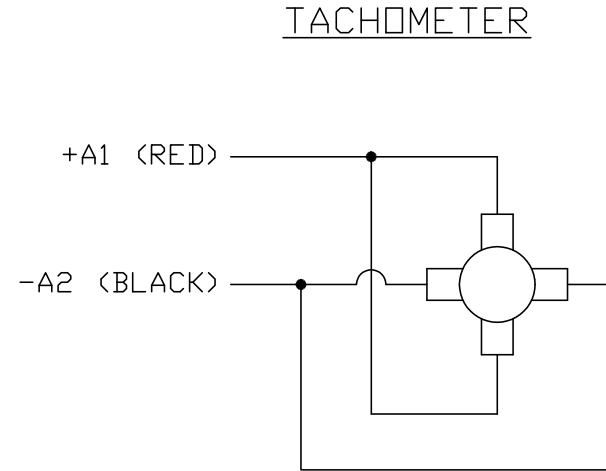
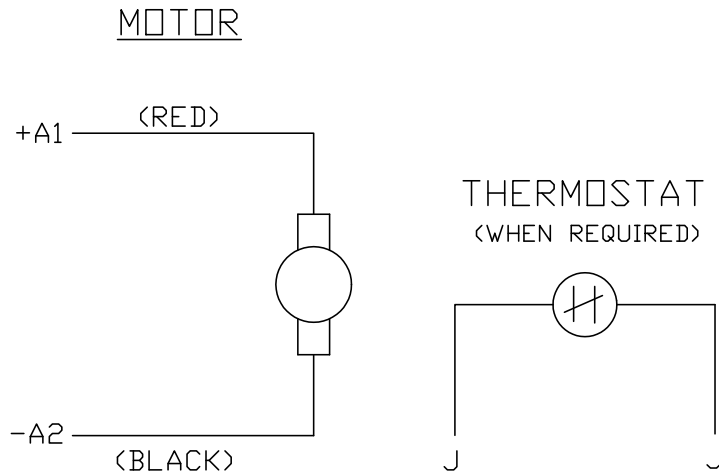


8/11/2024, DCPERF, VER 2.0.06, record 312





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