

ABB BALDOR RELIANCE III

Customer information packet

CDPWD3605

5HP, 1750RPM, DC, 1810ATC, 3681P, TEFC, F1

Class - None

Division -

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TEFC
Frame	1810ATC
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
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 12 AWG, A
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	27.83 IN
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding

Part Detail

Revision	AX
Type	DC
Mech. spec.	36P128
Base	
Status	PRD/A
Elec. spec.	36WGZ509
Layout	36LYP128
Eff. date	05-22-2026
CD Diagram	CD0194
Poles	00
Leads	2#12 A Y
Proprietary	False
Created date	01-01-0001

Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger

Nameplate

NP1509					
CAT.NO.	CDPWD3605				
SPEC.	36P128Z509				
HP	5/KW3.73	ENCL		TEFC	
RPM	1750				
FRAME	1810ATC	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		6206	
BRUSHES	2/BP5027A01				
		BLANK			
SER.					
BLANK	IP55 KG 71				
APRV-CSA	Y	APRV-UL	Y	APRV-CE	Y

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

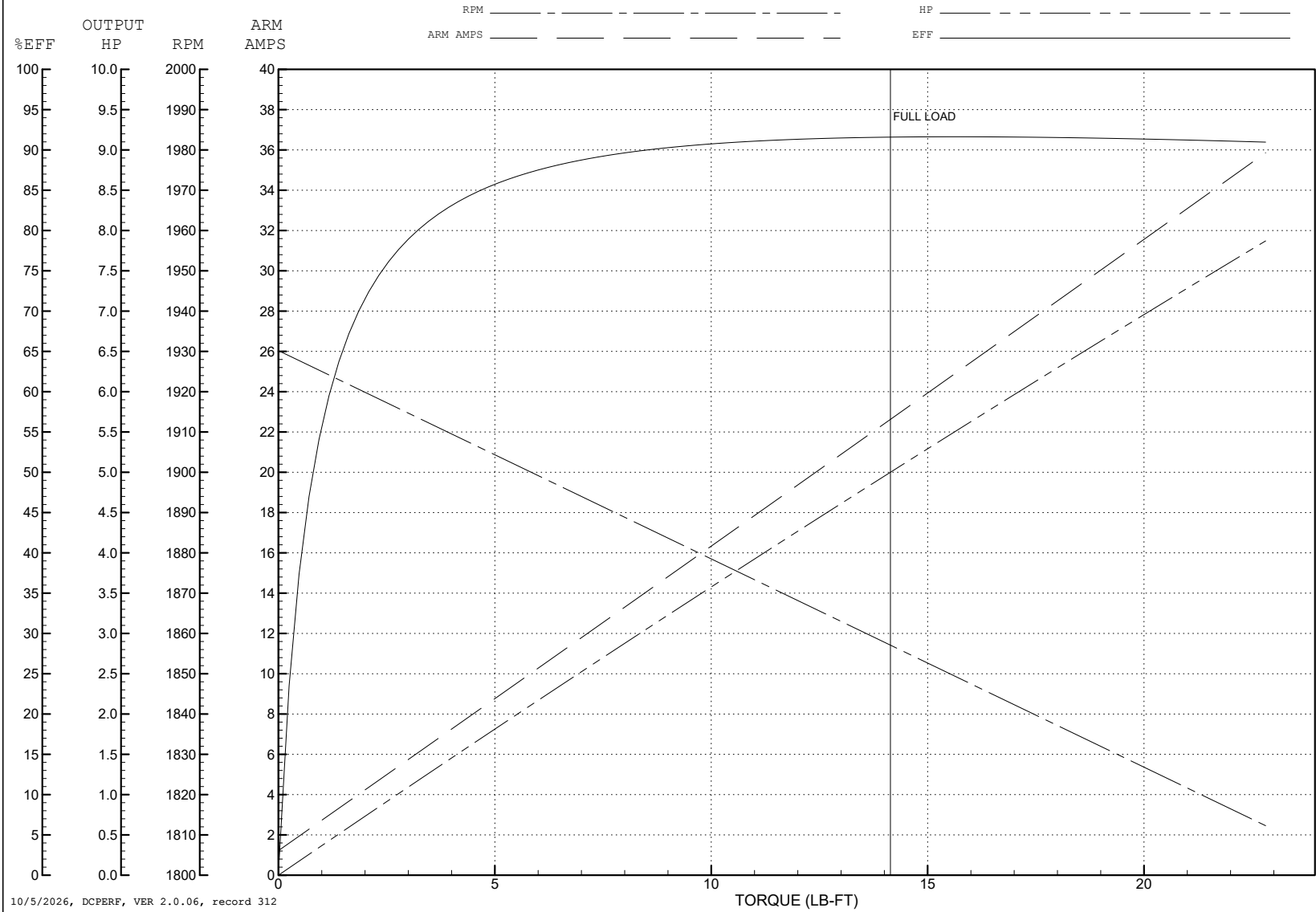
ABB Motors and Mechanical Inc.

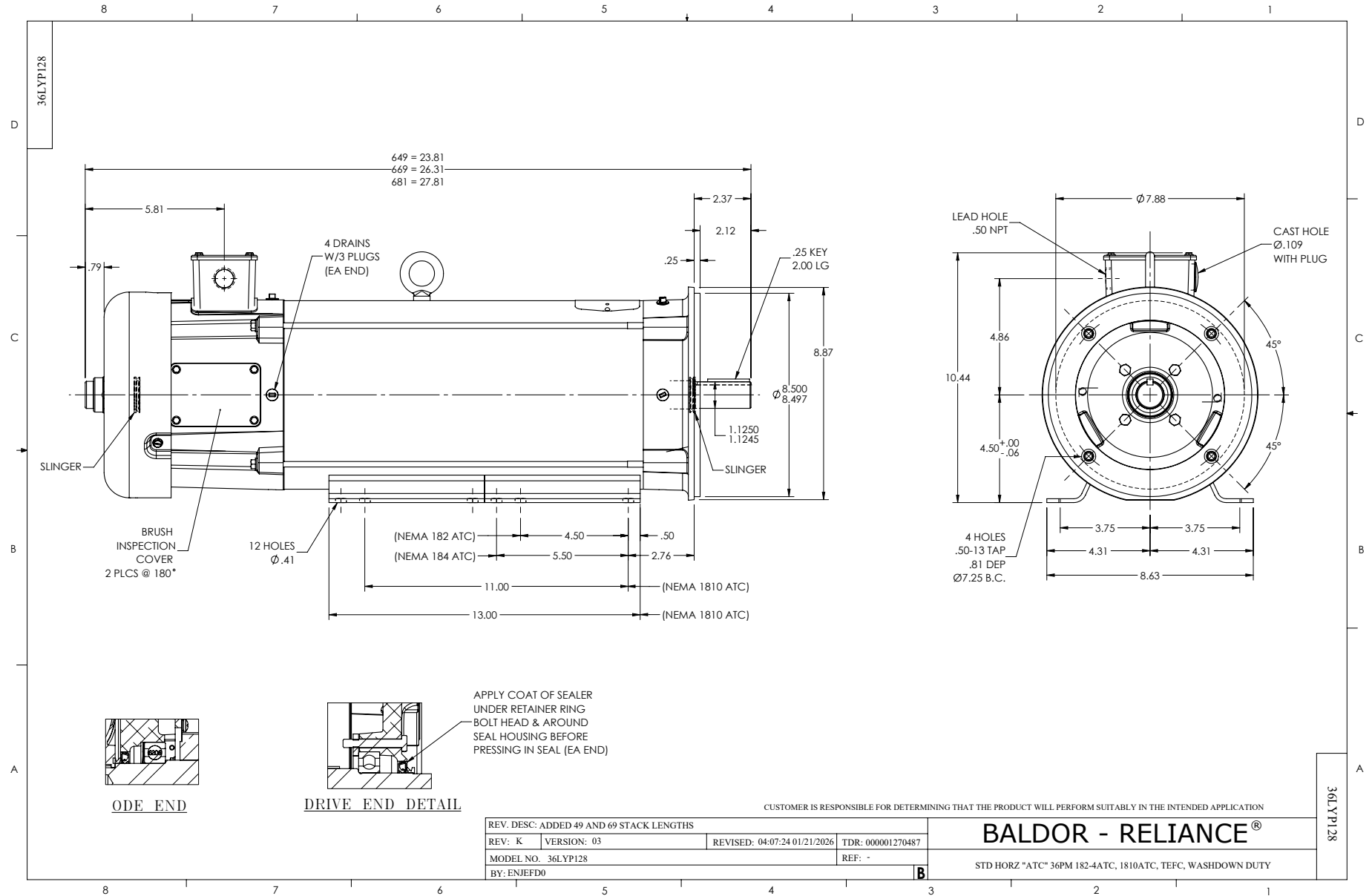
WINDING # 36WGZ509

Typical performance - not guaranteed values.

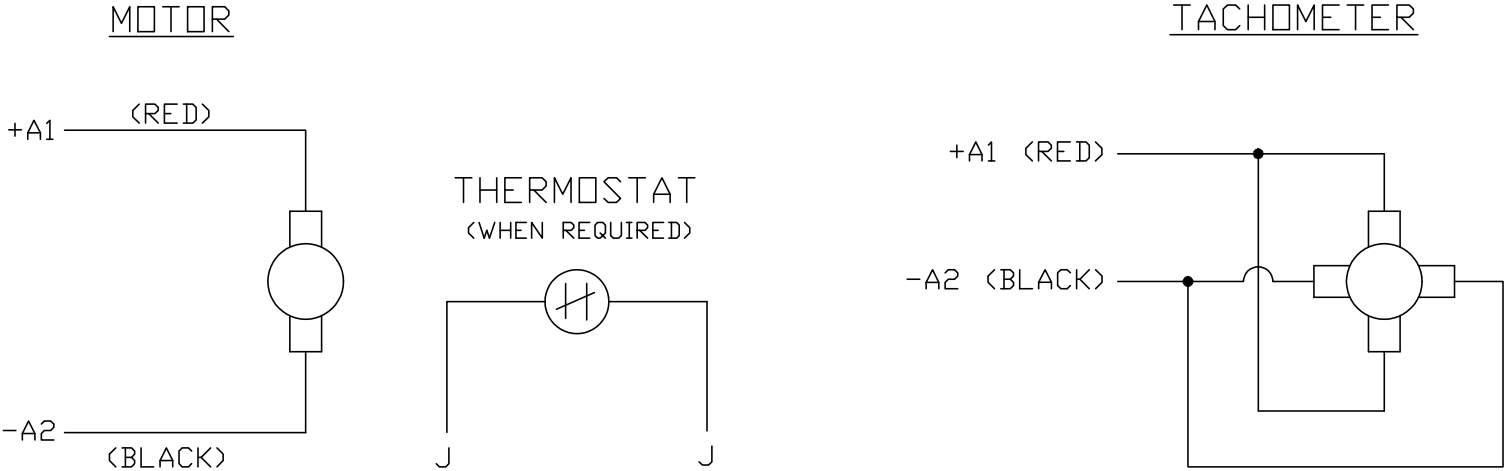
5 HP DC 1750 RPM 180 V 3681P

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
		FILE: AAA00004503	TDR: 0078737

BALDOR ELECTRIC Co.

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194