ABB BALDOR RELIANCE

Customer information packet

CD7502

2HP, 1750RPM, DC, 213C, 3646D, TEFC, F1, N
Class - None
Division -

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11/13/2026 5:55:00 AM

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	100 V
	200 V
Frame	213C
Frame Material	Steel
Haz Area Class and Group	None
Output Power	2.000 HP
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Armature Current	9.5 a
Armature Inertia	38.770 lb-ft2
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	SHUNT
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 12 AWG
	4 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	19.79 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00

Part Detail

Revision	L
Type	DC
Mech. spec.	36-5580
Base	
Status	PRD/A
Elec. spec.	36WGZ105
Layout	36LY5580
Eff. date	11-12-2024
CD Diagram	CD0860C01
Poles	00
Leads	
Proprietary	False
Created date	11-20-2008

Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP0111L			
CAT.NO.	CD7502		
SPEC.	36-5580Z105		
HP	2	**ENCL**	TEFC
RPM	1750		
FRAME	213C	**TYPE**	3646D
ARM V	180	**ARM A**	9.5
FLD V	200/100	**FLD A**	.4/.8
INSUL	F	**AMB.**	40
DUTY	CONT	**SUPPLY**	K
BRG/DE	6207	**BRG/ODE**	6205
BRUSHES	2/BP5125A01		
	BLANK		
SER.			
BLANK			
APRV-CSA	**APRV-UL**		

Accessories

Part number	Description	Multiplier
TK7500	TEFC TACH MTG. CONVERSION KIT	

DC Motor Performance Data
Record # 306
Typical performance - not guaranteed values

Winding: 36WGZ105-R001	**Type:** 3646D	**Enclosure:** TEFC

Nameplate Data	
Rated Output (HP)	2
R.P.M.	1750
Armature Volts	180
Armature Amps	9.5
Field Volts	200 / 100
Field Amps	0.4 / 0.8
Rating - Duty	40C AMB-CONT
Power Supply Code	K

General Characteristics	
Armature Resistance @ 25ºC	0.631 Ω
Commutating Winding Resistance @ 25ºC	0.451 Ω
Shunt Winding Resistance @ 25ºC	428 Ω
Armature Inertia	38.7702 LI^2

Load Characteristics at 180 Armature Volts, 200 Field Volts, 0.42 Field Amps

Load Point	1	2	3	4	5	6	7
Armature Amps	0.6	2.7	4.6	6.5	8.75	10.8	13
R.P.M.	1683	1669	1647	1637	1615	1602	1588
Torque (LB-FT)	0	1.5	3	4.5	6	7.5	9

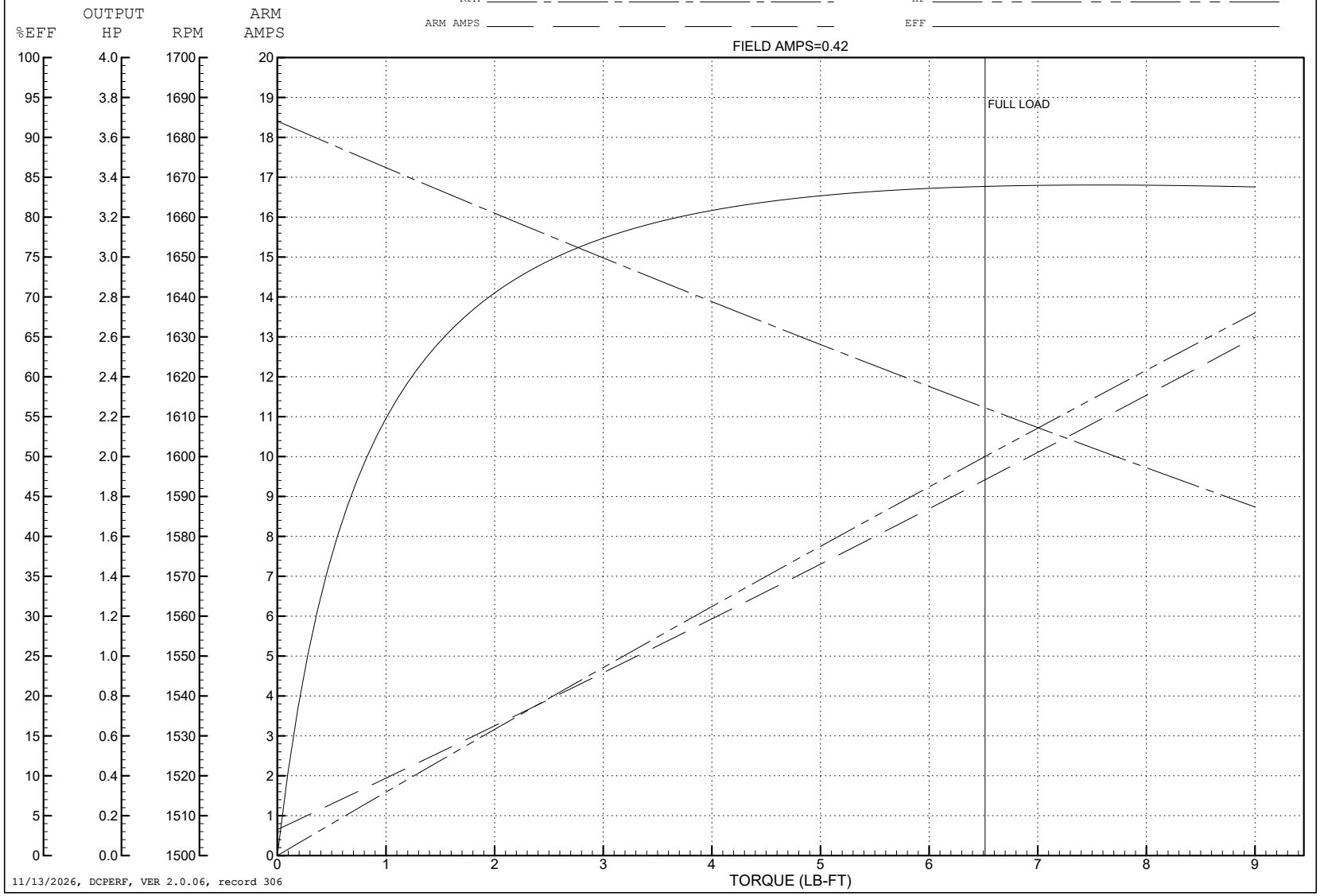
ABB Motors and Mechanical Inc.

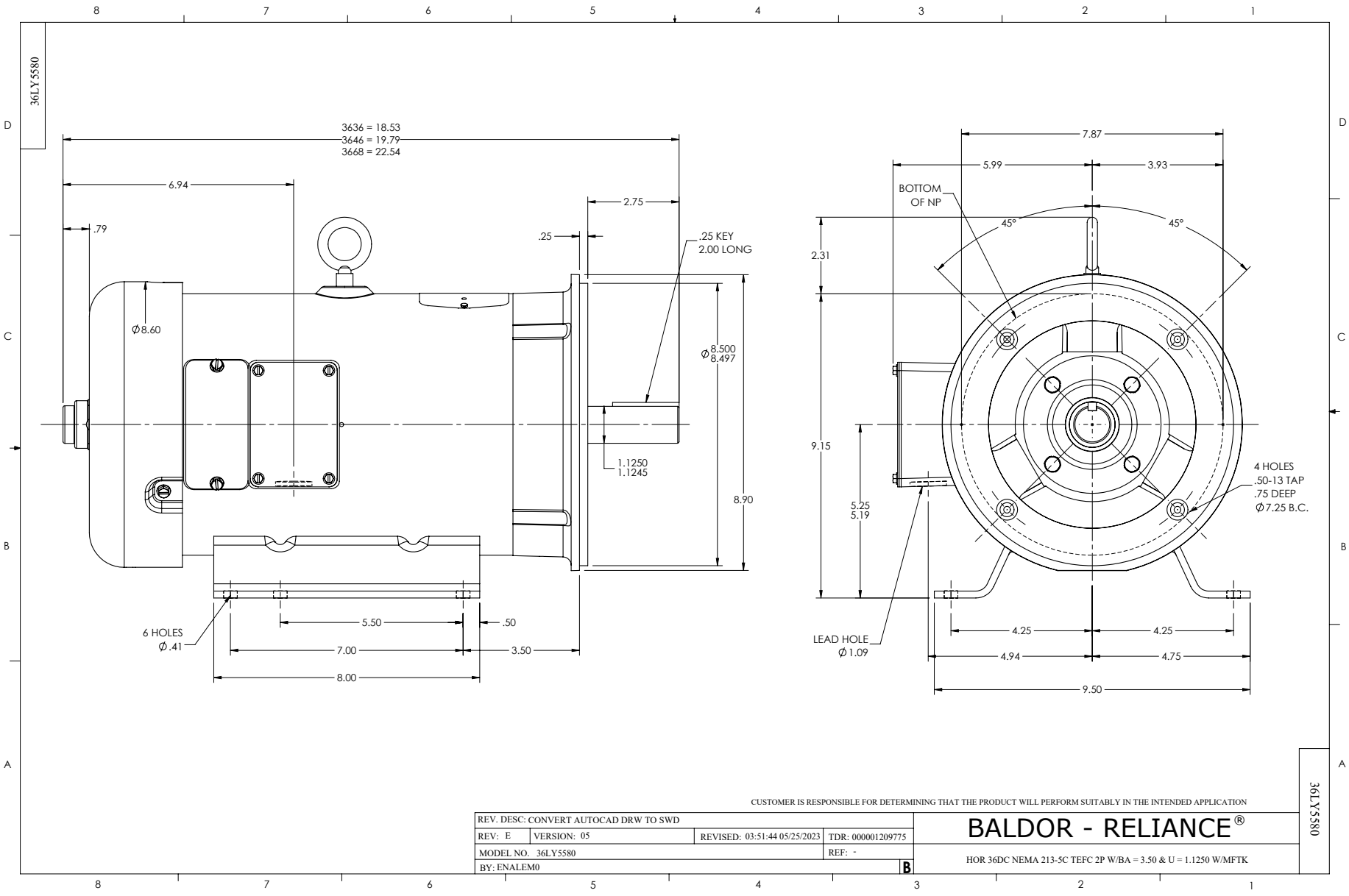
WINDING # 36WGZ105

Typical performance - not guaranteed values.

2 HP DC 1750 RPM 180 V ARM 200/100 V FLD 3646D

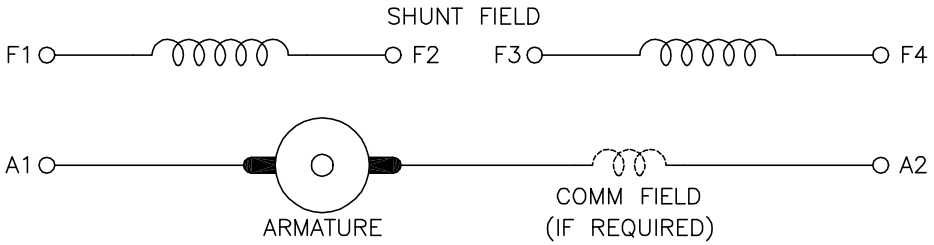
ENCL: TEFC DUTY: CONT CL: F




36LY5580
3636 = 18.53
3646 = 19.79
3668 = 22.54
6.94
.79
2.75
.25
.25 KEY
2.00 LONG
Ø8.60
Ø8.500
8.497
1.1250
1.1245
8.90
6 HOLES
Ø.41
5.50
.50
7.00
3.50
8.00
7.87
5.99
3.93
BOTTOM
OF NP
45°
45°
2.31
9.15
5.25
5.19
4 HOLES
.50-13 TAP
.75 DEEP
Ø7.25 B.C.
LEAD HOLE
Ø1.09
4.25
4.25
4.94
4.75
9.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD
REV: E
VERSION: 05
REVISED: 03:51:44 05/25/2023
TDR: 000001209775
MODEL NO. 36LY5580
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HOR 36DC NEMA 213-5C TEFC 2P W/BA = 3.50 & U = 1.1250 W/MFTK
36LY5580

CD0860C01

SHUNT WOUND



CONNECTION	DIRECTION OF ROTATION			
	CWDE		CCWDE	
	POS TERM (+)	NEG TERM (−)	POS TERM (+)	NEG TERM (−)
HIGH VOLTAGE	A1 F1 CONNECT F2 & F3	A2 F4	A2 F1 CONNECT F2 & F3	A1 F4
LOW VOLTAGE	A1 F1 & F3	A2 F2 & F4	A2 F1 & F3	A1 F2 & F4

NOTES:

1. LIMIT STARTING INRUSH CURRENT TO NOT MORE THAN 3 TIMES RATED AMPERES BY ENERGIZING THE FULL SHUNT FIELD BEFORE BRINGING THE ARMATURE VOLTAGE UP SLOWLY OR IN STEPS.
2. OPTIONAL FIELD REOSTAT MAY BE CONNECTED IN SERIES WITH THE SHUNT FIELD.
3. OPTIONAL THERMOSTAT LEADS ARE MARKED J,J.

CD0860C01

REV. DESC: NEW, REPLACE CD0860			BALDOR ELECTRIC Co.
REV. LTR: –	BY: JLP	REVISED: 15:35:22 11/03/2004	TDR: 347796
10C0860CD		FILE: AAA00121477	REF: CD0860C01
		MTL: –	DC CONNECTION DIAGRAM, SHUNT FIELD, 6 LEAD, DUAL VOLTAGE