

ABB BALDOR RELIANCE III

Customer information packet

CD7502

2HP, 1750RPM, DC, 213C, 3646D, TEFC, F1, N

Class - None

Division -

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-ft ²
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		General Characteristics	
Rated Output (HP)	2	Armature Resistance @ 25°C	0.631 Ω
R.P.M.	1750	Commutating Winding Resistance @ 25°C	0.451 Ω
Armature Volts	180		
Armature Amps	9.5	Shunt Winding Resistance @ 25°C	428 Ω
Field Volts	200 / 100		
Field Amps	0.4 / 0.8	Armature Inertia	38.7702 LI ²
Rating - Duty	40C AMB-CONT		
Power Supply Code	K		

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

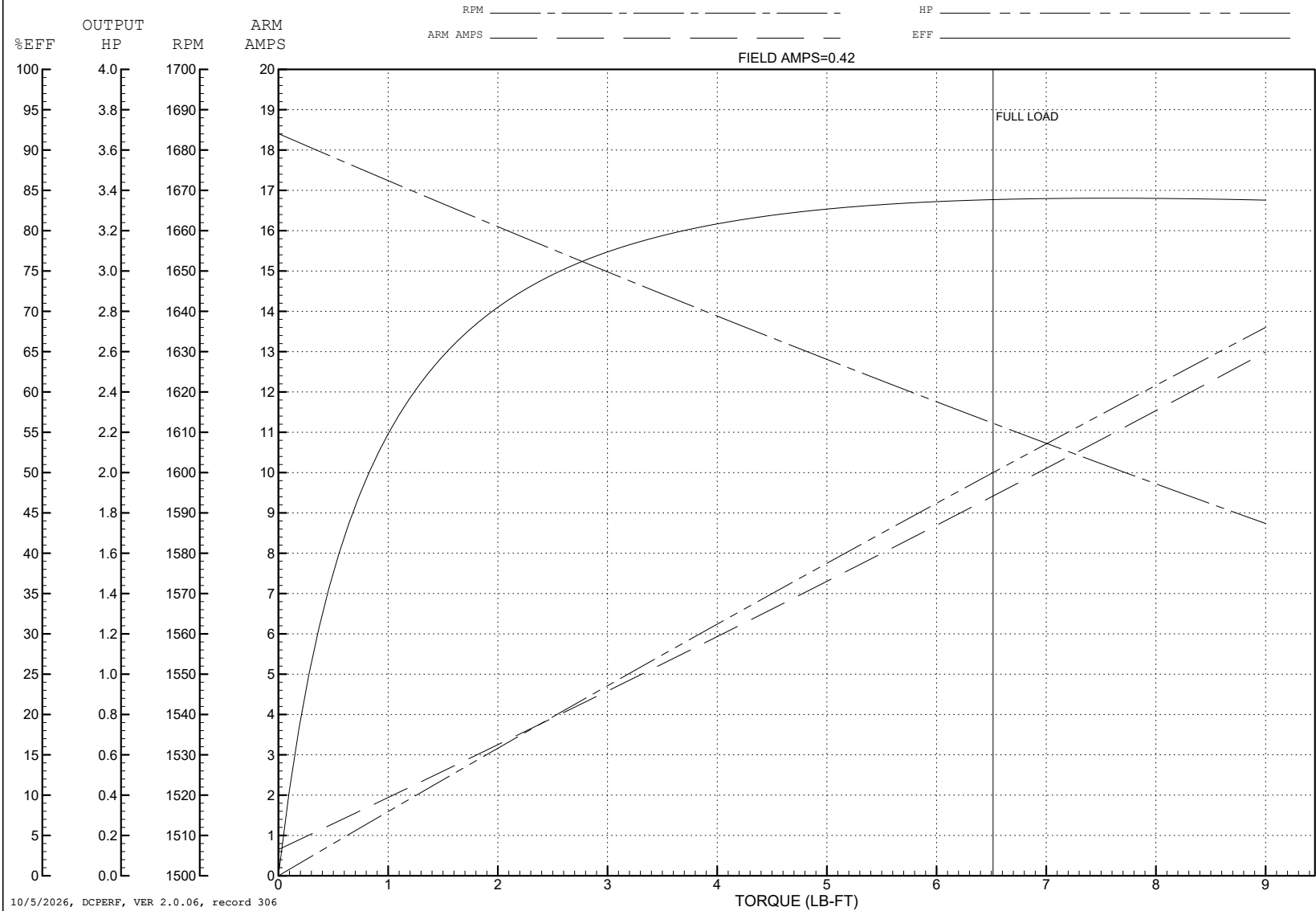
ABB Motors and Mechanical Inc.

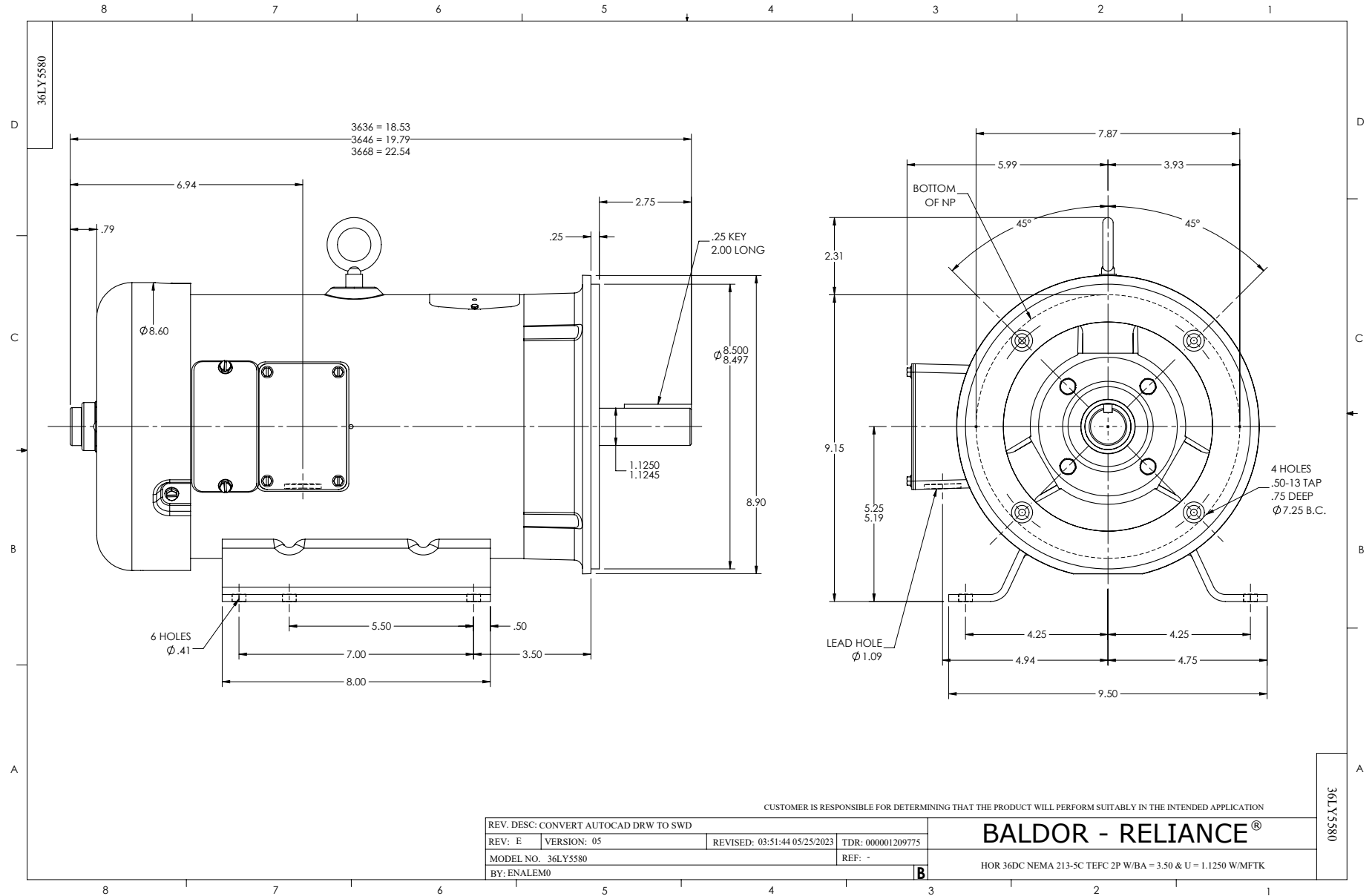
WINDING # 36WGZ105

Typical performance - not guaranteed values.

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

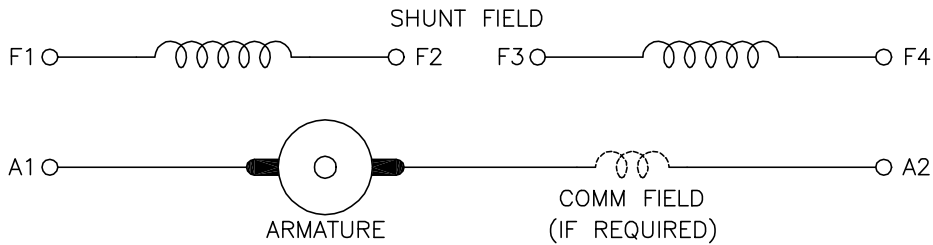
ENCL: TEFC DUTY: CONT CL: F





SHUNT WOUND

CD0860C01



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

REV. DESC: NEW, REPLACE CD0860			
REV. LTR: -	BY: JLP	REVISED: 15:35:22 11/03/2004	TDR: 347796
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		MTL: -	

BALDOR ELECTRIC Co.

DC CONNECTION DIAGRAM, SHUNT FIELD, 6 LEAD, DUAL VOLTAGE

CD0860C01