

ABB BALDOR RELIANCE III

Customer information packet

CD7503

3HP, 1750RPM, DC, 215C, 3668D, TEFC, F1, N

Class - None

Division -

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	100 V
	200 V
Frame	215C
Frame Material	Steel
Haz Area Class and Group	None
Output Power	3.000 HP
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Armature Current	14.7 a
Armature Inertia	57.312 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	4 @ 18 AWG
	2 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	22.54 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
RoHS Status	ROHS COMPLIANT

Part Detail

Revision	T
Type	DC
Mech. spec.	36-5580
Base	
Status	PRD/A
Elec. spec.	36WGZ136
Layout	36LY5580
Eff. date	11-12-2024
CD Diagram	CD0860C01
Poles	00
Leads	
Proprietary	False
Created date	11-18-2008

Service Factor	1.00
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.	CD7503		
SPEC.	36-5580Z136G1		
HP	3	ENCL	TEFC
RPM	1750		
FRAME	215C	TYPE	3668D
ARM V	180	ARM A	14.7
FLD V	200/100	FLD A	.6/1.2
INSUL	F	AMB.	40
DUTY	CONT	SUPPLY	K
BRG/DE	6207	BRG/ODE	6205
BRUSHES	2/BP5125A01		
	BLANK		
SER.			
BLANK			
APRV-CSA		APRV-UL	

Parts List

Part number	Description	Quantity
SA177205	SA 36-5580Z136G1	1.000 ea
AA013605	AA 36-5580Z136G1	1.000 ea
BP5125A01SP	CARBON BRUSH - SERRATED H45 - FOR 36D	1.000 ea
BP2000A01SP	BRUSH SPRING FOR DC MOTORS	1.000 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
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
36EP3300A03	FR ENDPLATE, MACH	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
HW5010U49	RET. RING 5100-143 TRU ARC	1.000 ea
36EP1307A31	PU EP ENCL 207 BRG 182-215TC W/NO TS, NO	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
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 ea
HW1000A25	1/4 SAE FLAT WASHER (FS)	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 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
36CV4000	INSPECTION COVER, BRUSH Z	2.000 ea
36GS1016	GASKET, BRUSH INSP COVER X	2.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 ea
35CB4514	35 LIPPED CB LID	1.000 ea
36GS1001SP	GASKET, CONDUIT BOX LID, .06 THICK #SV-3	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501E18	KEY, 1/4 SQ X 2.000	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.022 ga

85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
36RK5002SP	ROCKERARM ASSY	1.000 ea
HA3101A68	THRUBOLT- 1/4-20 X 15.937	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0860	CONN. DIAGRAM-DC(SHUNT WOUND MOTOR)	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP0111L	NP STD LASER ENGRAVED DC MOTORS, UL CSA	1.000 ea
37PA1052	PALLET PACK,PRINT PK1026A06,37PK5008A06	1.000 ea

Accessories

Part number	Description	Multiplier
TK3600	TEFC TACH MTG.CONVERSION KIT	

DC Motor Performance Data

Record # 1944

Typical performance - not guaranteed values

Winding: 36WGZ136-R004		Type: 3668D	Enclosure: TEFC
Nameplate Data		General Characteristics	
Rated Output (HP)	3	Armature Resistance @ 25°C	0.411 Ω
R.P.M.	1750	Commutating Winding Resistance @ 25°C	0.279 Ω
Armature Volts	180		
Armature Amps	14.7	Shunt Winding Resistance @ 25°C	351 Ω
Field Volts	200 / 100	Armature Inductance	7.003 mH
Field Amps	0.6 / 1.2		
Rating - Duty	40C AMB-CONT		
Power Supply Code	K		

Load Characteristics at 180 Armature Volts, 200 Field Volts, 0.55 Field Amps

Load Point	1	2	3	4	5	6	7
Armature Amps	1.1	7.2	10.2	13.4	16.4	20.4	27.1
R.P.M.	1697	1626	1611	1590	1572	1555	1547
Torque (LB-FT)	0	4.5	6.75	9	11.25	13.5	18

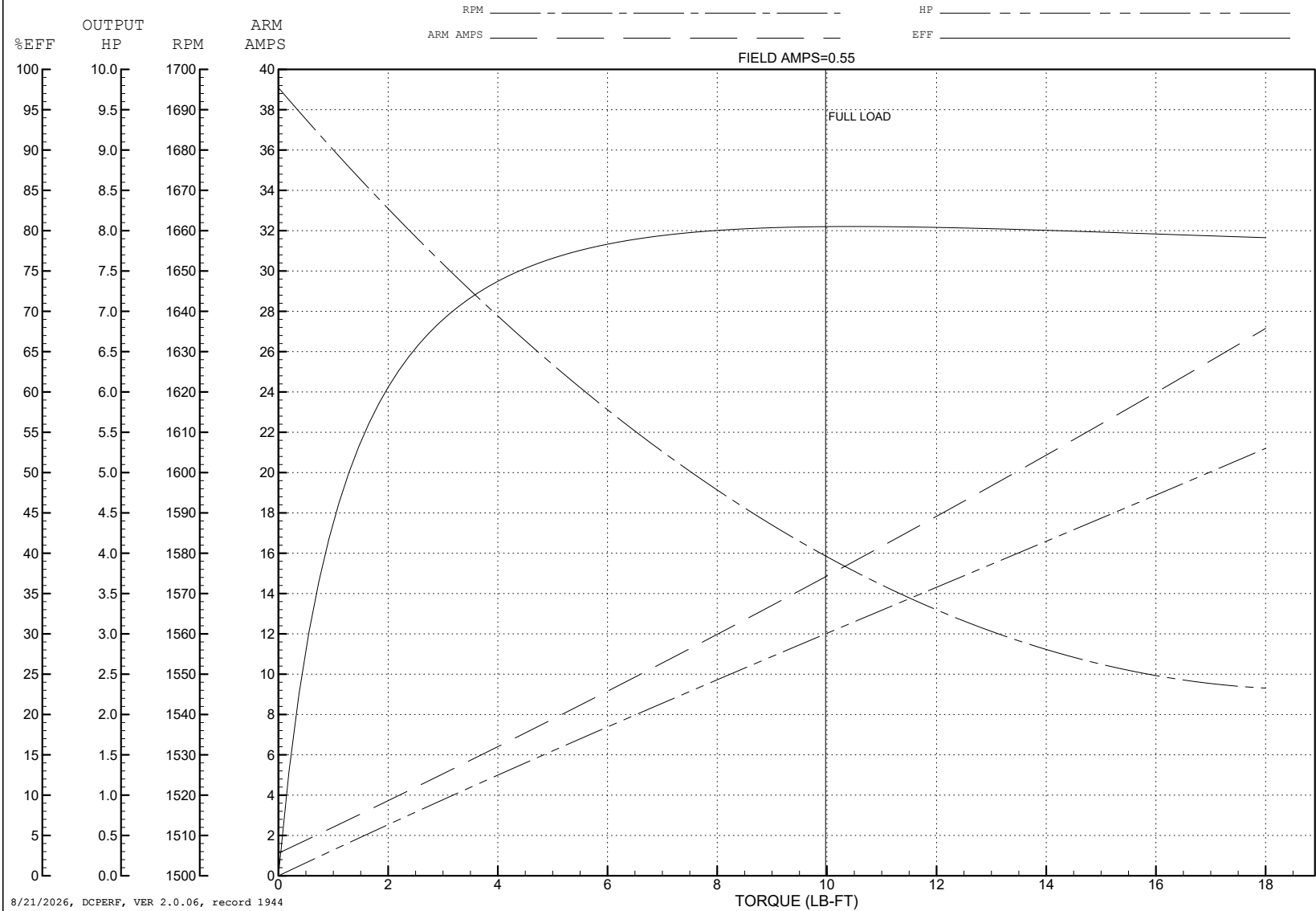
ABB Motors and Mechanical Inc.

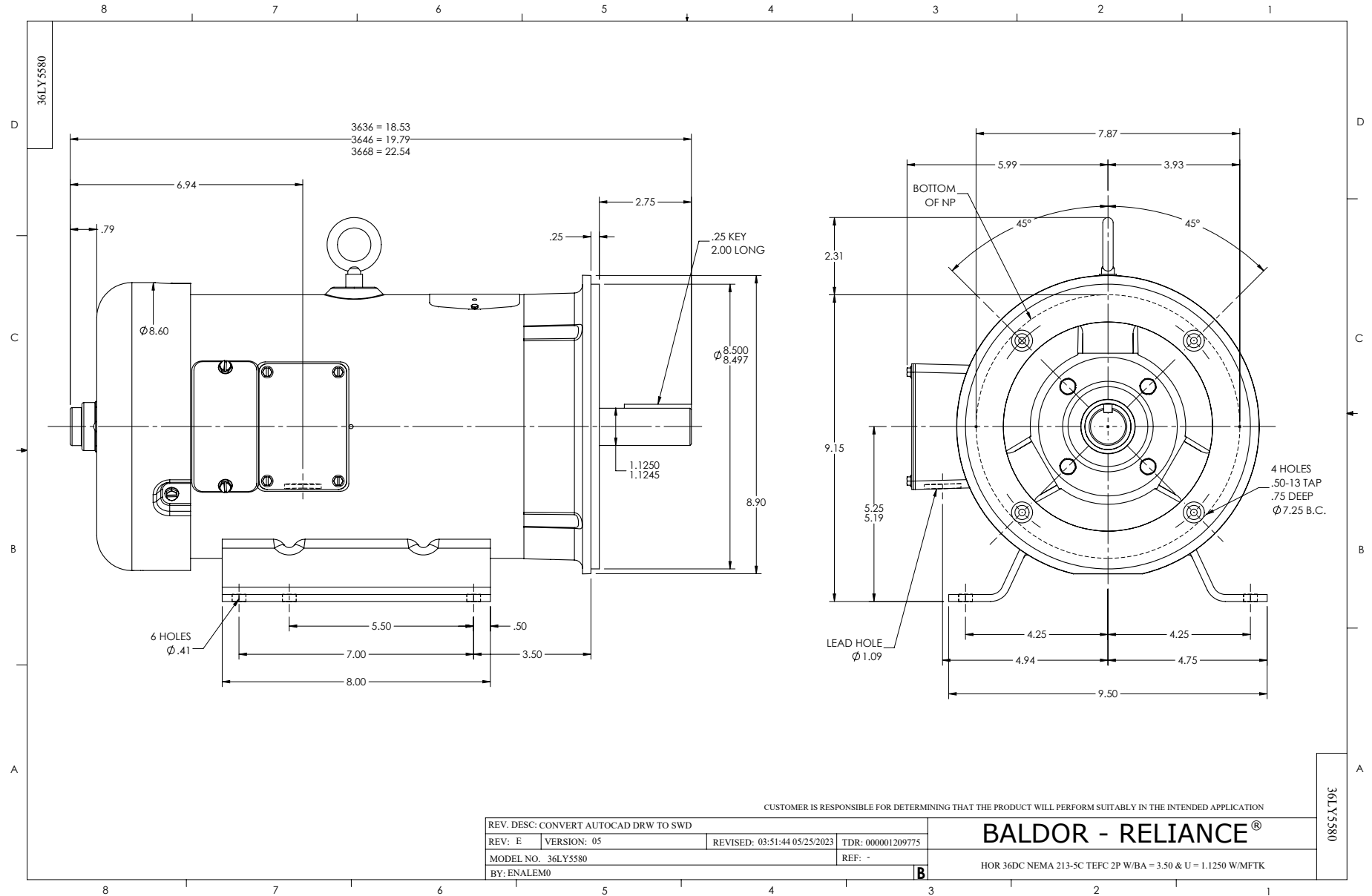
WINDING # 36WGZ136

Typical performance - not guaranteed values.

3 HP DC 1750 RPM 180 V ARM 200/100 V FLD 3668D

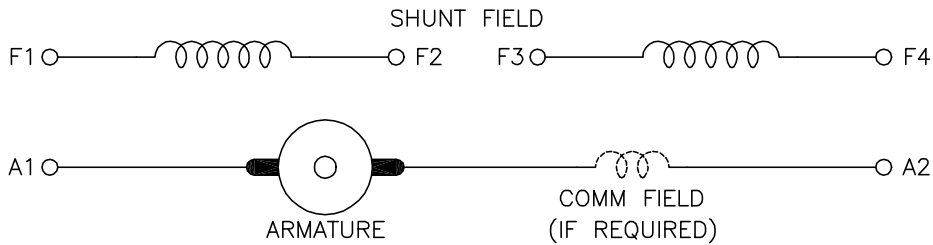
ENCL: TEFC DUTY: CONT CL: F





CD0860C01

SHUNT WOUND



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
10C0980C0		FILE: AAA00121477	REF: CD0860C01
		MTL: -	

BALDOR ELECTRIC Co.

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

CD0860C01