

ABB BALDOR RELIANCE III

Customer information packet

CDX1850

.5HP, 1750RPM, DC, 182CZ, X3623D, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division -

Specifications

Armature Voltage	90 V
Base Speed	1750 rpm
Enclosure	XPFC
Field Voltage	100 V
	50 V
Frame	182CZ
Frame Material	Steel
Haz Area Class and Group	CLI GP D; CLII GP F,G
Output Power	0.500 HP
Agency Approvals	CSA
	UL
	UR
Ambient Temperature	40 °C
Armature Current	4.9 a
Armature Inertia	19.385 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
Haz Area Temp Code	T3B
Heater Indicator	No Heater
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 16 AWG
	4 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	18.61 IN
Product Family	Hazardous Location Motor

Part Detail

Revision	AW
Type	DC
Mech. spec.	36-5382
Base	
Status	PRD/A
Elec. spec.	36WGZ141
Layout	36LY5382
Eff. date	12-30-2024
CD Diagram	CD0860C01
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP0727XPSL			
NO.			
SER.			
SPEC.	36-5382Z141		
CAT.NO.	CDX1850	T. CODE	T3B
HP	.5	ENCL	XPFC
RPM	1750		
FRAME	182CZ	TYPE	3623D
ARM V	90	ARM A	4.9
FLD V	100/50	FLD A	.55/1.1
INSUL	A	AMB.	40
DUTY	CONT	SUPPLY	K
BRG/DE	BG6206	BRG/ODE	BG6205
BRUSHES	2/BP5125A01		
BLANK			

Parts List

Part number	Description	Quantity
SA006703	SA 36-5382Z141	1.000 ea
AA003337	AA 36-5382Z141	1.000 ea
MJ5000A09	EFI KIT #1578 (400 ML CARTRIDGE OF EFI	0.050 ea
35CB3001A02SP	EXPL PROOF CONDUIT BOX, 3/4"PIPE TAP LEA	1.000 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
36EP1707A01	ENDPLATE, MACH	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP1710A01	ENDPLATE, MACH	1.000 ea
10XN2520J24	1/4-20X1.5" HX HD BOLT,GR8,3/4" THD LGTH	2.000 ea
10XN2520A16	1/4-20 X 1 HEX HEAD CAP SCR, ZINC PLATED	2.000 ea
HW1000A25	1/4 SAE FLAT WASHER (FS)	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000H04	HOLL#R4161SFT,INSL.RING,16-14 GA,#10 STU	2.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
36FN3000A01SP	EXFN, PLASTIC, 7.00 OD, .912 ID	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	1.000 ea
36FH4009A05SP	IEC FH,GREASER & 1.38 SHAFT HOLE,W/	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
HW4030A01	1-1/2" N.P.T. PIPE PLUG W/SQ.HEAD	2.000 ea
35CB3500A01SP	CONDUIT BOX LID, MACH	1.000 ea
51XN2520A16	SCREW, HEX WS SLT, ZN, 1/4-20 X 1.00	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
NP0018W	ALUM UL XP CONDUIT BOX NAMEPLATE	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	6.000 ea
36RK5003A01	ROCKERARM ASSY	1.000 ea
HA3105A07	THRUBOLT 3/8-16 X 11.000	4.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1161	LABEL,THERMOSTAT (ROLL LABEL)	1.000 ea
LC0860	CONN. DIAGRAM-DC(SHUNT WOUND MOTOR)	1.000 ea
NP0727XPSL	SS XP DC UL CSA CC CL-I GP-D CL-II GP-F&	1.000 ea
07PA1005	PKG GRP, PRINT PK1156A07	1.000 ea

DC Motor Performance Data

Record # 1409

Typical performance - not guaranteed values

Winding: 36WGZ141-R001		Type: 3623D	Enclosure: XPFC
Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	0.492 Ω
R.P.M.	1750	Commutating Winding Resistance @ 25°C	0.2924 Ω
Armature Volts	90		
Armature Amps	4.9	Shunt Winding Resistance @ 25°C	190.87 Ω
Field Volts	100 / 50		
Field Amps	0.55 / 1.1		
Rating - Duty	40C AMB-CONT		
Power Supply Code	K		

Load Characteristics at 90 Armature Volts, 100 Field Volts, 0.52 Field Amps

Load Point	1	2	3	4	5	6	7
Armature Amps	0.7	2.4	4.6	6.4	8.7	11.1	13.6
R.P.M.	1720	1694	1659	1631	1612	1606	1599
Torque (LB-FT)	0	0.75	1.5	2.25	3	3.75	4.5

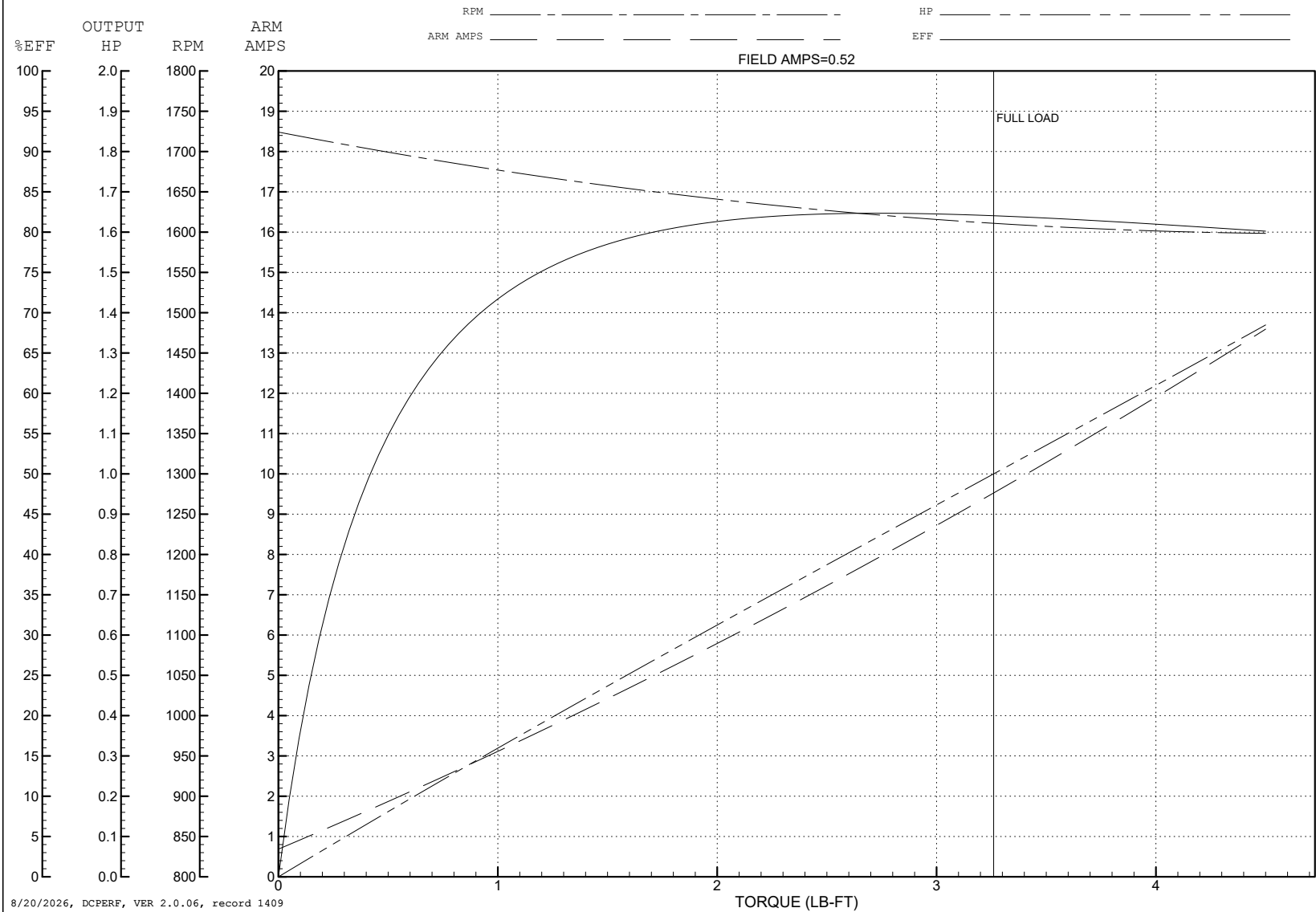
ABB Motors and Mechanical Inc.

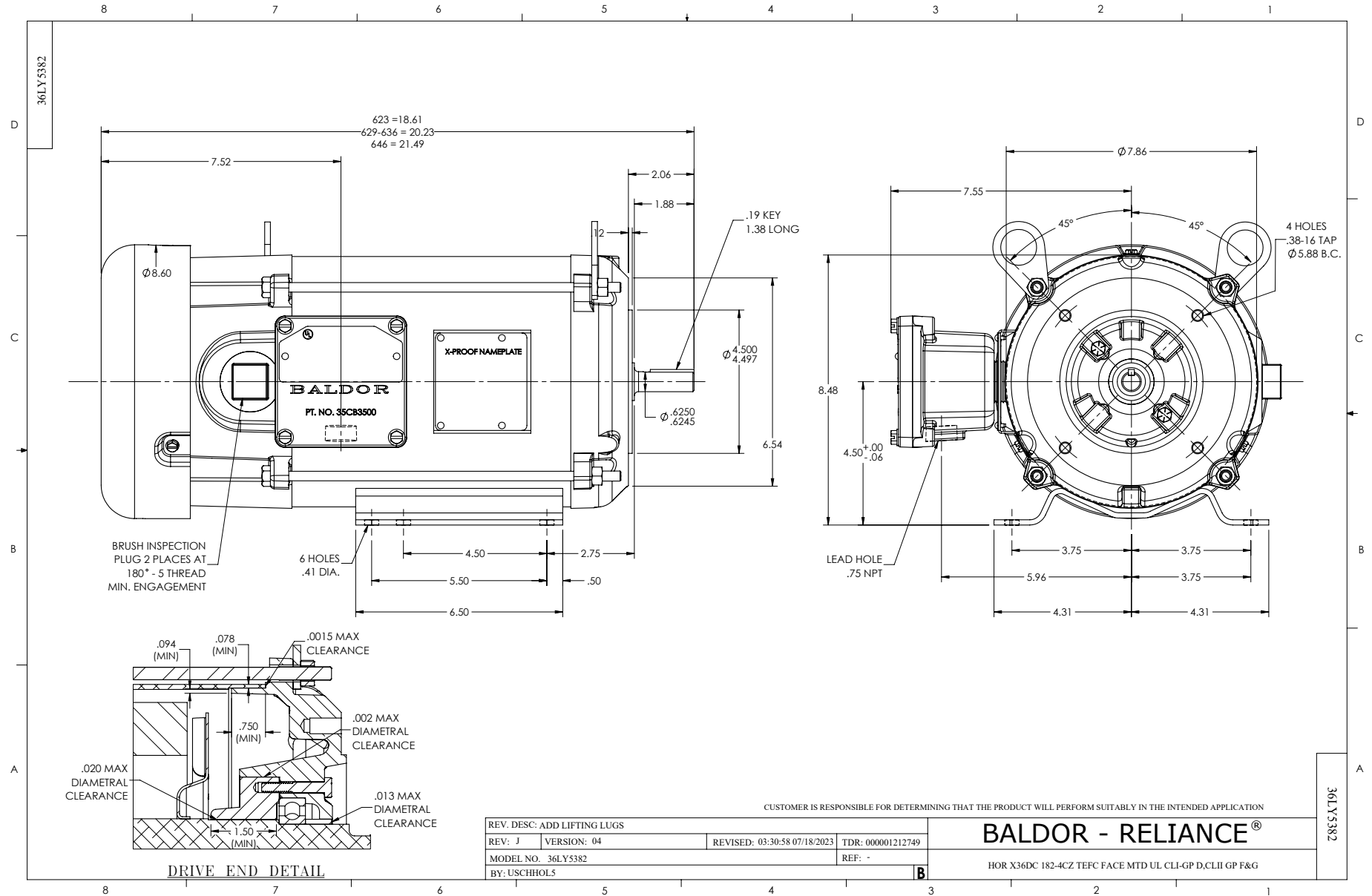
WINDING # 36WGZ141

Typical performance - not guaranteed values.

0.5 HP DC 1750 RPM 90 V ARM 100/50 V FLD 3623D

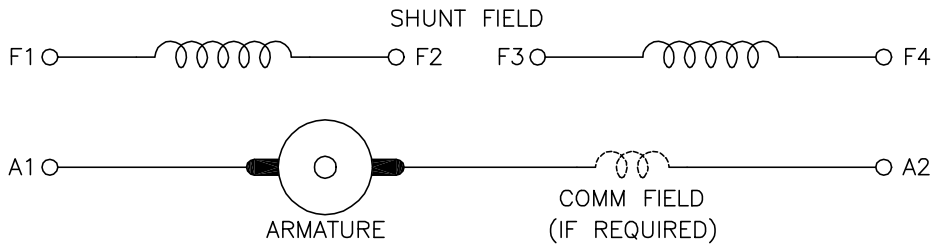
ENCL: XPFC DUTY: CONT CL: A





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
10C0980C0		FILE: AAA00121477	REF: CD0860C01
		MTL: -	

BALDOR ELECTRIC Co.

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

CD0860C01