

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			

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

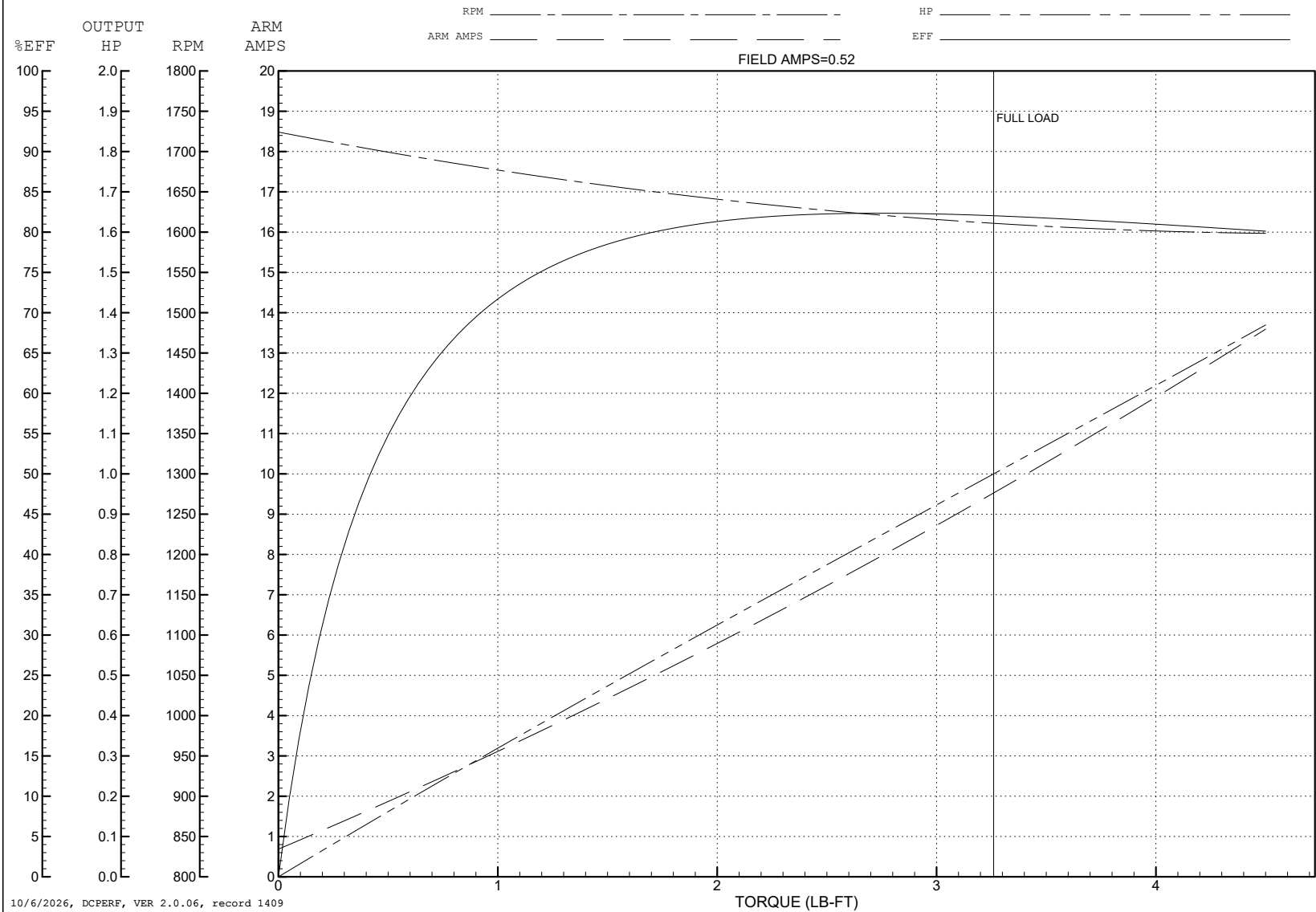
ABB Motors and Mechanical Inc.

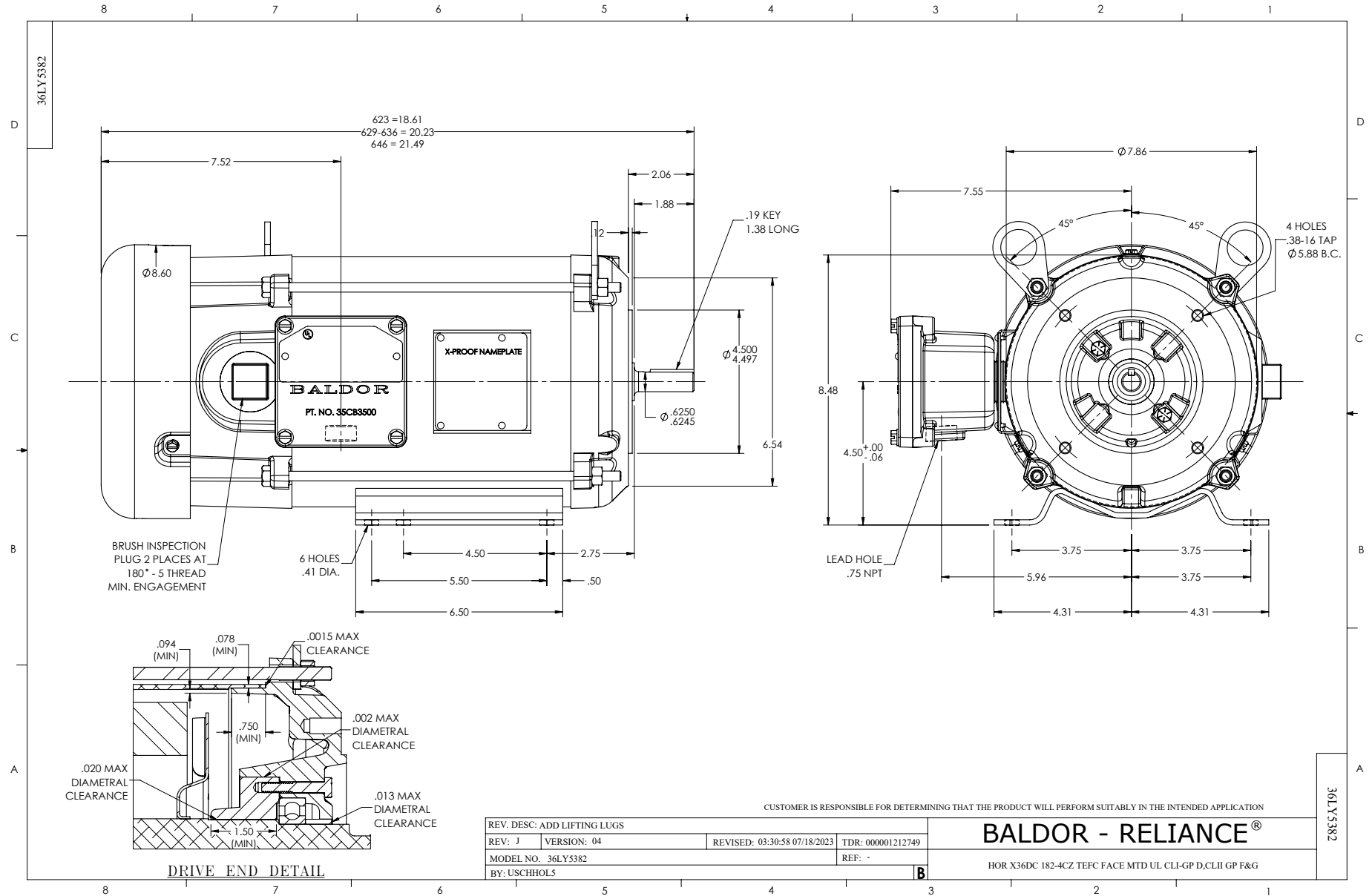
WINDING # 36WGZ141

Typical performance - not guaranteed values.

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

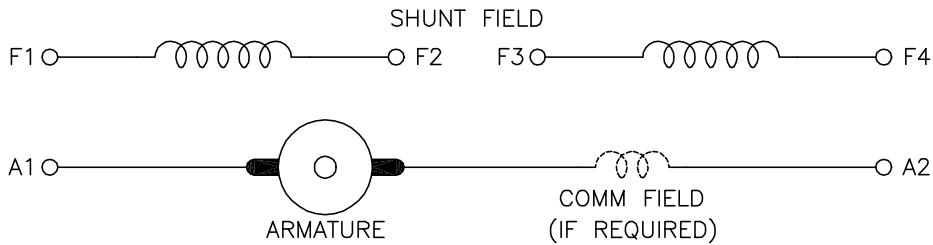
ENCL: XPFC DUTY: CONT CL: A





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