

ABB BALDOR RELIANCE III

Customer information packet

ECS101A2K2P2EF4

2.2KW, 1500RPM, 3PH, 50HZ, D112S, 3624B, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D112S
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Brushless Wound Field PM Rotor
Output @ Frequency	2.200 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ
Agency Approvals	CE CULUS UKCA WEEE
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	5
Current @ Voltage	8.600 A @ 230.0 V
Drip Cover	No Drip Cover
Duty Rating	S1
Efficiency @ 100% Load	91.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	8.6 a
Insulation Class	F

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0036
Layout	36LYT346
Eff. date	02-04-2026
CD Diagram	CD0006B03
Poles	04
Leads	3#14 15" LONG LEADS
Proprietary	False
Created date	01-11-2023

Inverter Code	Inverter Duty
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	3624B
Mounting Arrangement	B3
Number of Poles	4
Overall Length	21.87 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.103 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1500 rpm
Speed Code	Single Speed
Starting Method	INVERTER SPECIAL
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3968B01A01											
CAT.NO.	ECS101A2K2P2EF4										
SPEC.	36-0000-3640					YR					
FRAME	D112S			IP	55	WT.		84			
KW	2.2	HZ	50		PH	3	DUTY-IPM		S1		
INS CL	F	CLASS RISE					AMB-C		40		
EFF. CL	IE5	EFF	91.5		COSØ			97			
VOLTS	230			FLA		8.6					
1/MIN	1500				1/MIN MAX			3000			
BEMF (V)	88			RS (OHMS)				0.97			
LD (MH)	14.4				LQ (MH)				54.4		
VPWM	CP =		50		TO		100				
CT	5	TO	50	VT		1	TO	50			
MATCHED INV	ECIN2A10P5										
DE	6206			ODE		6205					
SERIAL #											

NP3978A00						
PART NO.	ECIN2A10P5					
U1	230	PH	3	HZ	50	
I1	10.5	W/EXT. CHOKE				8.6
SERIAL #						

Volts	230	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	8.6	Max Amps		Cs Diagram	CS1127	BEMF	86
KW	2.2	VFD#	ECIN2A10P5			LD	12.7
RPM	1500	S.F.	1.00			LQ	44.2
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	0.9903 Meas. L-L

60034-2-3 Motor Performance at Standardized Operating Points

	RPM	% Speed	LB-FT	% Torque	KW	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1345	90%	10.3	100%	2.0	90.8	9.12%	201
P2	747	50%	10.3	100%	1.1	87.5	7.17%	158
P3	370	25%	10.3	100%	0.5	79.5	6.36%	140
P4	1345	90%	5.2	50%	1.0	91.6	4.16%	92
P5	747	50%	5.2	50%	0.5	89.1	3.06%	67
P6	747	50%	2.6	25%	0.3	89.0	1.54%	34
P7	370	25%	2.6	25%	0.1	85.0	1.09%	24

61800-9-2 PDS Performance at Reference Operating Points

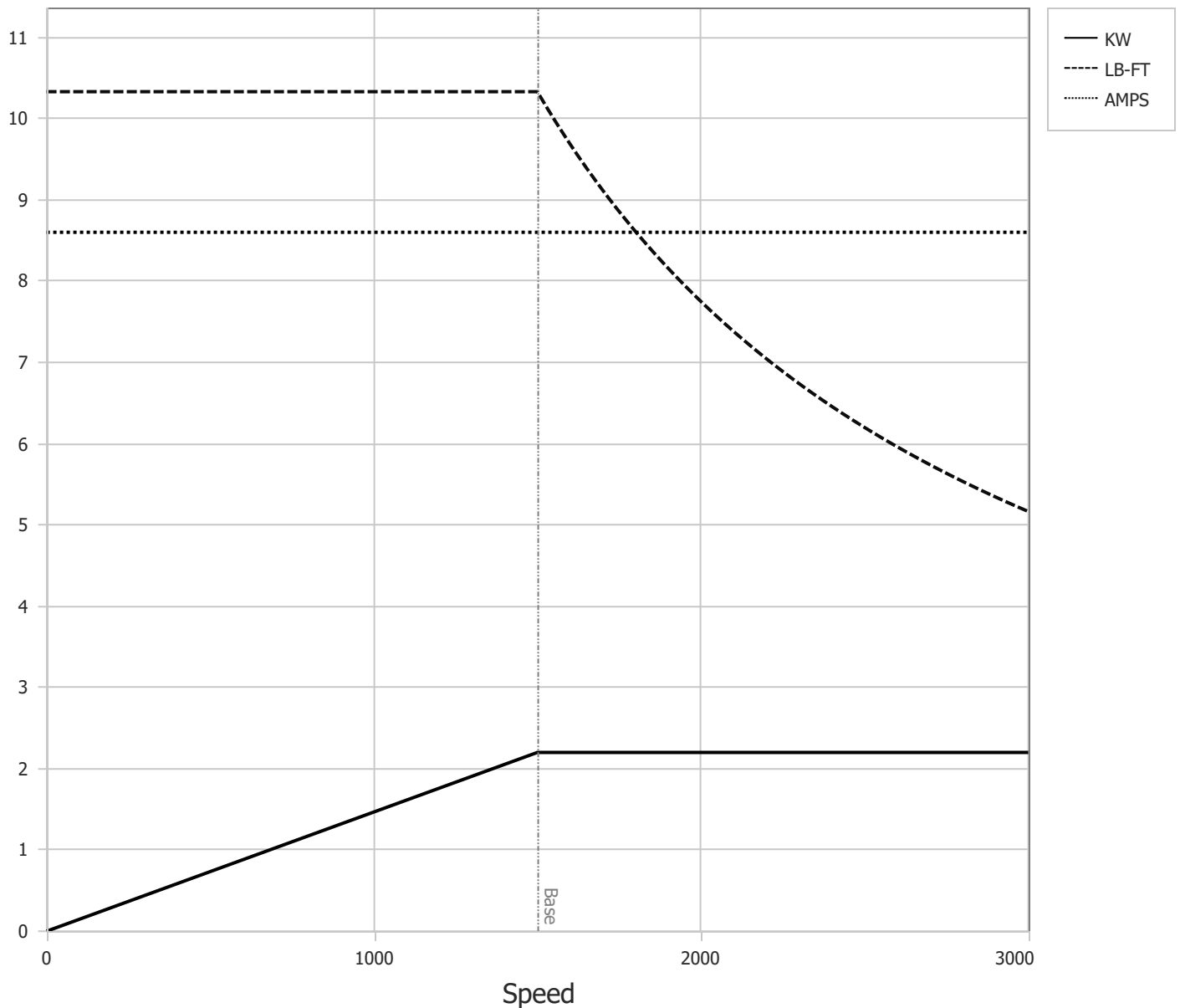
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1506	100%	10.3	100%	2.2	88.0	13.71%	302
P2	747	50%	10.3	100%	1.1	81.9	11.01%	242
P3	254	17%	10.3	100%	0.4	63.4	9.75%	215
P4	1494	100%	5.2	50%	1.1	88.2	6.69%	147
P5	747	50%	5.2	50%	0.5	82.8	5.19%	114
P6	254	17%	5.2	50%	0.2	66.1	4.33%	95
P7	747	50%	2.6	25%	0.3	81.2	2.87%	63
P8	254	17%	2.6	25%	0.1	65.6	2.22%	49

Points not taken in certified order.

	DR By:	<u>R & D</u>	AC MOTOR PERFORMANCE CURVES	36WGA0036 36-0000-3638 Test - 111793
	CK By:	<u>USJORAD2</u>		
	APP By:	<u>USJAROB1</u>		
	Date:	<u>01/14/2025</u>		

Volts	230	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	8.6	Max Amps		Cs Diagram	CS1127	BEMF	86
KW	2.2	VFD #	ECIN2A10P5			LD	12.7
RPM	1500	S.F.	1.00			LQ	44.2
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	0.9903 Meas L-L

Constant Duty Operating Range


BALDOR • RELIANCE

DR By: R & D

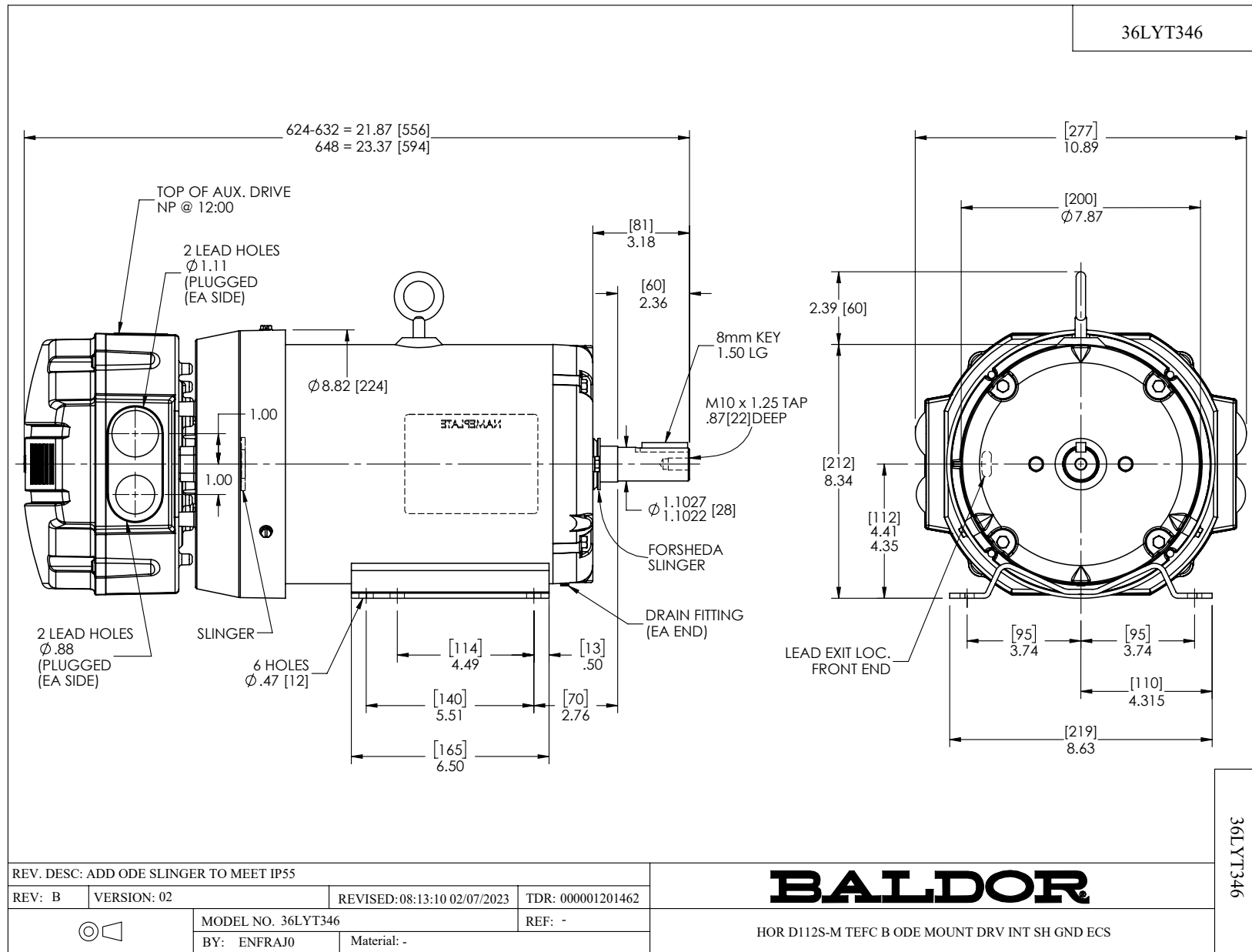
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APP By: USJAROB1

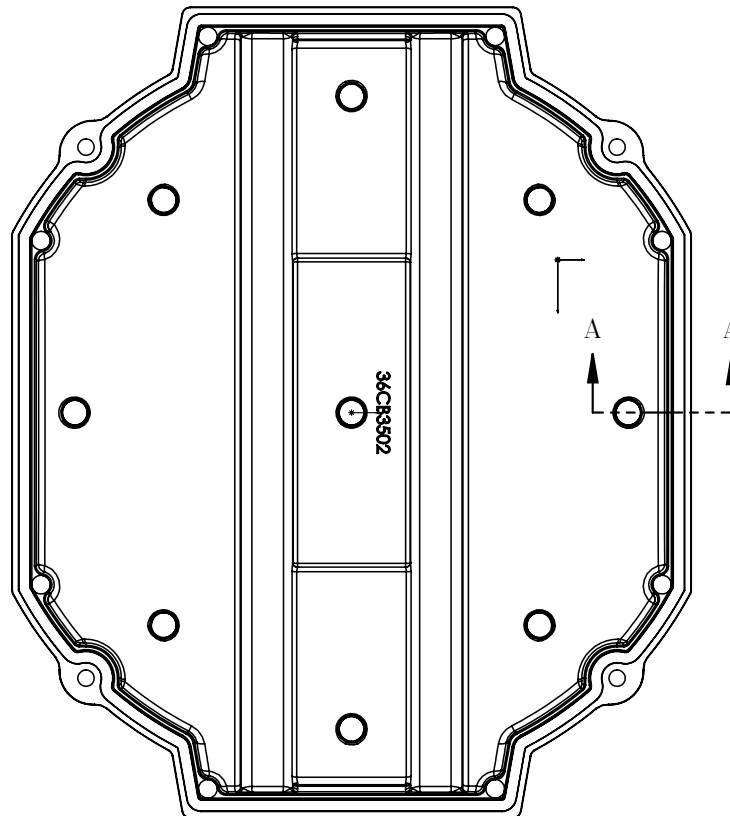
Date: 01/14/2025
**AC MOTOR
PERFORMANCE
CURVES**
36WGA0036

36-0000-3638

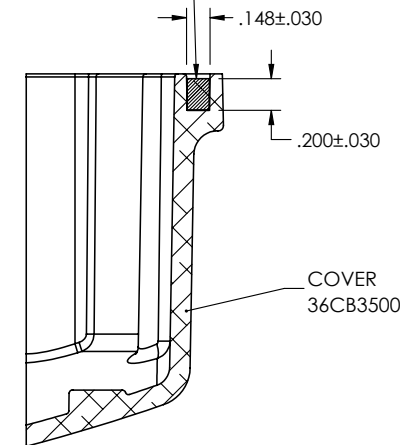
Test - 111793



36CB3502A00



MATERIAL: RAMPF, RAKU-PUR 32-3280-51L



SECTION A-A

REV. DESC: NEW

REV: -

VERSION: 00

REVISED: 09:16:43 01/15/2020

TDR: 000001129989



MODEL NO. 36CB3502A00

REF: -

BY: ENMARS0

Material: -

BALDOR - RELIANCE®

36 FRAME ODE ECM ALUMINUM COVER WITH FOAM SEAL

36CB3502A00

