

ABB BALDOR RELIANCE III

Customer information packet

ECS101T2K2P2EF4

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	WEEE UKCA CULUS CE BLUETOOTH
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
Design Code	B
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

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0036
Layout	36LYT272
Eff. date	01-21-2025
CD Diagram	CD0006B03
Poles	04
Leads	3#14 19" LONG LEADS
Proprietary	False
Created date	01-10-2023

High Voltage Full Load Amps	8.6 a
Insulation Class	F
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	16.34 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

NP3978A01					
PART NO.	ECI2A10P5				
U1	200	PH	3	HZ	50
I1	7.8	W/EXT. CHOKE			7.6
SERIAL #					

NP3968B01A01

CAT.NO.	ECS101T2K2P2EF4										
SPEC.	36-0000-3638				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	90.9		COSØ		97				
VOLTS	190		FLA		8.8						
1/MIN	1500		1/MIN MAX			3000					
BEMF (V)	86		RS (OHMS)			0.97					
LD (MH)	12.7		LQ (MH)			44.2					
VPWM	CP =	50	TO		100						
CT	5	TO	50	VT	1	TO	50				
MATCHED INV	ECI2A10P5										
DE	6206		ODE		6205						
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

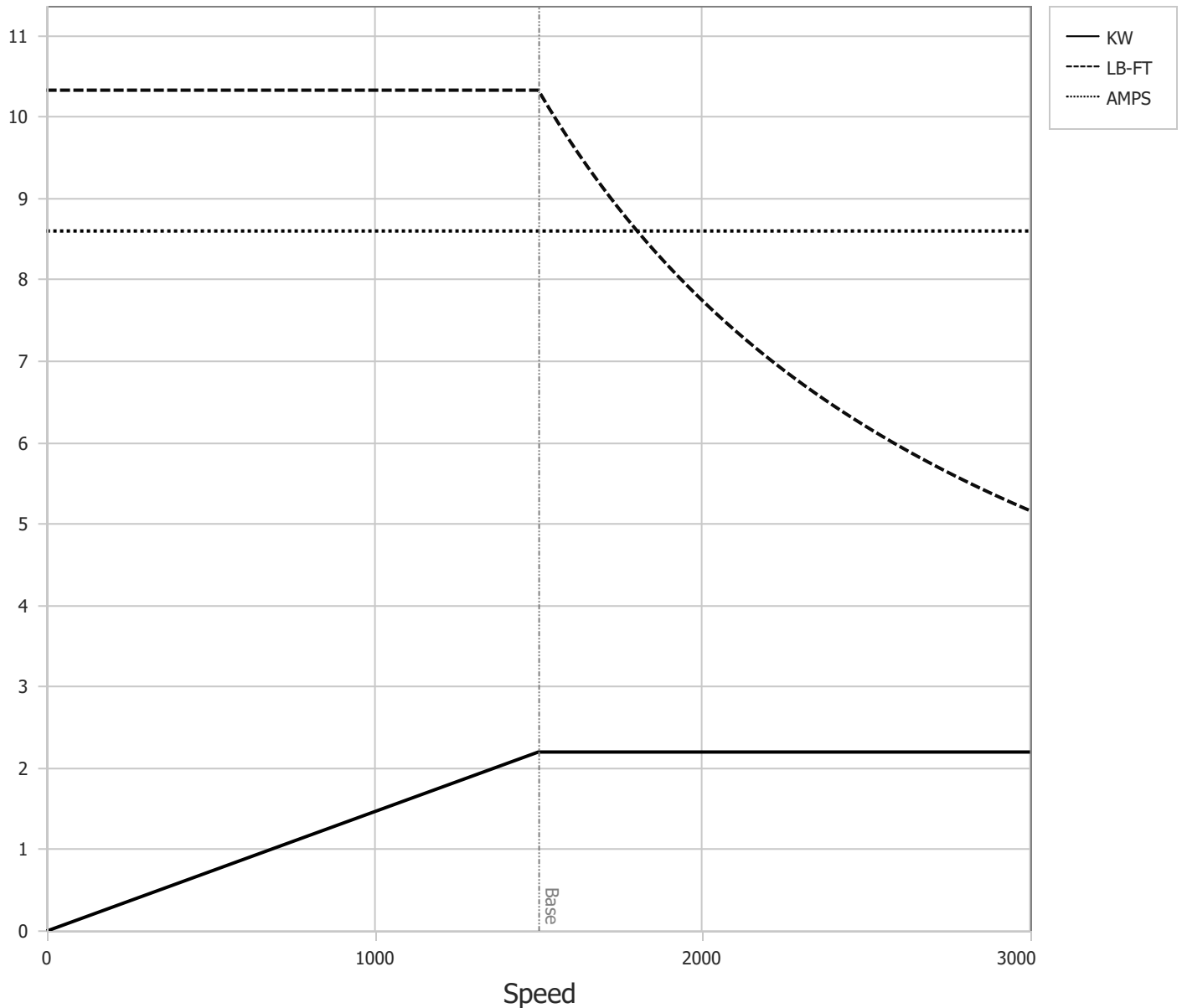
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1506	100%	10.3	100%	2.2	88.0	13.71%	302
P2	747	50%	10.3	100%	1.1	81.9	11.01%	242
P3	254	17%	10.3	100%	0.4	63.4	9.75%	215
P4	1494	100%	5.2	50%	1.1	88.2	6.69%	147
P5	747	50%	5.2	50%	0.5	82.8	5.19%	114
P6	254	17%	5.2	50%	0.2	66.1	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


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DR By: R & D

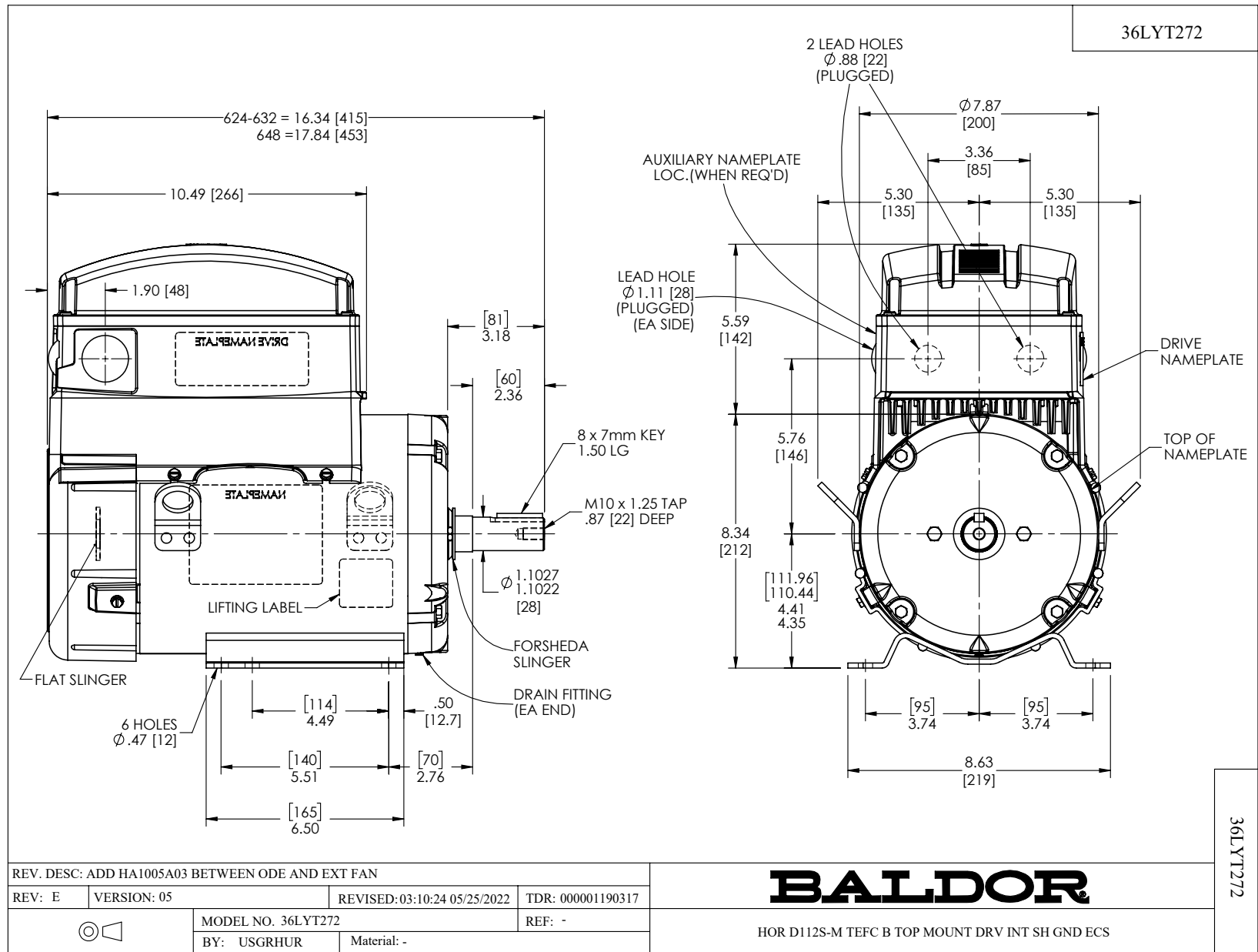
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APP By: USJAROB1

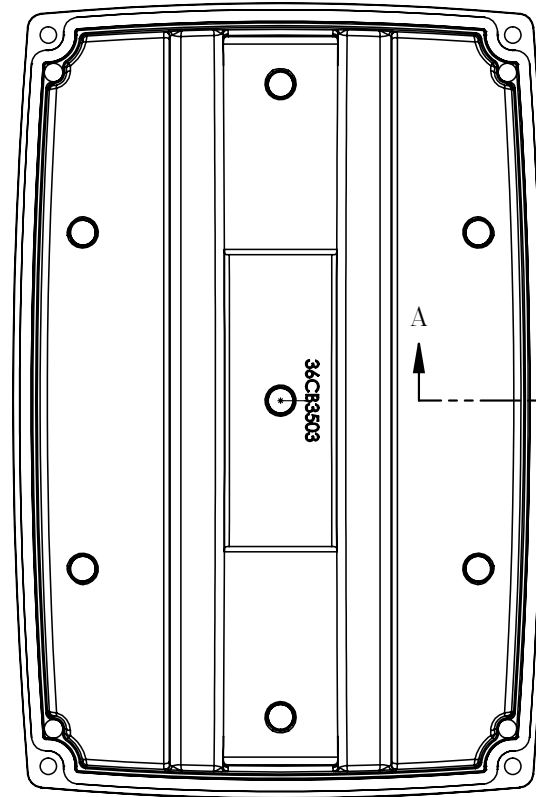
Date: 01/14/2025
**AC MOTOR
PERFORMANCE
CURVES**
36WGA0036

36-0000-3638

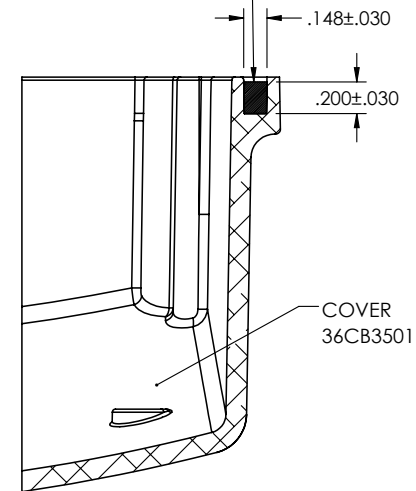
Test - 111793



36CB3503A00



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



SECTION A-A

36CB3503A00

REV. DESC: NEW

REV: -

VERSION: 00

REVISED: 09:13:16 01/15/2020

TDR: 000001129989



MODEL NO. 36CB3503A00

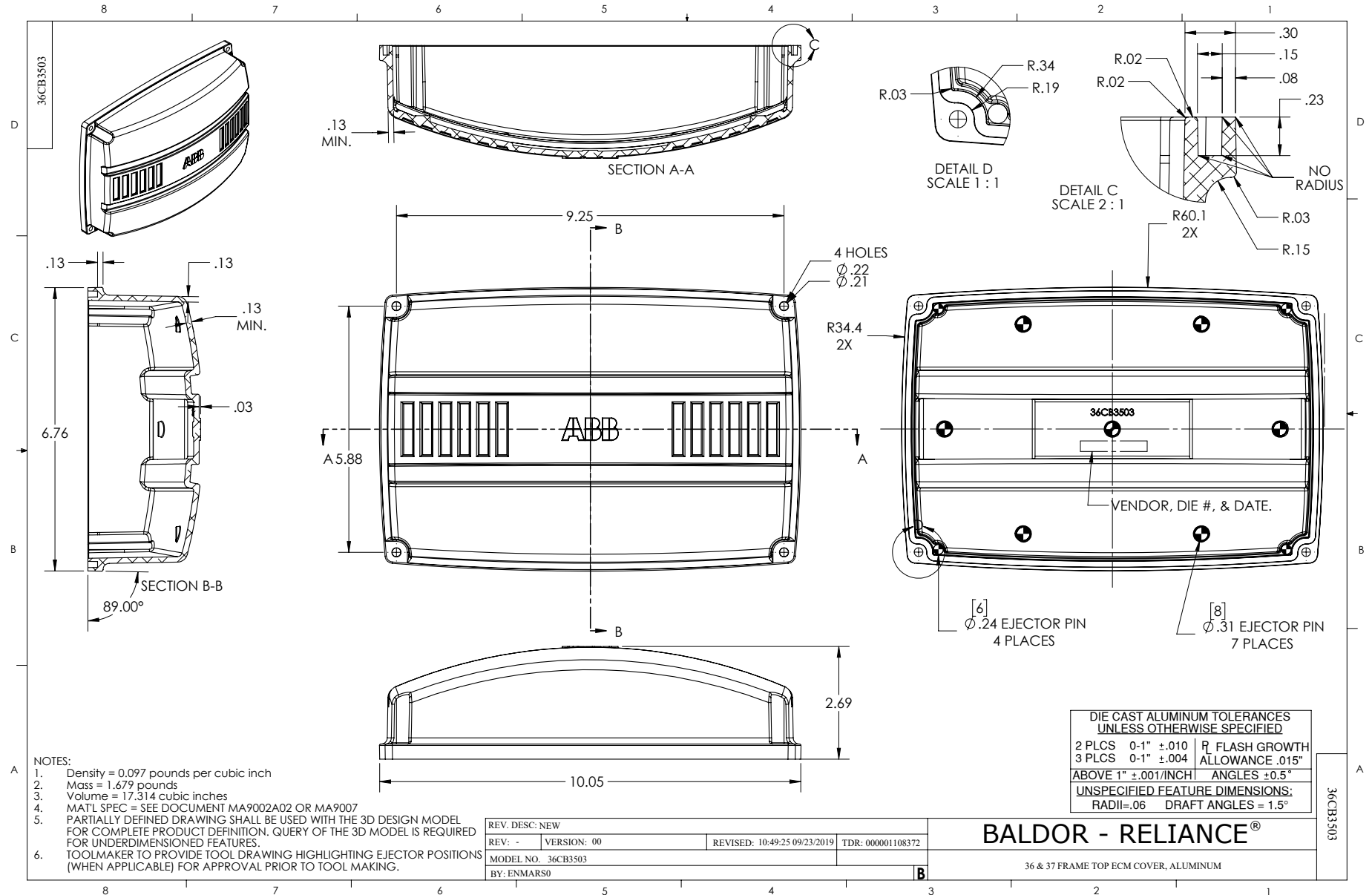
REF: -

BY: ENMARS0

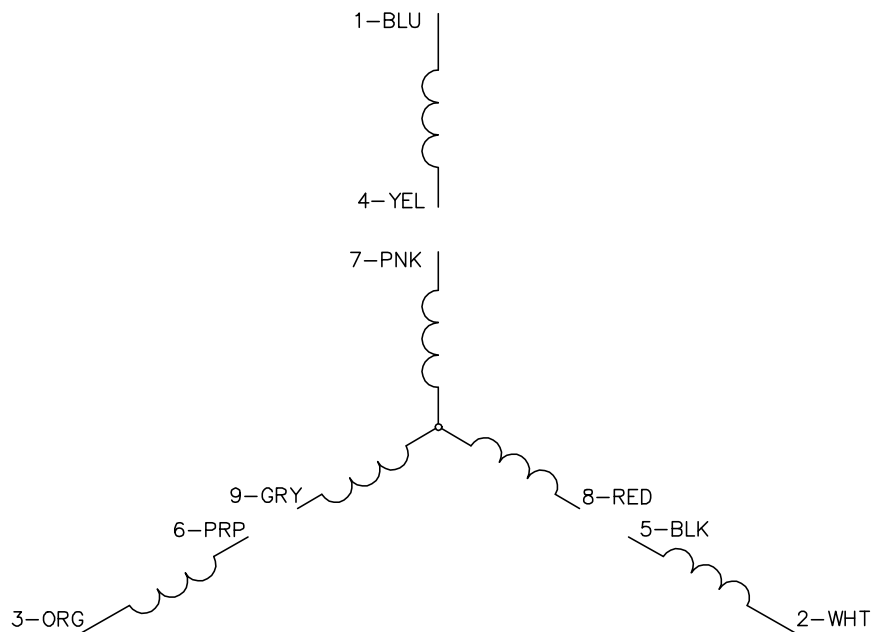
Material: -

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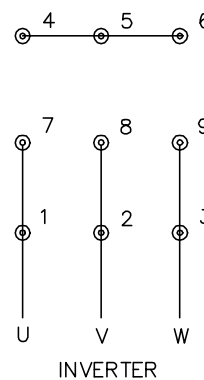
36 & 37 FRAME TOP ECM ALUMINUM COVER WITH FOAM SEAL



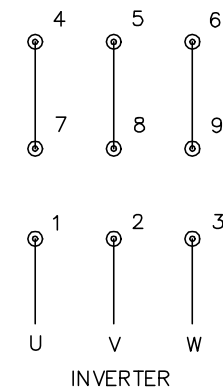
CD0005A25



LOW VOLTAGE
(2Y)



HIGH VOLTAGE
(1Y)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: NEW		
REV. LTR: -	VERSION: 00	TDR: 000001135746
FILE: \AAA\00253\082	REVISED: 01:10:57 03/30/2020	BY: ENMARSO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, ECS
SH 1 of 1

CD0005A25

