

ABB BALDOR RELIANCE III

Customer information packet

ECS101T3K3EF4

3KW, 1500RPM, 3PH, 50HZ, D112S, 3632B, TEFC, B3

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	3.000 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	380.0 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	5.300 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	S1
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0022
Layout	36LYT272
Eff. date	05-08-2024
CD Diagram	CD0006B03
Poles	04
Leads	3#12 19" LONG LEADS
Proprietary	False
Created date	01-10-2023

High Voltage Full Load Amps	5.3 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	3632B
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.	ECIN4A5P8				
U1	400	PH	3	HZ	50
I1	7.1	W/EXT. CHOKE			6
SERIAL #					

NP3968B01A01

CAT.NO.	ECS101T3K3EF4									
SPEC.	36-0000-3639				YR					
FRAME	D112S	IP	55	WT.	97					
KW	3	HZ	50	PH	3	DUTY-IPM	S1			
INS CL	F	CLASS RISE			AMB-C	40				
EFF. CL	IE5	EFF	92.4	COSφ	97					
VOLTS	380		FLA	5.3						
1/MIN	1500			1/MIN MAX	3000					
BEMF (V)	210			RS (OHMS)	3.3					
LD (MH)	54			LQ (MH)	191					
VPWM	CP =	50		TO	100					
CT	5	TO	50	VT	1	TO	50			
MATCHED INV	ECIN4A5P8									
DE	6206		ODE	6205						
SERIAL #										

Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	5.3	Max Amps		Cs Diagram	CS1126	BEMF	210
KW	3	VFD#	ECIN4A5P8			LD	54
RPM	1500	S.F.	1.00			LQ	191
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.0984 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	1336	90%	14.1	100%	3.6	92.9	6.79%	204
P2	750	50%	14.1	100%	2.0	90.1	5.49%	165
P3	380	25%	14.1	100%	1.0	83.9	4.85%	146
P4	1350	90%	7.0	50%	1.8	93.3	3.26%	98
P5	750	50%	7.0	50%	1.0	91.3	2.40%	72
P6	750	50%	3.5	25%	0.5	91.2	1.22%	36
P7	378	25%	3.5	25%	0.3	87.7	0.88%	27

61800-9-2 PDS Performance at Reference Operating Points

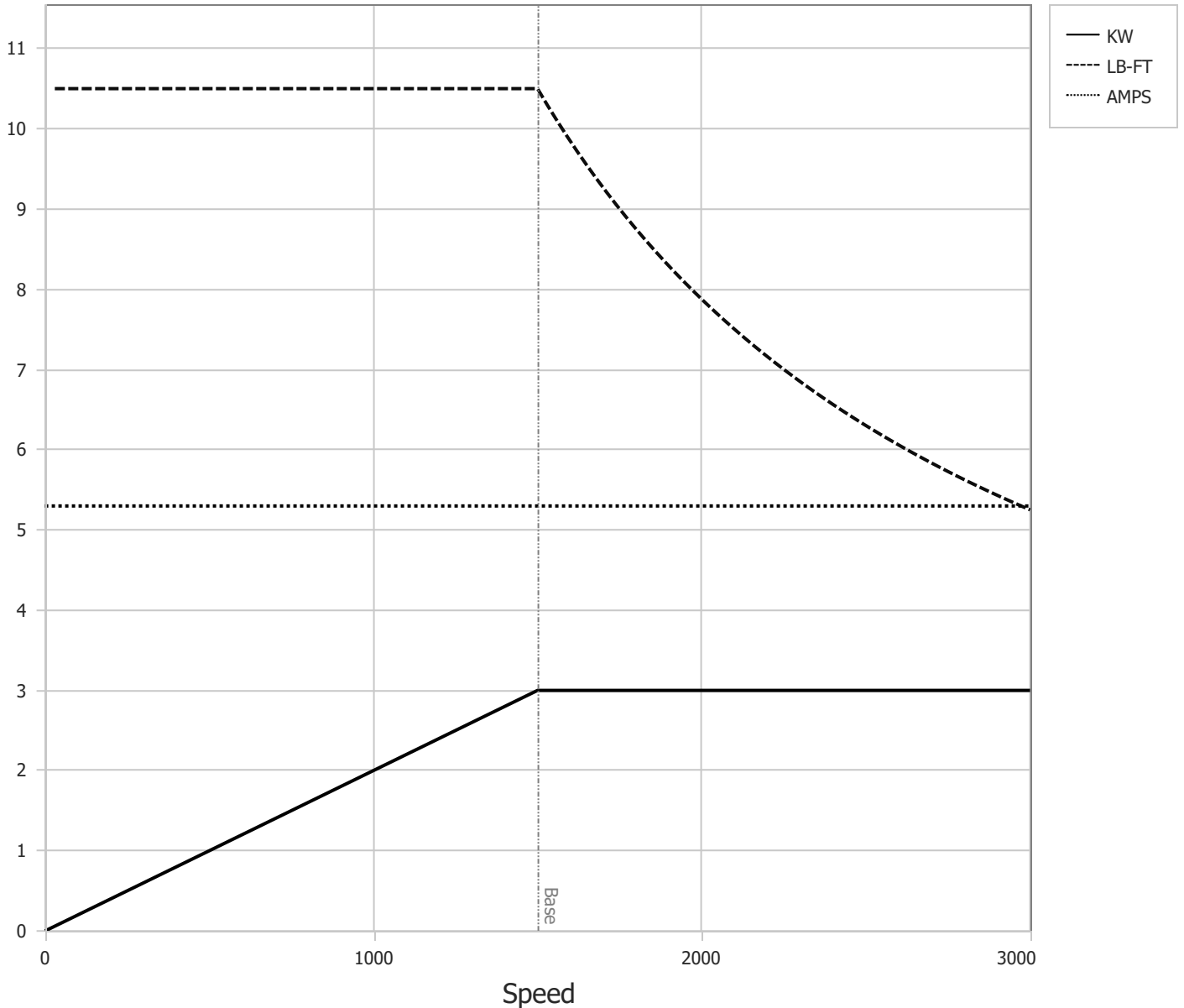
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1508	100%	14.1	100%	4.0	90.2	10.89%	327
P2	750	50%	14.1	100%	2.0	86.8	7.63%	229
P3	255	17%	14.1	100%	0.7	72.0	6.59%	198
P4	1494	100%	7.0	50%	2.0	91.2	4.79%	144
P5	750	50%	7.0	50%	1.0	86.8	3.79%	114
P6	255	17%	7.0	50%	0.3	73.2	3.11%	93
P7	750	50%	3.5	25%	0.5	84.8	2.24%	67
P8	255	17%	3.5	25%	0.2	70.6	1.77%	53

Points not taken in certified order.

BALDOR • RELIANCE	DR By: <u>R & D</u>	AC MOTOR PERFORMANCE CURVES	36WGA0022 36-0000-3639 Test - 111783
	CK By: <u>USTOSAN</u>		
	APP By: <u>USJAROB1</u>		
	Date: <u>01/09/2025</u>		

Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	5.3	Max Amps		Cs Diagram	CS1126	BEMF	210
KW	3	VFD #	ECIN4A5P8			LD	54
RPM	1500	S.F.	1.00			LQ	191
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.0984 Meas L-L

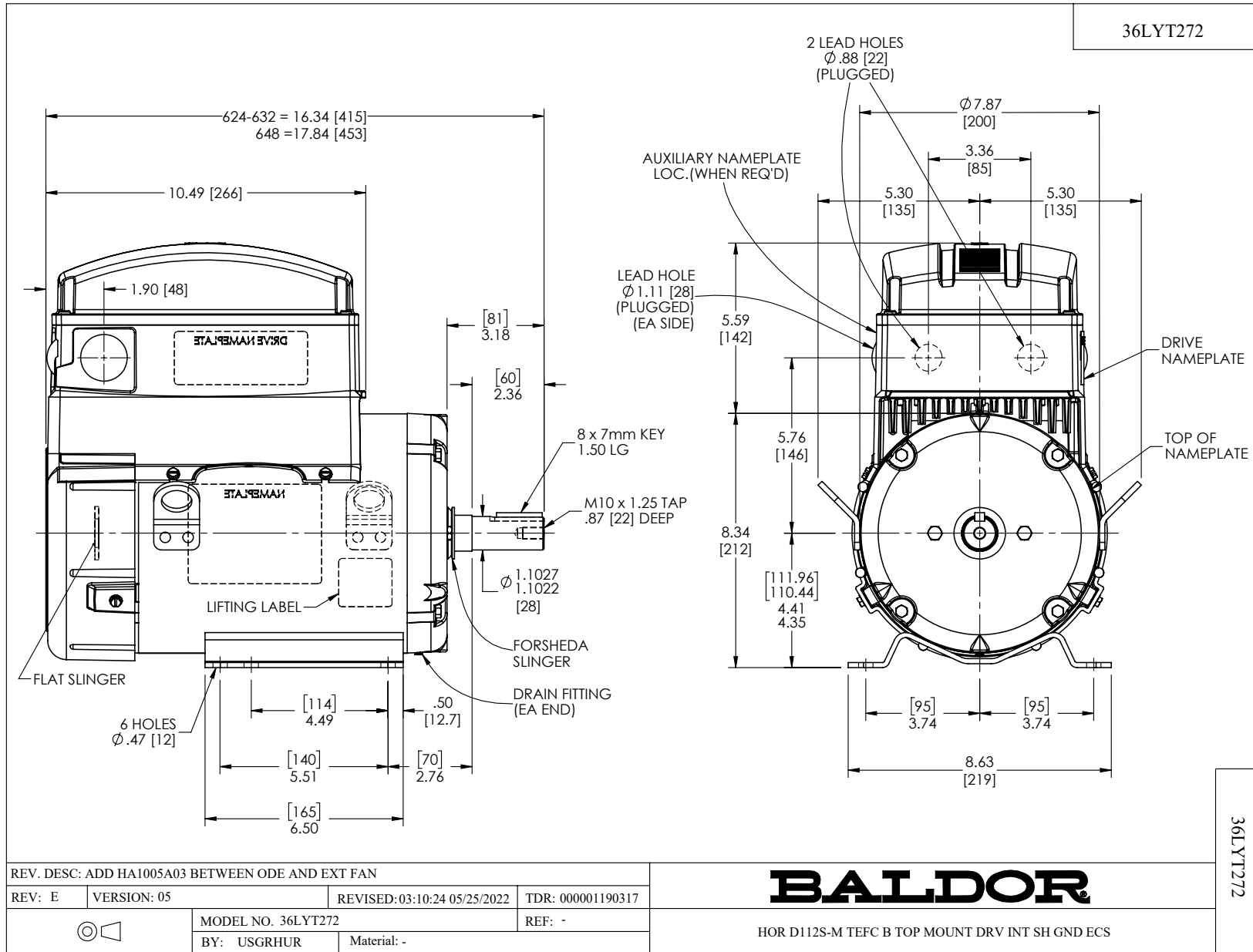
Constant Duty Operating Range



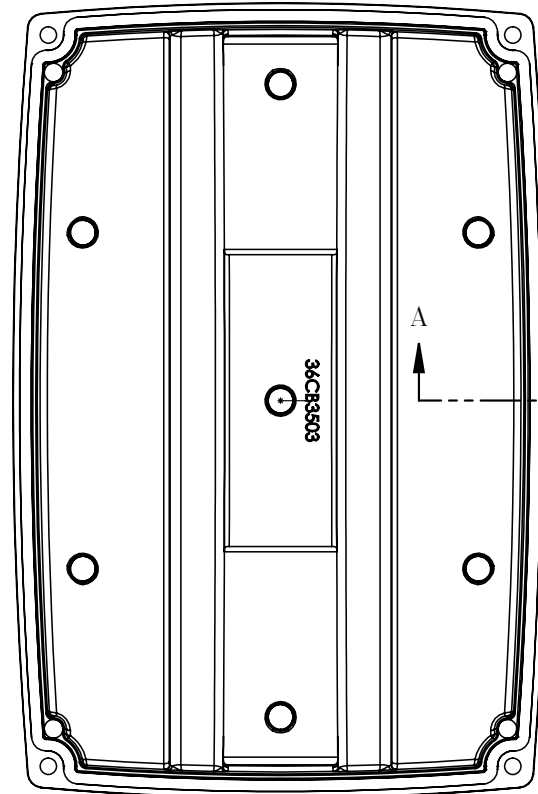
DR By: R & D
 CK By: USTOSAN
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 Date: 01/09/2025

**AC MOTOR
PERFORMANCE
CURVES**

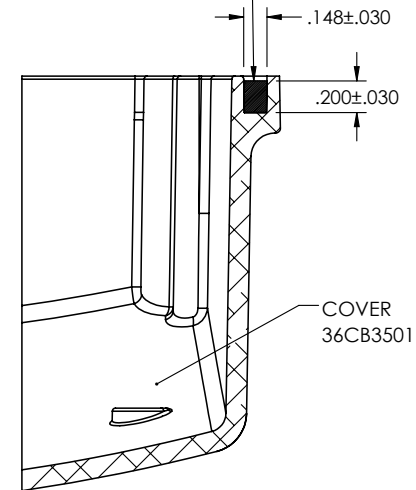
36WGA0022
 36-0000-3639
 Test - 111783



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
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MODEL NO. 36CB3503A00

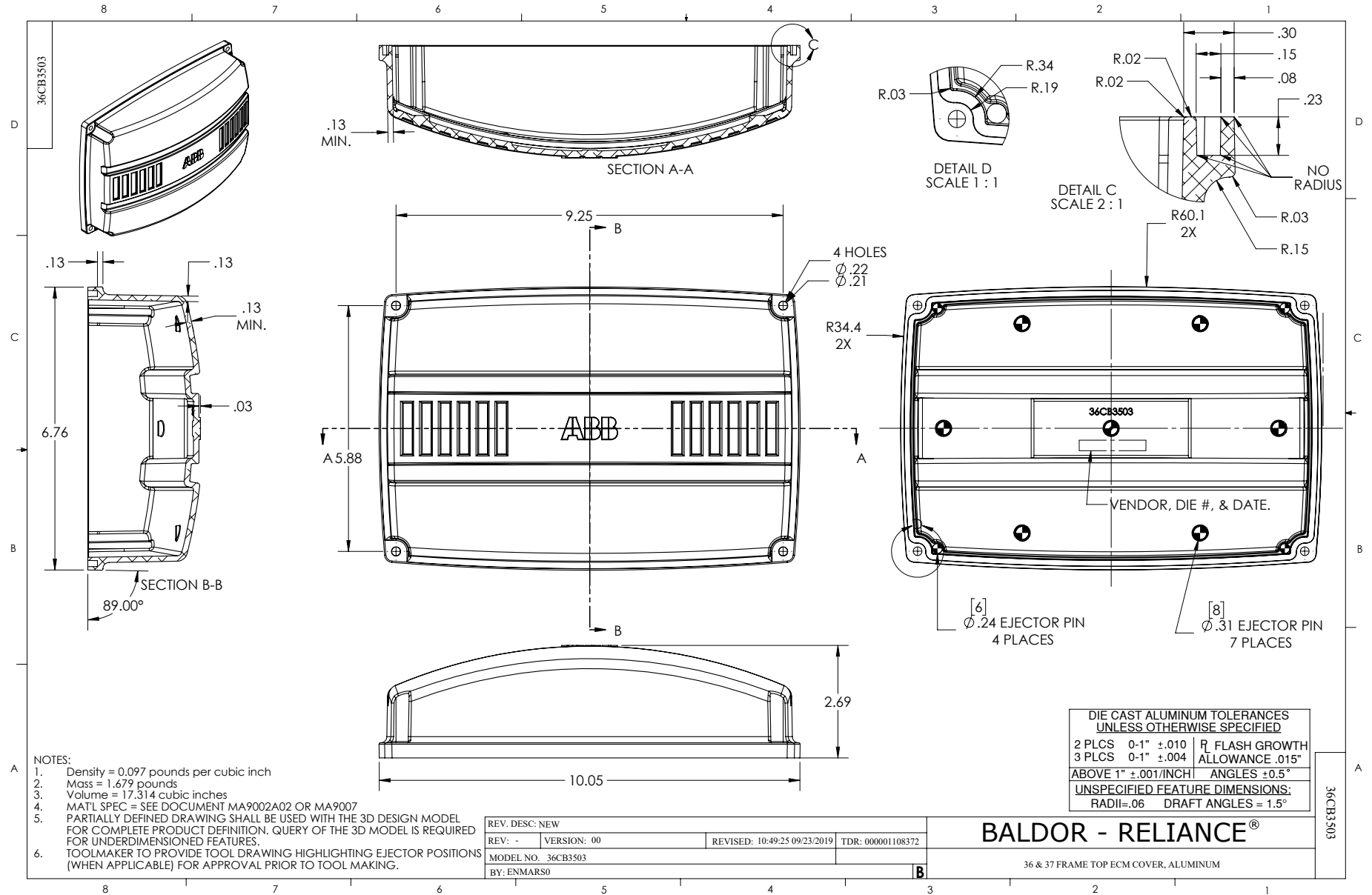
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BY: ENMARS0

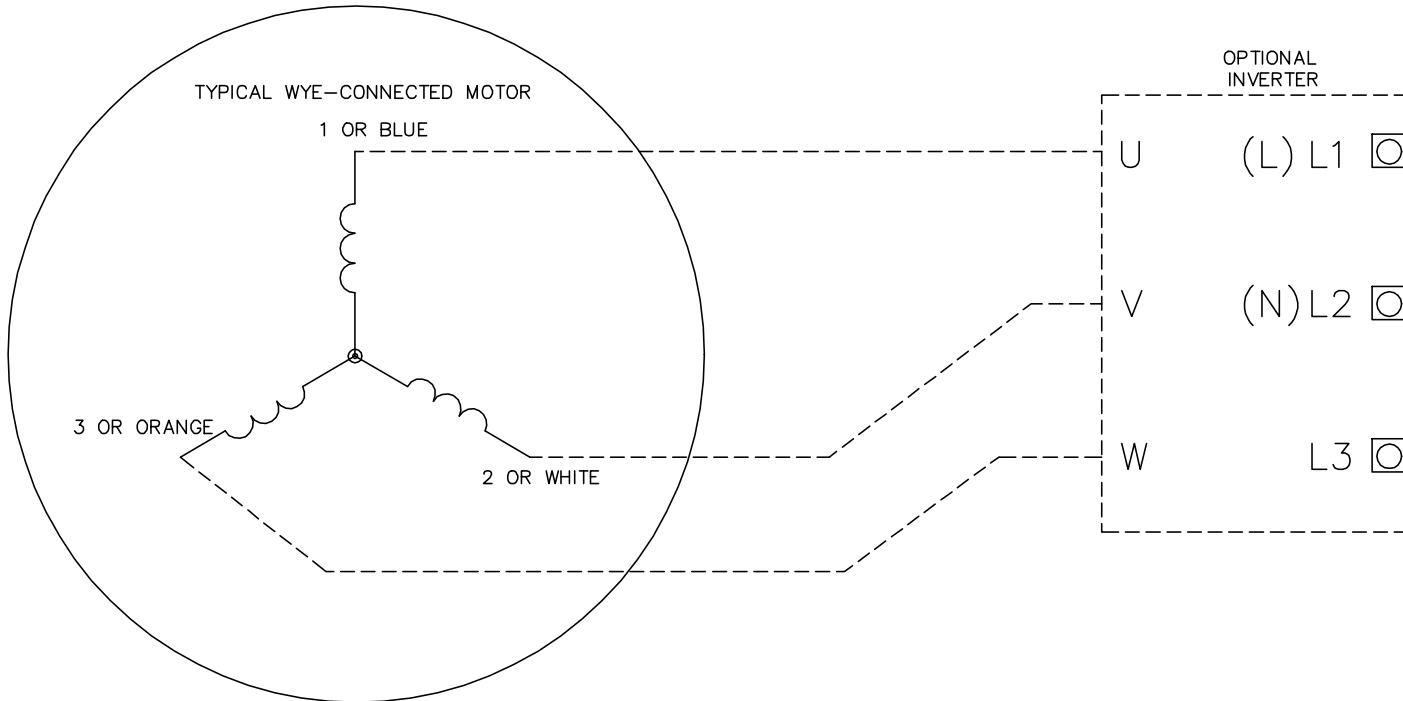
Material: -

BALDOR - RELIANCE®

36 & 37 FRAME TOP ECM ALUMINUM COVER WITH FOAM SEAL



CD0006B03



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.

CD0006B03

REV. DESC: CHANGE LEAD COLORS TO BLUE WHITE ORANGE		
REV. LTR: A	VERSION: 01	TDR: 000001158598
FILE: \AAA\00252\917	REVISED: 11:01:03 01/19/2021	BY: ENMARSO
MTL: -		© □

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE CONNECTED, ECS

SH 1 of 1