



Customer information packet

ECS101T3K5P5FF4

5.5KW, 1500RPM, 3PH, 50HZ, D132S, 3730B, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D132S
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	5.500 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
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	10.500 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	S1
Efficiency @ 100% Load	92.9 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	10.5 a

Part detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGA0020
Layout	37LYQ497
Eff. date	06-16-2025
CD Diagram	CD0006B03
Poles	04
Leads	3#12 19" LONG LEADS
Proprietary	False
Created date	01-11-2023

Insulation Class	F
Inverter Code	Inverter Duty
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Terminal Block
Motor Standards	IEC
Motor Type	3730B
Mounting Arrangement	B3
Number of Poles	4
Overall Length	17.87 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.497 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

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EC-Titanium™

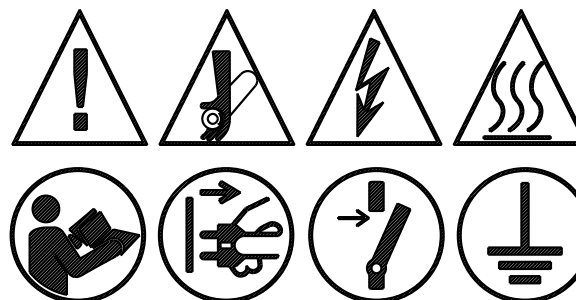
CAT. NO.	ECS101T3K5P5FF4									
SPEC.	37-0000-0494								YR	***
FRAME	D132S				ENCL.		TEFC		IP	55
HP	5.5		RATING		40C AMB-CONT					
NOM. EFF.	92.9			PF		97		SF		1
VOLTS	380				FLA		10.71			
RPM	1500			RPM MAX			3000			
HZ	50			PH.		3		CLASS		F
BEMF (V)	180.48				Rs (Ω)		1.39			
Ld (mH)	28.09				Lq (mH)		80.586			
INV TYP	VPWM		CHP		50		TO 100		HZ	
	CT	5			TO 50		HZ		VT	1 TO 50 HZ
MATCHED INV	EC IN4A12P0									
BEARING	DE	6208				ODE		6206		
SERIAL#	***									



ELECTRONICALLY PROTECTED MOTOR
FOR INDUSTRIAL USE

ABB MOTORS AND MECHANICAL INC.
5711 R.S. BOREHAM JR. ST., FORT SMITH, AR. MFG IN U.S.A.

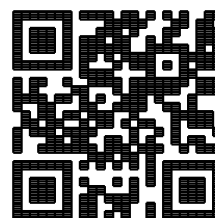
FERRITE ASSISTED
SYNCHRONOUS RELUCTANCE MOTOR
FOR INVERTER USE ONLY



PERMANENT MAGNET MOTOR. WHEN SHAFT IS
ROTATED, VOLTAGE WILL BE GENERATED AT
THE MOTOR TERMINALS.

MOTEUR À AIMANT PERMANENT. LORSQUE
L'ARBRE TOURNE, UNE TENSION SERA
GÉNÉRÉE AUX BORNES DU MOTEUR.

BALDOR-RELIANCE
SHAFT GROUNDING BRUSH INSTALLED



EN/IEC 60034
-1;-5
IEC TS 60034
-30-2

UL **us**
LISTED
E46145

BALDOR • RELIANCE

EC-Titanium™

PART NO. EC IN4A12P0

U1 400 PH 3 HZ 50

I1 MAX 10.7 W /EXT. CHOKE 10

SERIAL # ***

ABB MOTORS AND MECHANICAL
INC. FORT SMITH, AR.
MFG. IN U.S.A.



POWER DOWN FOR
5 MINUTES BEFORE
REMOVING COVER

METTRE HORS TENSION
PENDANT 5 MINUTES
AVANT DE RETIRER LE
COUVERCLE

Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	10.71	Max Amps		Cs Diagram	CS1126	BEMF	180.48
KW	5.5	VFD#	ECIN4A12P0			LD	28.09
RPM	1500	S.F.	1.00			LQ	80.586
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	1.4059
						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	1351	90%	25.8	100%	6.6	91.2	8.59%	478
P2	750	50%	25.8	100%	3.7	86.8	7.52%	418
P3	363	25%	25.8	100%	1.8	80.6	5.78%	321
P4	1351	90%	12.9	50%	3.3	91.0	4.42%	246
P5	751	50%	12.9	50%	1.8	89.5	2.91%	162
P6	751	50%	6.5	25%	0.9	88.0	1.70%	94
P7	360	25%	6.5	25%	0.4	83.0	1.22%	68

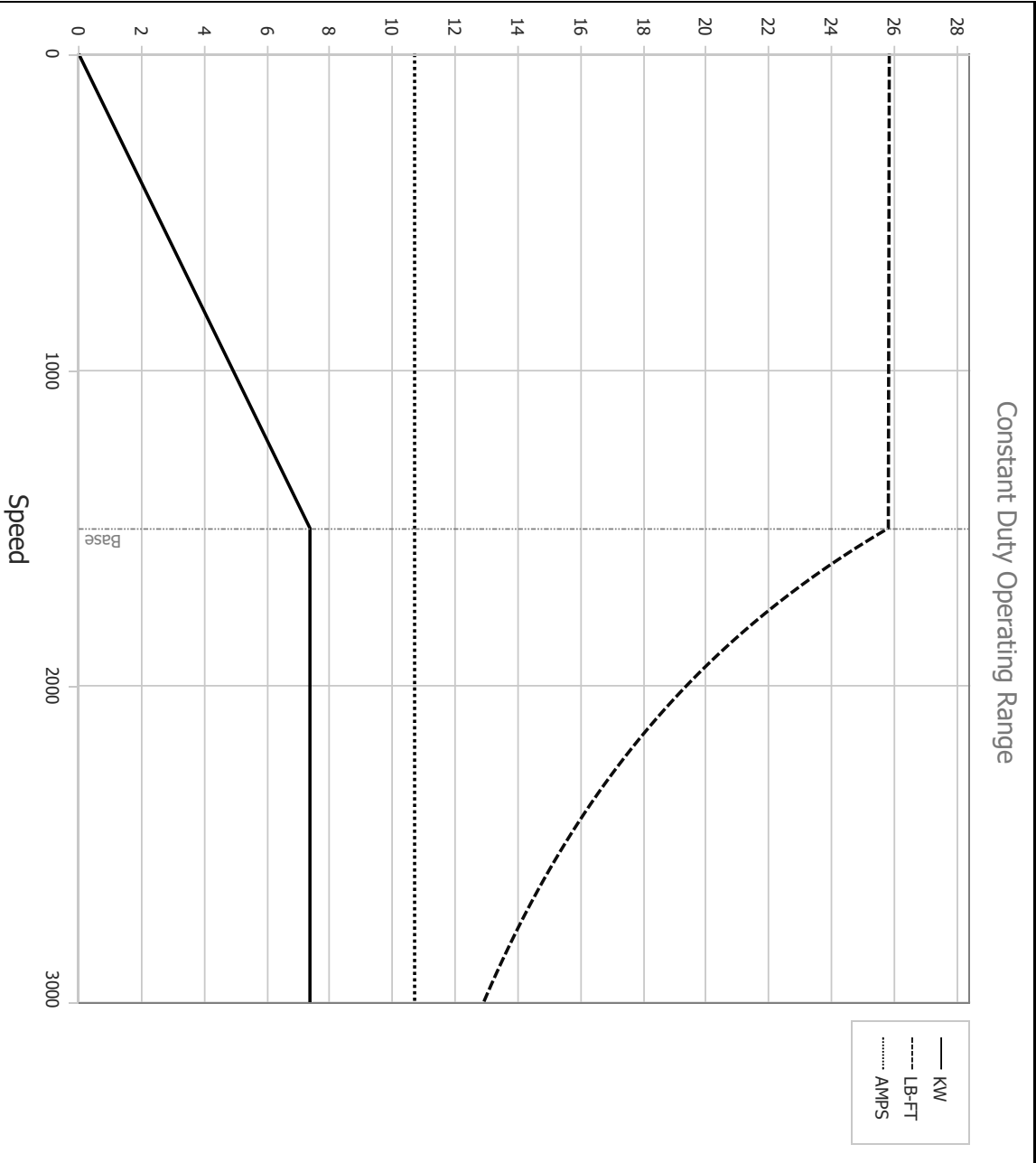
61800-9-2 PDS Performance at Reference Operating Points

	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1501	100%	25.8	100%	7.4	91.1	9.70%	540
P2	750	50%	25.8	100%	3.7	84.7	8.94%	497
P3	255	17%	25.8	100%	1.3	71.4	6.72%	374
P4	1501	100%	12.9	50%	3.7	90.7	5.07%	282
P5	751	50%	12.9	50%	1.8	87.8	3.45%	192
P6	255	17%	12.9	50%	0.6	75.7	2.69%	150
P7	751	50%	6.5	25%	0.9	86.8	1.88%	105
P8	255	17%	6.4	25%	0.3	75.8	1.34%	75

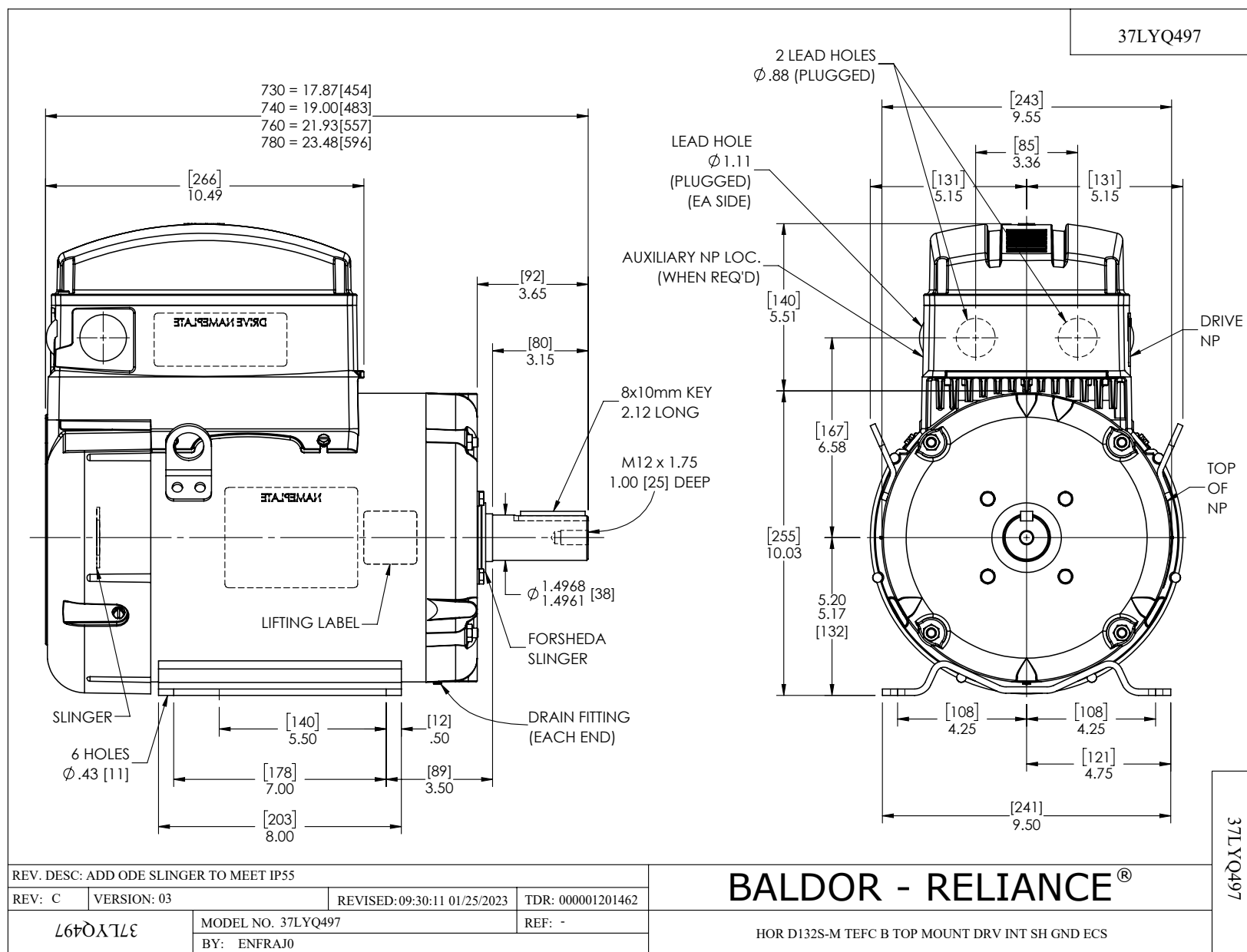
Points not taken in certified order.

BALDOR • RELIANCE	DR By: <u>R & D</u> CK By: <u>USWEALE1</u> App By: Date: <u>03/14/2025</u>	AC MOTOR PERFORMANCE CURVES	37WGA0020 37-0000-0494 Test - 112062
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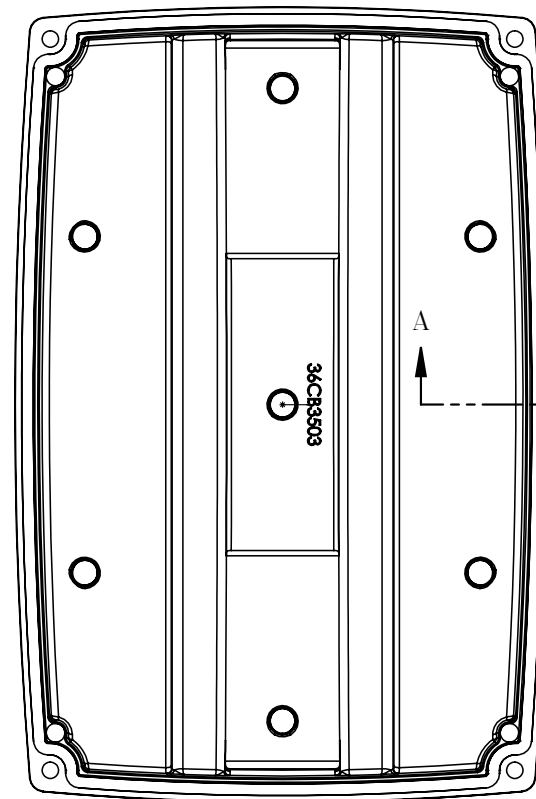
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						Meas L-L	



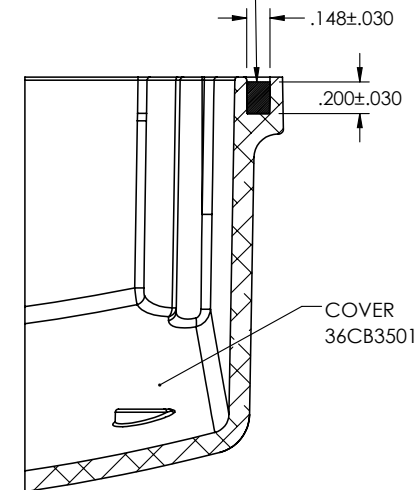
BALDOR • RELIANCE	DR By: <u>R & D</u> CK By: <u>USWEALE1</u> APP By: Date: <u>03/14/2025</u>	AC MOTOR PERFORMANCE CURVES	37WGA0020 37-0000-0494 Test - 112062
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36CB3503A00



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



SECTION A-A

REV. DESC: NEW

REV: -

VERSION: 00

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

TDR: 000001129989



MODEL NO. 36CB3503A00

REF: -

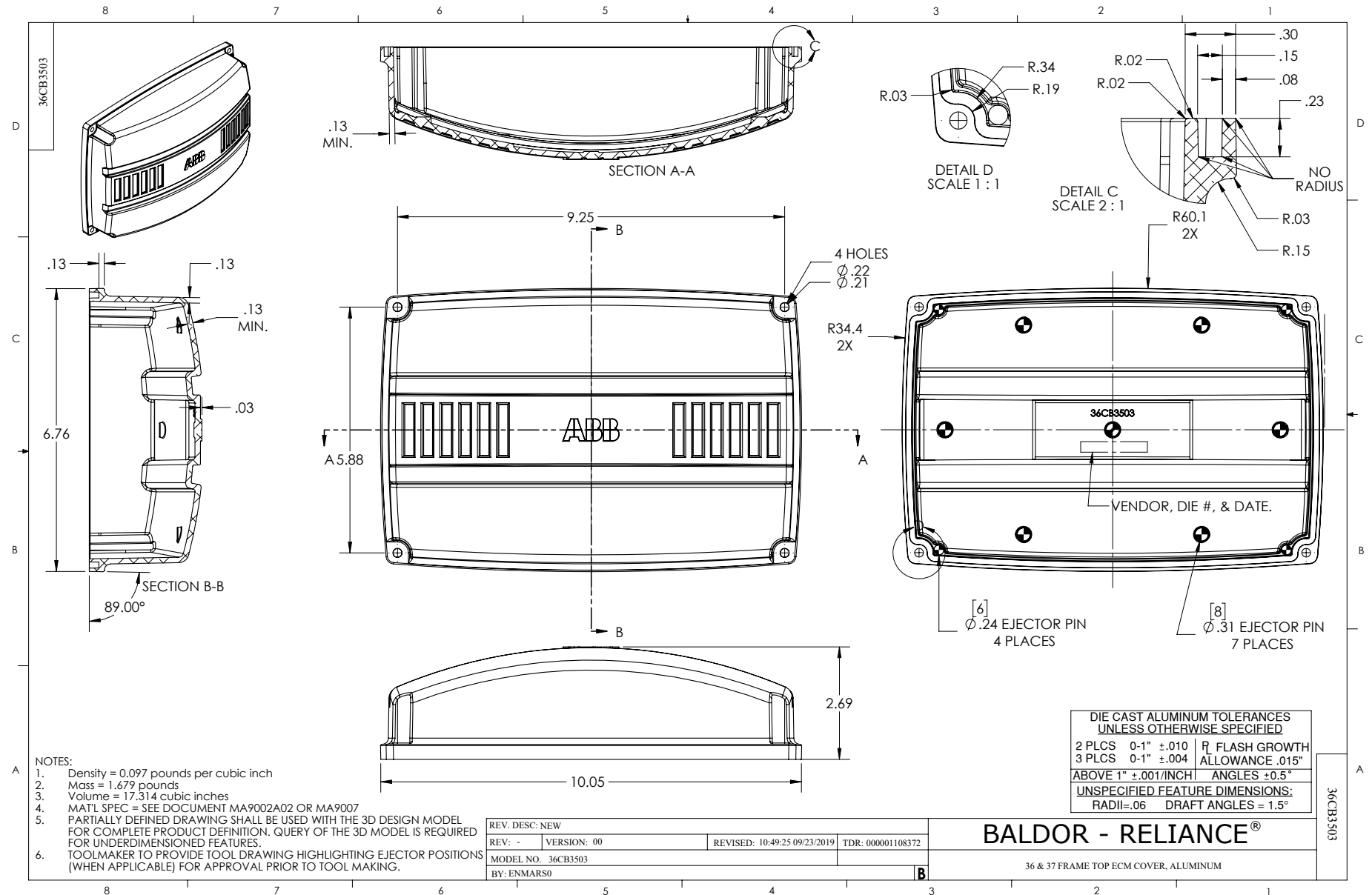
BY: ENMARS0

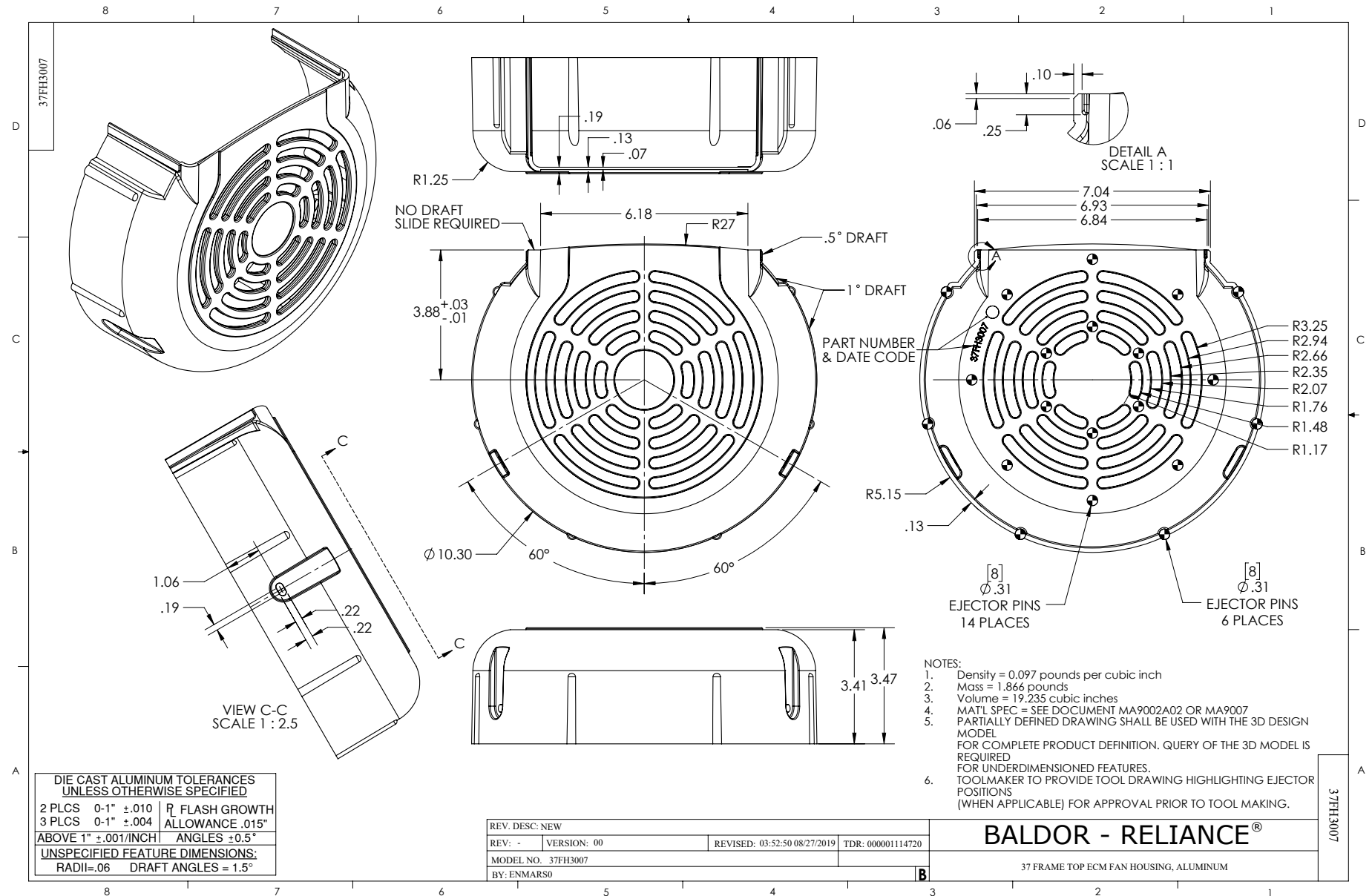
Material: -

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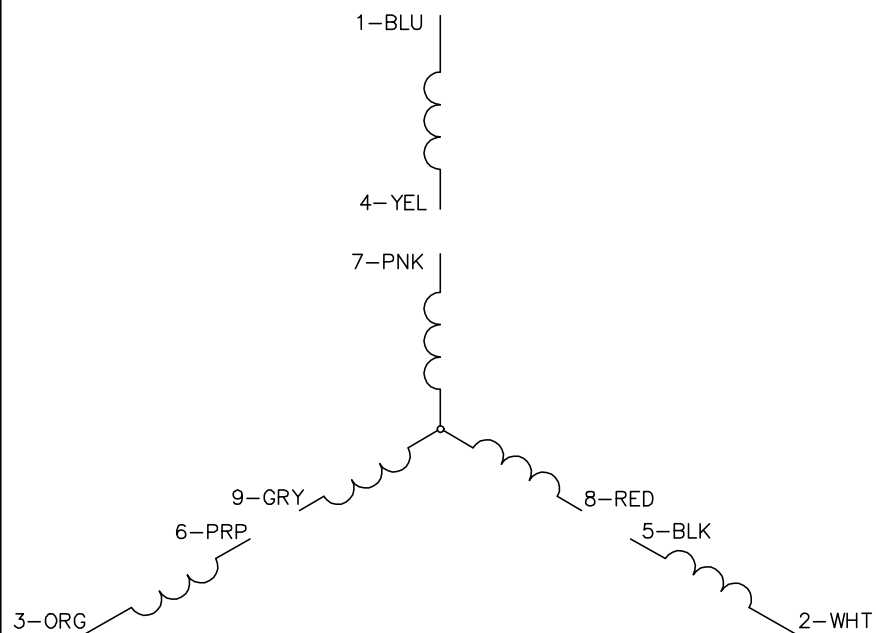
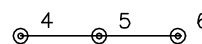
36 & 37 FRAME TOP ECM ALUMINUM COVER WITH FOAM SEAL

36CB3503A00





CD0005A25

LOW VOLTAGE
(2Y)

U V W

INVERTER

HIGH VOLTAGE
(1Y)

U V W

INVERTER

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

