ABB BALDOR RELIANCE

Customer information packet

ECS101T3K5P5FF4

5.5KW, 1500RPM, 3PH, 50HZ, D132S, 3730B, TEFC
Class - None
Division - Not Applicable

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11/5/2026 11:03:15 AM

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

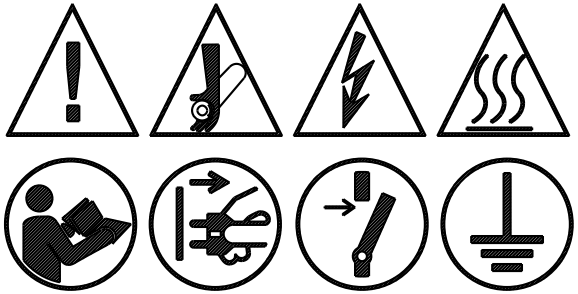
BALDOR·RELIANCE

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	ECIN4A12P0						
BEARING	DE	6208	ODE	6206			
SERIAL#	***						

ELECTRONICALLY PROTECTED MOTOR
FOR INDUSTRIAL USE

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 Á 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
LISTED E46145

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

BALDOR·RELIANCE

EC-Titanium™

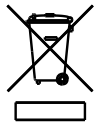
PART NO.	EC IN4A12P0				
U1	400	PH	3	HZ	50
I1 MAX	10.7	W/EXT. CHOKE		10	
SERIAL #	***				



POWER DOWN FOR
5 MINUTES BEFORE
REMOVING COVER

METTRE HORS TENSION
PENDANT 5 MINUTES
AVANT DE RETIRER LE
COUVERCLE

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



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

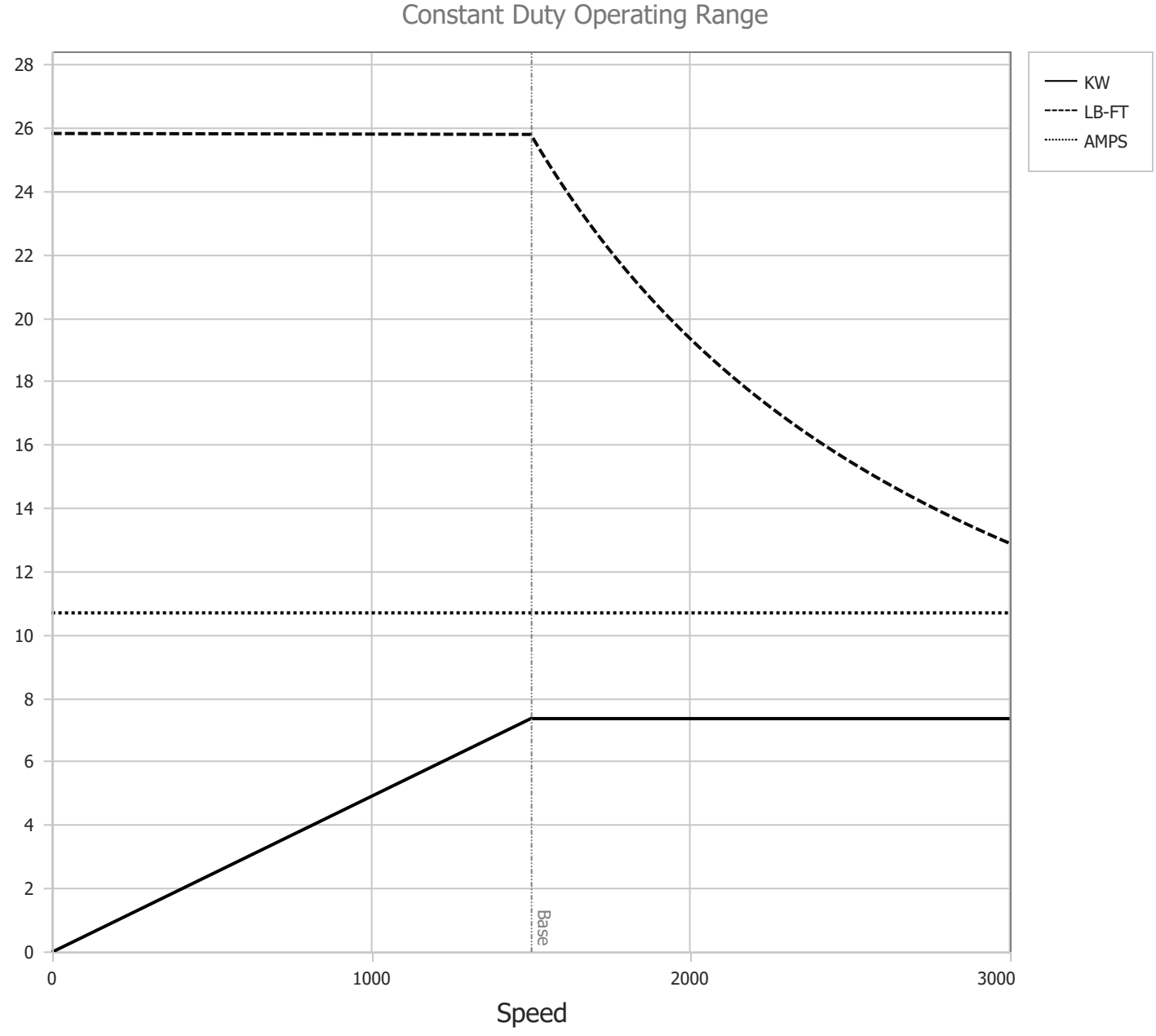
	RPM	% Speed	LB-FT	% Torque	KW	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1351	90%	25.8	100%	6.6	91.2	8.59%	478
P2	750	50%	25.8	100%	3.7	86.8	7.52%	418
P3	363	25%	25.8	100%	1.8	80.6	5.78%	321
P4	1351	90%	12.9	50%	3.3	91.0	4.42%	246
P5	751	50%	12.9	50%	1.8	89.5	2.91%	162
P6	751	50%	6.5	25%	0.9	88.0	1.70%	94
P7	360	25%	6.5	25%	0.4	83.0	1.22%	68

61800-9-2 PDS Performance at Reference Operating Points

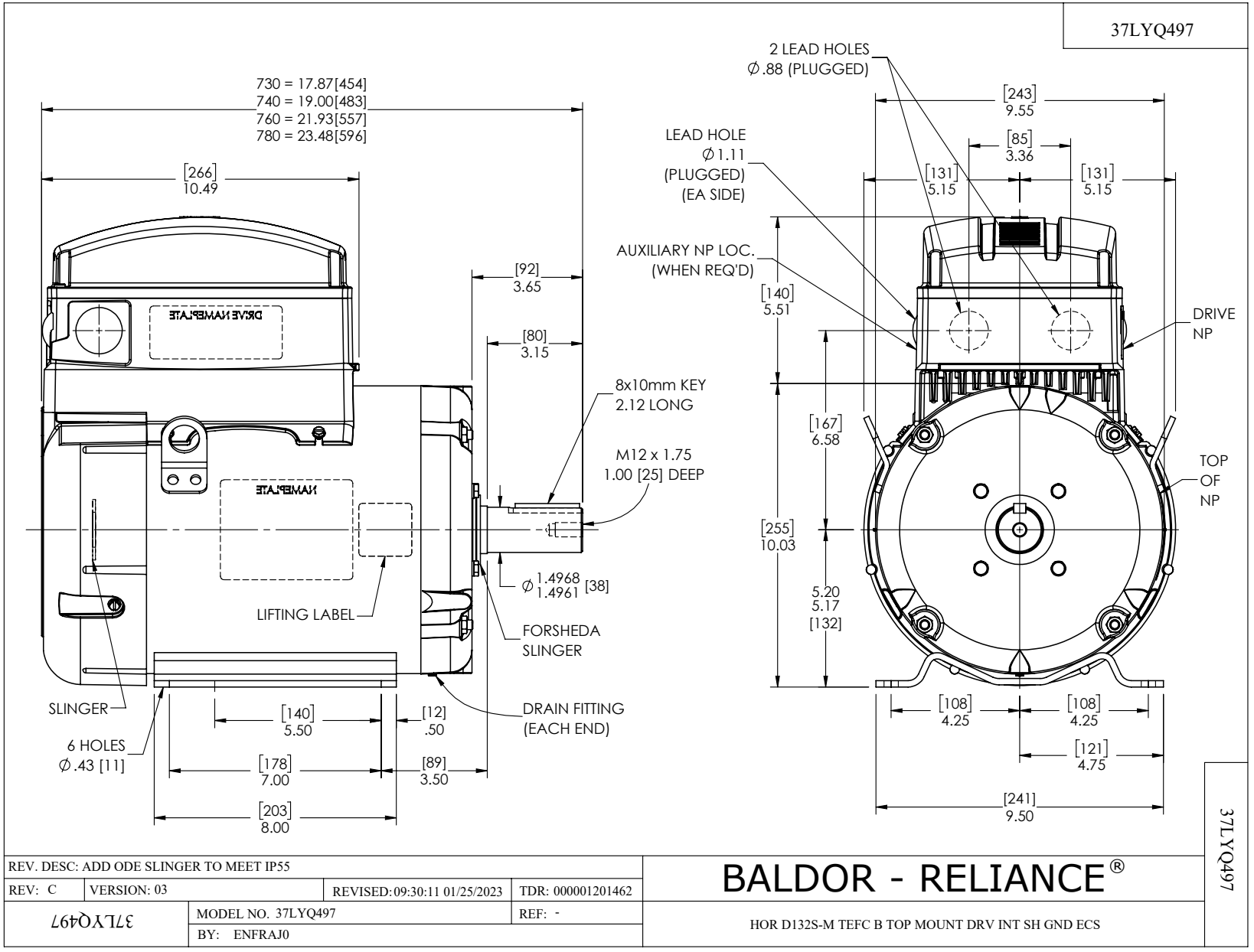
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1501	100%	25.8	100%	7.4	91.1	9.70%	540
P2	750	50%	25.8	100%	3.7	84.7	8.94%	497
P3	255	17%	25.8	100%	1.3	71.4	6.72%	374
P4	1501	100%	12.9	50%	3.7	90.7	5.07%	282
P5	751	50%	12.9	50%	1.8	87.8	3.45%	192
P6	255	17%	12.9	50%	0.6	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.

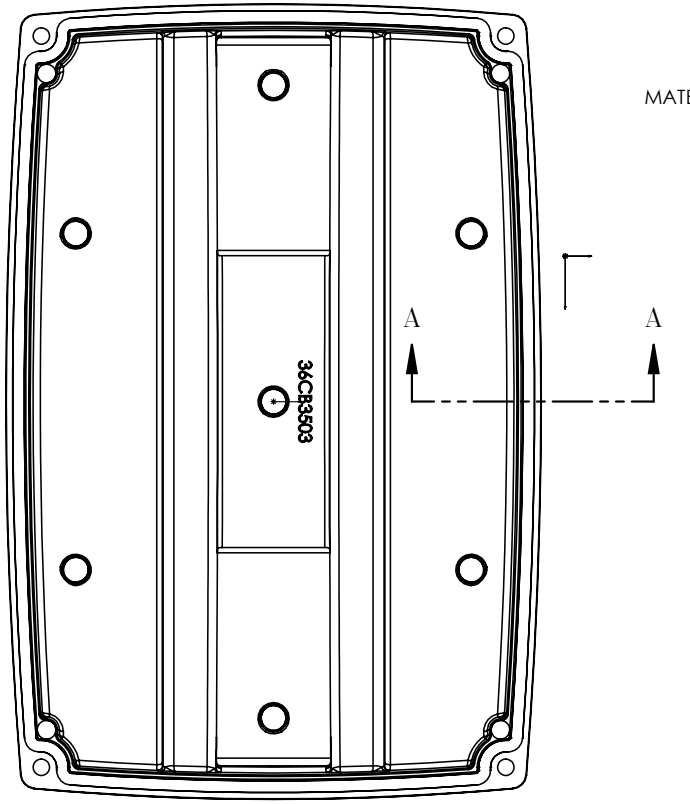
Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	10.71	Max Amps		Cs Diagram	CS1126	BEMF	180.48
KW	5.5	VFD #	ECIN4A12P0			LD	28.09
RPM	1500	S.F.	1.00			LQ	80.586
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	1.4059 Meas L-L



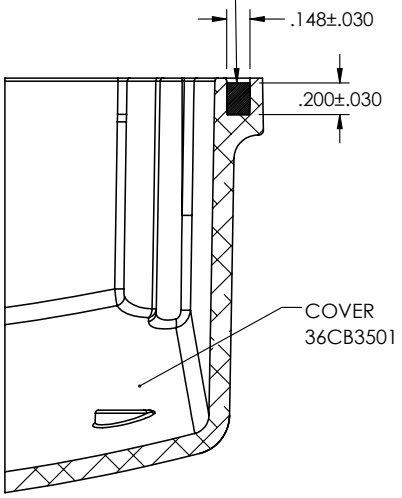
BALDOR • RELIANCE	DR By: R & D CK By: USWEALE1 APP By: Date: 03/14/2025	**AC MOTOR PERFORMANCE CURVES**	**37WGA0020** 37-0000-0494 *Test - 112062*


37LYQ497
730 = 17.87[454]
740 = 19.00[483]
760 = 21.93[557]
780 = 23.48[596]
[266] 10.49
[92] 3.65
[80] 3.15
8x10mm KEY 2.12 LONG
M12 x 1.75 1.00 [25] DEEP
Ø 1.4968 1.4961 [38]
LIFTING LABEL
FORSHEDA SLINGER
DRAIN FITTING (EACH END)
SLINGER
6 HOLES Ø .43 [11]
[140] 5.50
[12] .50
[178] 7.00
[89] 3.50
[203] 8.00
2 LEAD HOLES Ø .88 (PLUGGED)
LEAD HOLE Ø 1.11 (PLUGGED) (EA SIDE)
AUXILIARY NP LOC. (WHEN REQ'D)
[243] 9.55
[85] 3.36
[131] 5.15
[131] 5.15
[140] 5.51
DRIVE NP
[167] 6.58
TOP OF NP
[255] 10.03
5.20 5.17 [132]
[108] 4.25
[108] 4.25
[121] 4.75
[241] 9.50
REV. DESC: ADD ODE SLINGER TO MEET IP55
REV: C
VERSION: 03
REVISED: 09:30:11 01/25/2023
TDR: 000001201462
MODEL NO. 37LYQ497
REF: -
BY: ENFRAJ0
BALDOR - RELIANCE®
HOR D132S-M TEFC B TOP MOUNT DRV INT SH GND ECS
37LYQ497

36CB3503A00



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



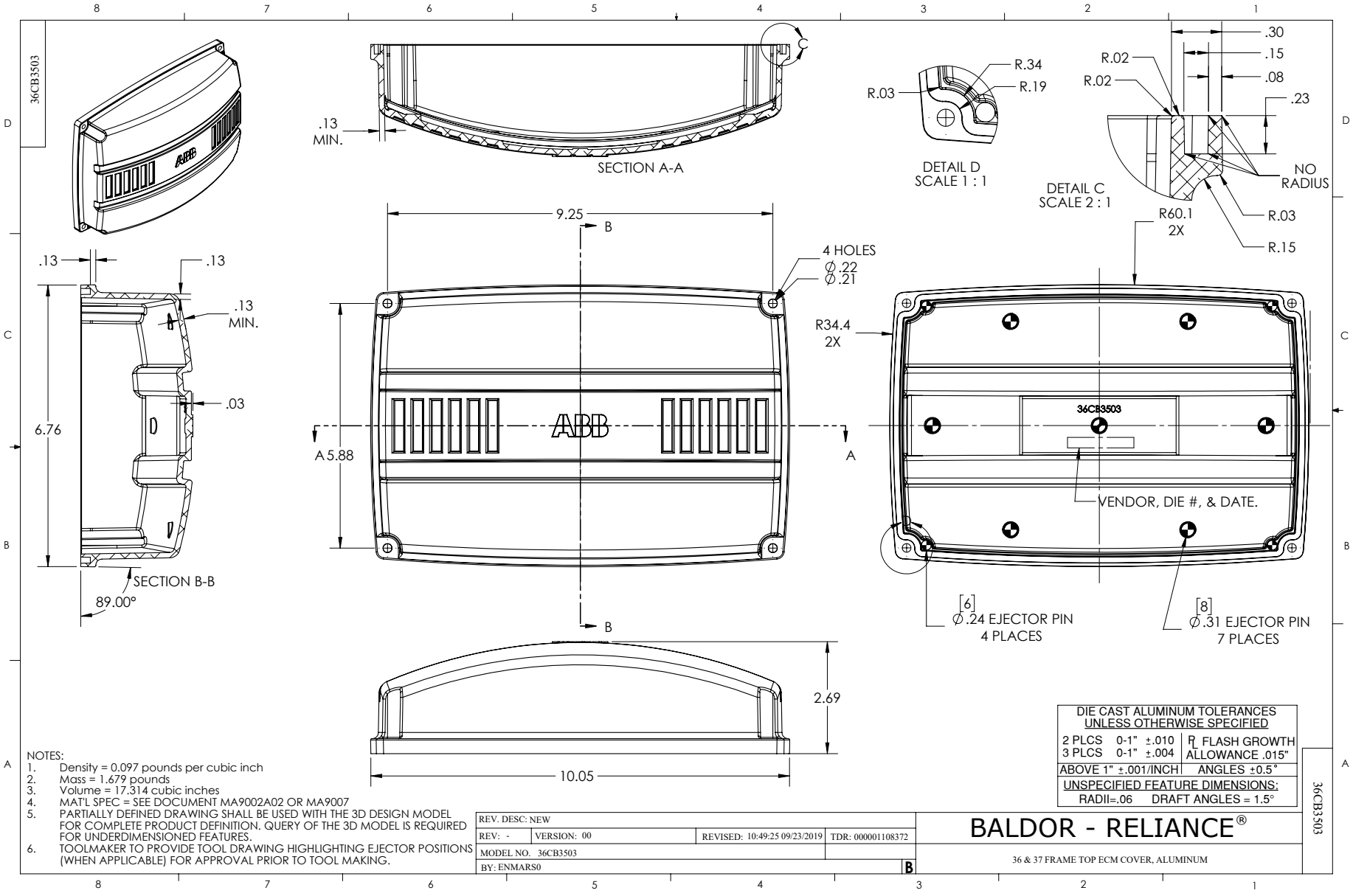
SECTION A–A

36CB3503A00

REV. DESC: NEW			
REV: -	VERSION: 00	REVISED: 09:13:16 01/15/2020	TDR: 000001129989
	MODEL NO. 36CB3503A00		REF: -
	BY: ENMARS0	Material: -	

BALDOR - RELIANCE®

36 & 37 FRAME TOP ECM ALUMINUM COVER WITH FOAM SEAL



DIE CAST ALUMINUM TOLERANCES
UNLESS OTHERWISE SPECIFIED

2 PLCS	0-1" ±.010	R FLASH GROWTH ALLOWANCE .015"
3 PLCS	0-1" ±.004	
ABOVE 1" ±.001/INCH		ANGLES ±0.5°

UNSPECIFIED FEATURE DIMENSIONS:
RADII=.06 DRAFT ANGLES = 1.5°

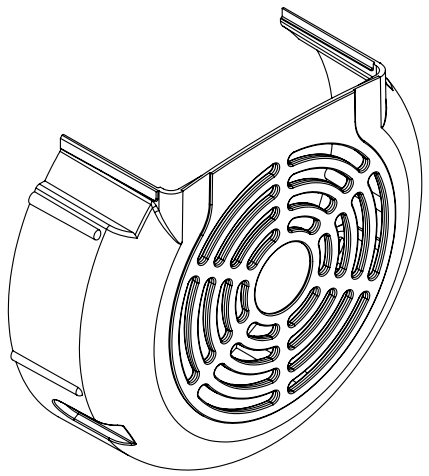
NOTES:
1. Density = 0.097 pounds per cubic inch
2. Mass = 1.679 pounds
3. Volume = 17.314 cubic inches
4. MAT'L SPEC = SEE DOCUMENT MA9002A02 OR MA9007
5. PARTIALLY DEFINED DRAWING SHALL BE USED WITH THE 3D DESIGN MODEL FOR COMPLETE PRODUCT DEFINITION. QUERY OF THE 3D MODEL IS REQUIRED FOR UNDERDIMENSIONED FEATURES.
6. TOOLMAKER TO PROVIDE TOOL DRAWING HIGHLIGHTING EJECTOR POSITIONS (WHEN APPLICABLE) FOR APPROVAL PRIOR TO TOOL MAKING.

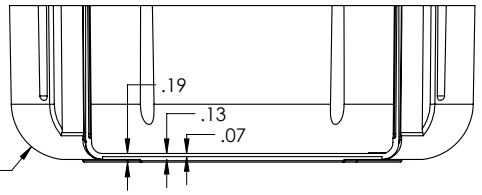
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REV: -	VERSION: 00	REVISED: 10:49:25 09/23/2019	TDR: 000001108372
MODEL NO. 36CB3503			
BY: ENMARS0			B

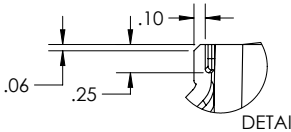
BALDOR - RELIANCE®

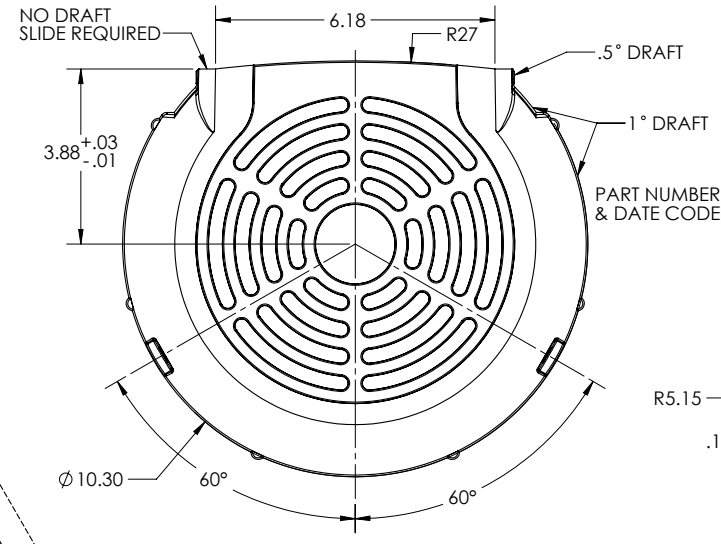
36 & 37 FRAME TOP ECM COVER, ALUMINUM

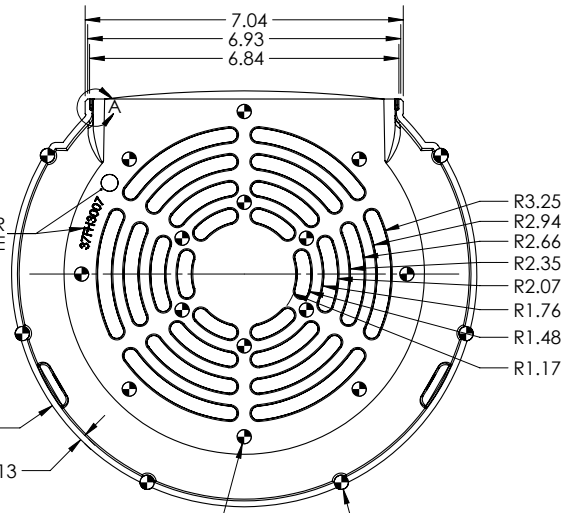
36CB3503

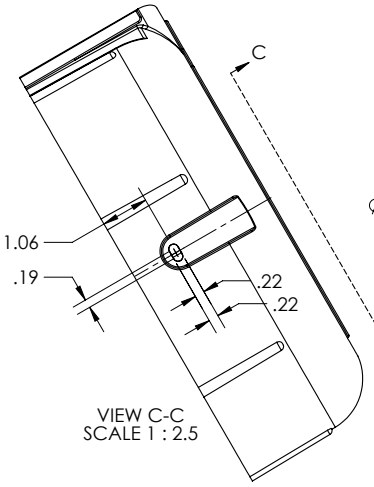


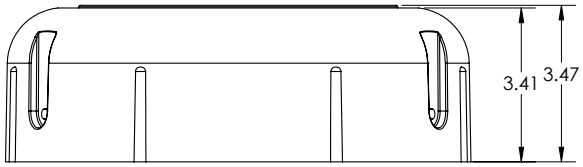












NOTES:
1. Density = 0.097 pounds per cubic inch
2. Mass = 1.866 pounds
3. Volume = 19.235 cubic inches
4. MAT'L SPEC = SEE DOCUMENT MA9002A02 OR MA9007
5. PARTIALLY DEFINED DRAWING SHALL BE USED WITH THE 3D DESIGN MODEL FOR COMPLETE PRODUCT DEFINITION. QUERY OF THE 3D MODEL IS REQUIRED FOR UNDERDIMENSIONED FEATURES.
6. TOOLMAKER TO PROVIDE TOOL DRAWING HIGHLIGHTING EJECTOR POSITIONS (WHEN APPLICABLE) FOR APPROVAL PRIOR TO TOOL MAKING.

DIE CAST ALUMINUM TOLERANCES UNLESS OTHERWISE SPECIFIED	
2 PLCS 0-1" ±.010 3 PLCS 0-1" ±.004	R FLASH GROWTH ALLOWANCE .015"
ABOVE 1" ±.001/INCH	ANGLES ±0.5°
UNSPECIFIED FEATURE DIMENSIONS: RADII=.06 DRAFT ANGLES = 1.5°	

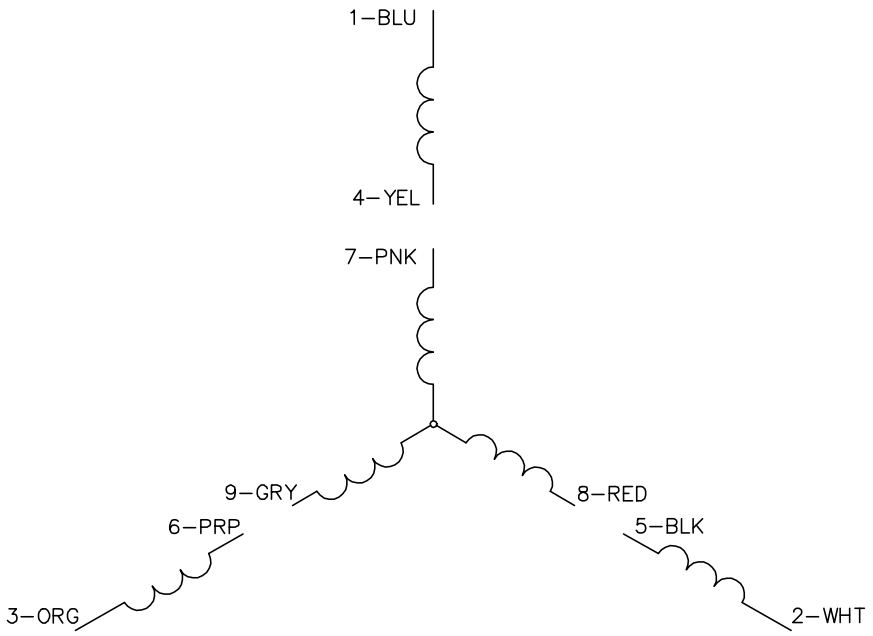
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REV: -	VERSION: 00	REVISED: 03:52:50 08/27/2019	TDR: 000001114720
MODEL NO. 37FH3007			
BY: ENMARS0			B

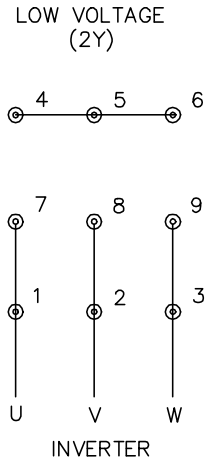
BALDOR - RELIANCE®

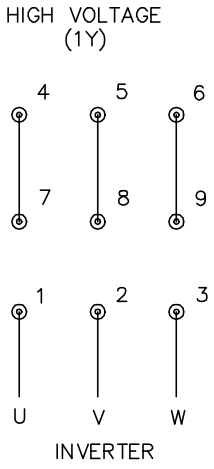
37 FRAME TOP ECM FAN HOUSING, ALUMINUM

37FH3007

CD0005A25







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.

CD0005A25

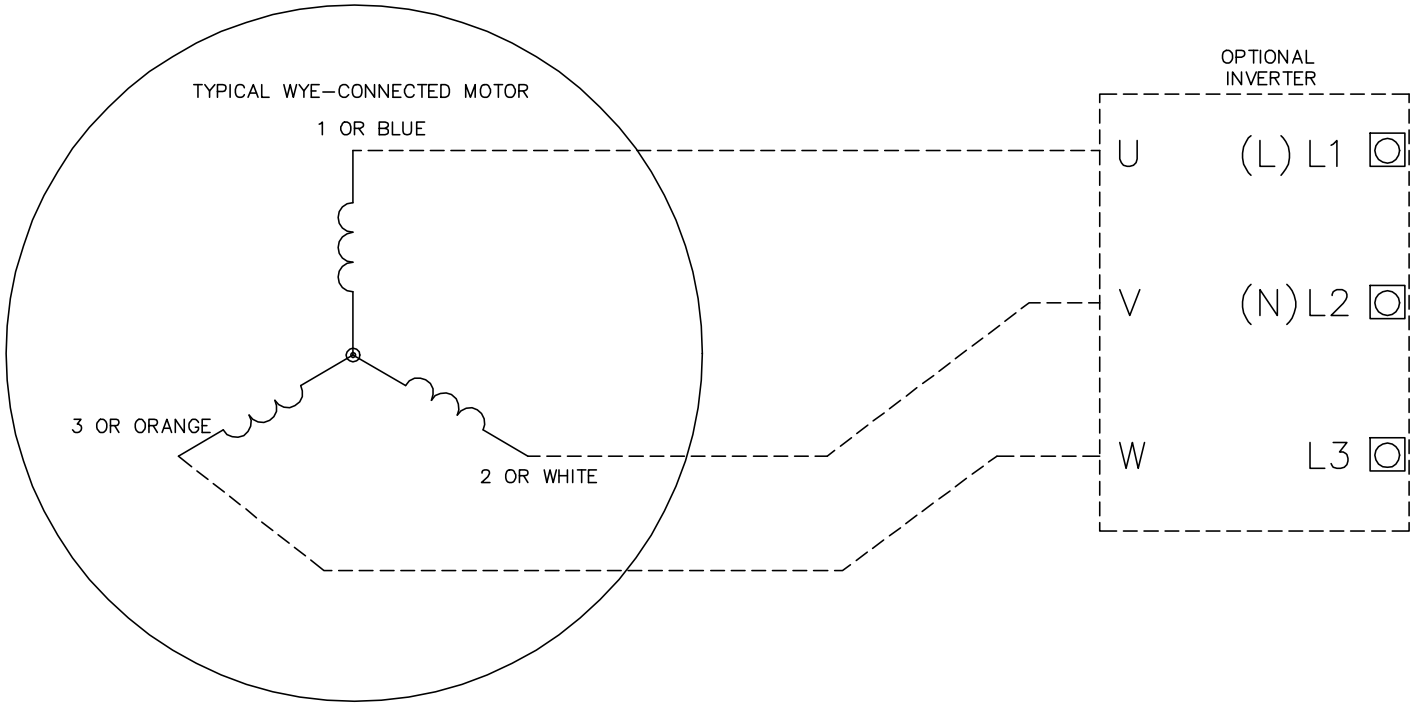
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FILE: \AAA\00253\082	REVISED: 01:10:57 03/30/2020	BY: ENMARSO
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, ECS

SH 1 of 1

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