ABB BALDOR RELIANCE

Customer information packet

ECS101T3K5P5FD4

5.5KW, 1500RPM, 3PH, 50HZ, D132D, 3730B, TEFC
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/5/2026 5:56:06 PM

Specifications

Enclosure	TEFC
Frame	D132D
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	CE
	WEEE
	CULUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	5
Current @ Voltage	12.000 A @ 380.0 V
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	12.0 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGA0020
Layout	37LYQ506
Eff. date	07-09-2024
CD Diagram	CD0006B03
Poles	04
Leads	3#12 19" LONG LEADS
Proprietary	False
Created date	05-25-2022

Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	3730B
Mounting Arrangement	V1
Number of Poles	4
Overall Length	17.87 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	D-Flange
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	Direct on line
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.	ECIN4A12P0						
U1	400	**PH**	3	**HZ**	50		
I1	11.1	**W/EXT. CHOKE**					9.7
SERIAL #							

NP3968B01A01							
CAT.NO.	ECS101T3K5P5FD4						
SPEC.	37-0000-0475			**YR**			
FRAME	D132D	**IP**	55	**WT.**	67		
KW	5.5	**HZ**	50	**PH**	3	**DUTY-IPM**	S1
INS CL	F	**CLASS RISE**		F	**AMB-C**	40	
EFF. CL	IE5	**EFF**	92.9	**COS0**	97		
VOLTS	380	**FLA**	12.24				
1/MIN	1500	**1/MIN MAX**		3000			
BEMF (V)	188	**RS (OHMS)**		1.39			
LD (MH)	28.09	**LQ (MH)**		80.586			
VPWM	**CP =**	50	**TO**	100			
CT	5	**TO**	50	**VT**	1	**TO**	100
MATCHED INV	ECIN4A12P0						
DE	6208	**ODE**	6206				
SERIAL #							

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

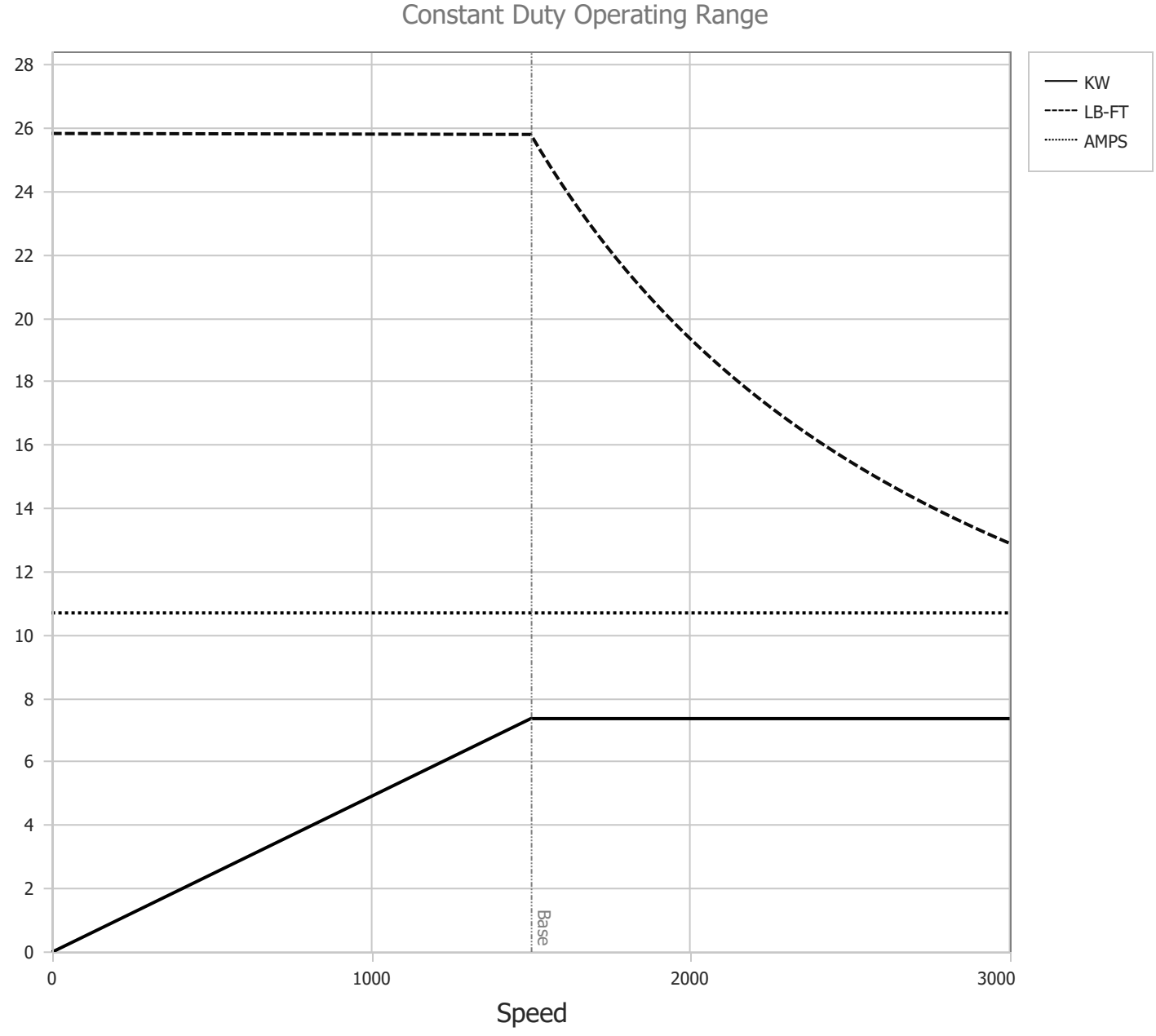
	RPM	% Speed	LB-FT	% Torque	KW	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1351	90%	25.8	100%	6.6	91.2	8.59%	478
P2	750	50%	25.8	100%	3.7	86.8	7.52%	418
P3	363	25%	25.8	100%	1.8	80.6	5.78%	321
P4	1351	90%	12.9	50%	3.3	91.0	4.42%	246
P5	751	50%	12.9	50%	1.8	89.5	2.91%	162
P6	751	50%	6.5	25%	0.9	88.0	1.70%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

61800-9-2 PDS Performance at Reference Operating Points

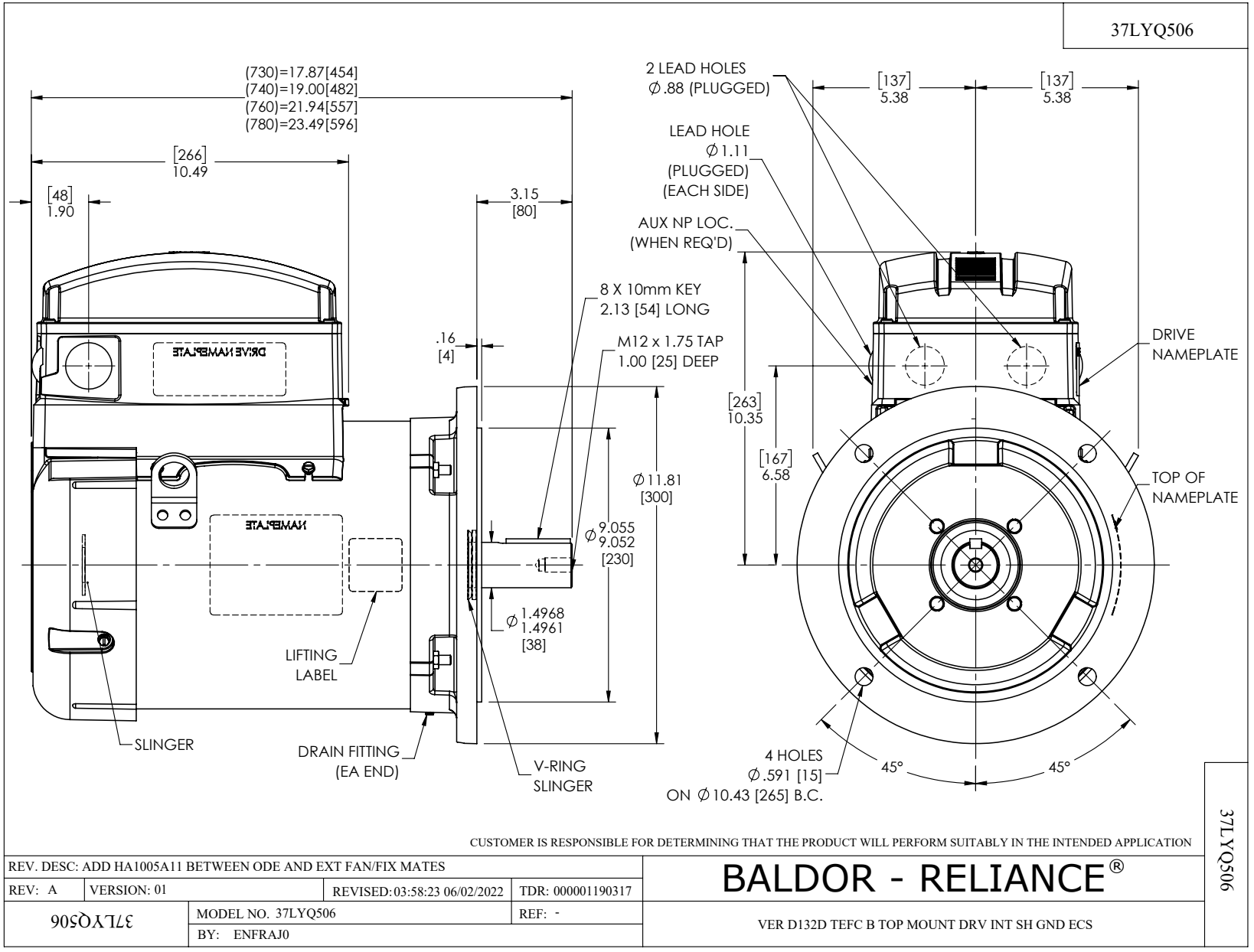
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1501	100%	25.8	100%	7.4	91.1	9.70%	540
P2	750	50%	25.8	100%	3.7	84.7	8.94%	497
P3	255	17%	25.8	100%	1.3	71.4	6.72%	374
P4	1501	100%	12.9	50%	3.7	90.7	5.07%	282
P5	751	50%	12.9	50%	1.8	87.8	3.45%	192
P6	255	17%	12.9	50%	0.6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

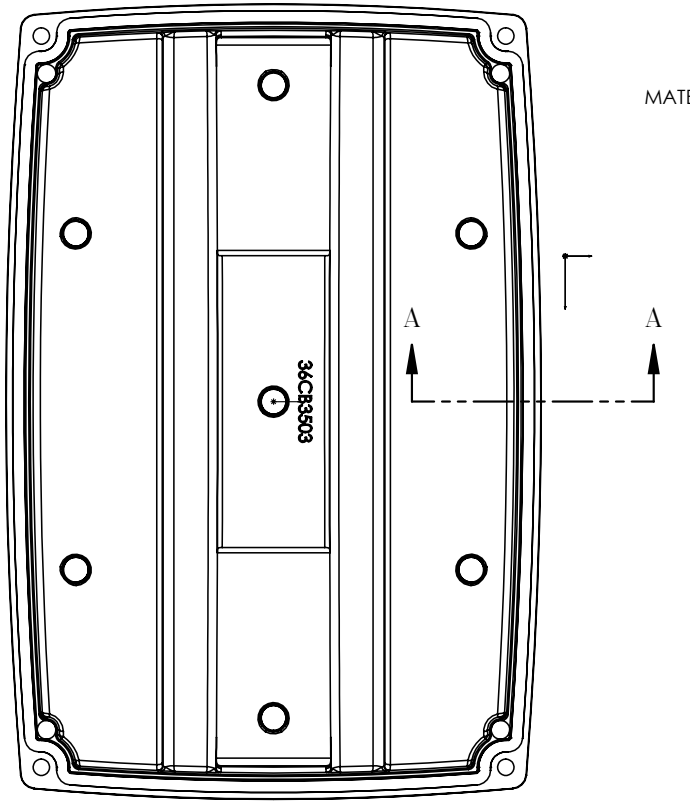
Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	10.71	Max Amps		Cs Diagram	CS1126	BEMF	180.48
KW	5.5	VFD #	ECIN4A12P0			LD	28.09
RPM	1500	S.F.	1.00			LQ	80.586
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	1.4059 Meas L-L



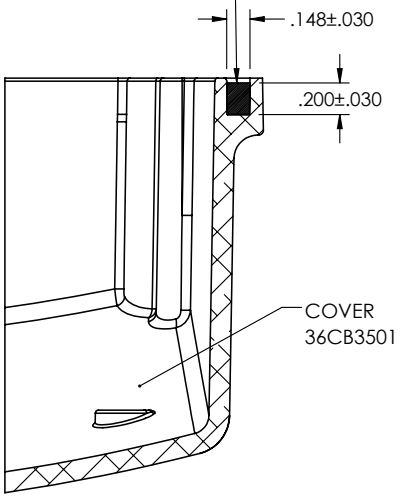
BALDOR • RELIANCE	DR By: R & D CK By: USWEALE1 APP By: Date: 03/14/2025	**AC MOTOR PERFORMANCE CURVES**	**37WGA0020** 37-0000-0494 *Test - 112062*


37LYQ506
(730)=17.87[454]
(740)=19.00[482]
(760)=21.94[557]
(780)=23.49[596]
[266]
10.49
[48]
1.90
3.15
[80]
.16
[4]
8 X 10mm KEY
2.13 [54] LONG
M12 x 1.75 TAP
1.00 [25] DEEP
Ø11.81
[300]
Ø9.055
9.052
[230]
Ø1.4968
1.4961
[38]
LIFTING
LABEL
SLINGER
DRAIN FITTING
(EA END)
V-RING
SLINGER
2 LEAD HOLES
Ø.88 (PLUGGED)
LEAD HOLE
Ø1.11
(PLUGGED)
(EACH SIDE)
AUX NP LOC.
(WHEN REQ'D)
[137]
5.38
[137]
5.38
DRIVE
NAMEPLATE
[263]
10.35
[167]
6.58
TOP OF
NAMEPLATE
4 HOLES
Ø.591 [15]
ON Ø10.43 [265] B.C.
45°
45°
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD HA1005A11 BETWEEN ODE AND EXT FAN/FIX MATES
REV: A
VERSION: 01
REVISED: 03:58:23 06/02/2022
TDR: 000001190317
BALDOR - RELIANCE®
37LYQ506
MODEL NO. 37LYQ506
REF: -
BY: ENFRAJ0
VER D132D TEFC B TOP MOUNT DRV INT SH GND ECS
37LYQ506

36CB3503A00



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



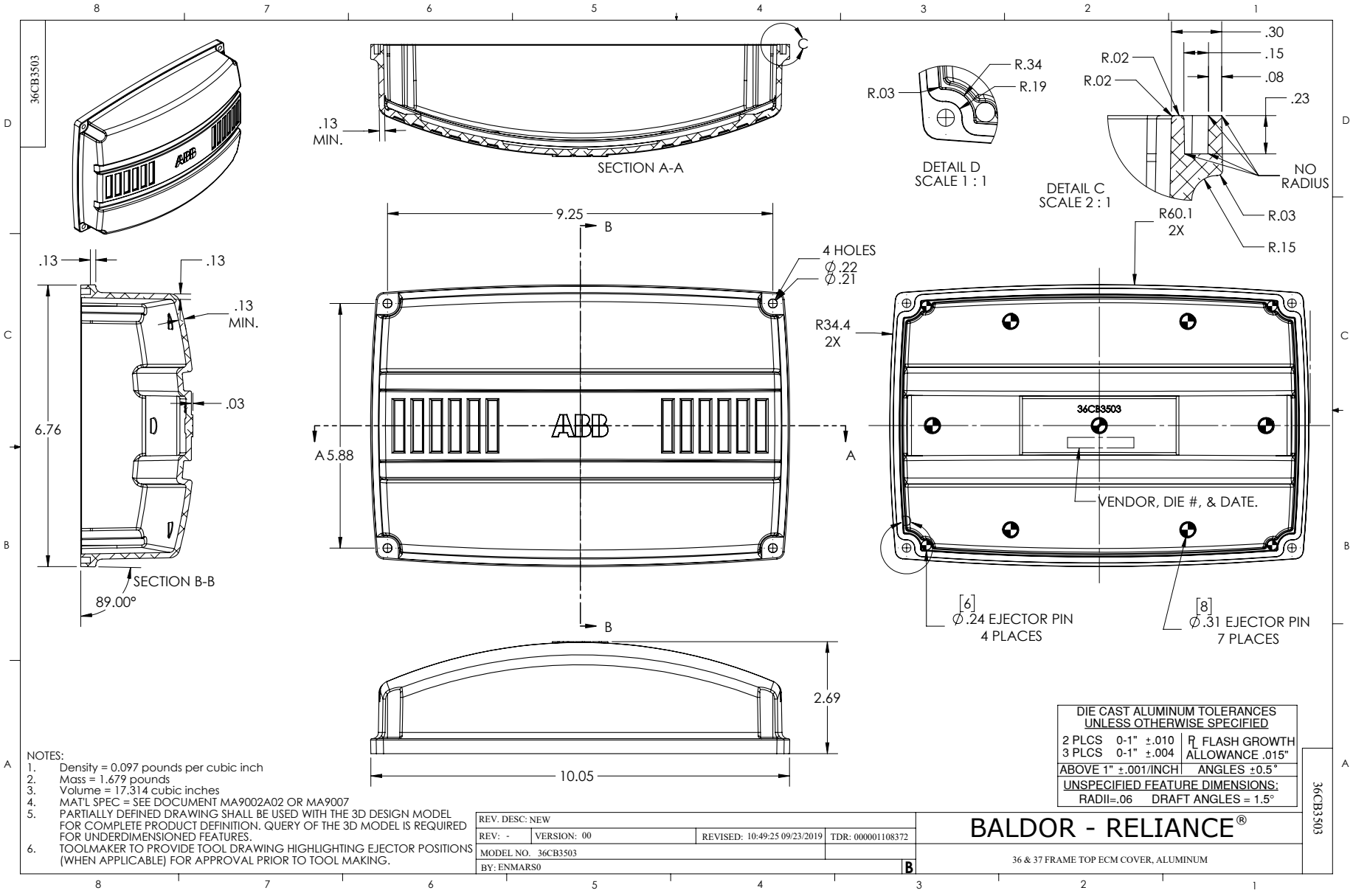
SECTION A–A

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



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.

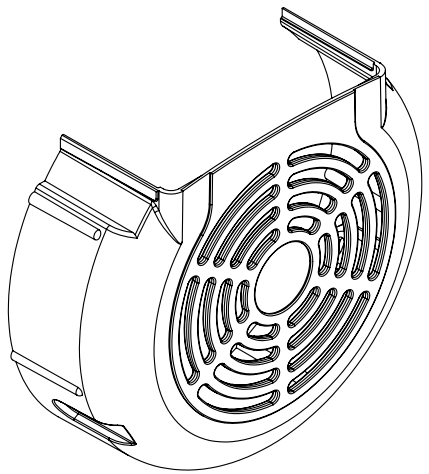
DIE CAST ALUMINUM TOLERANCES UNLESS OTHERWISE SPECIFIED	
2 PLCS 0-1" ±.010 3 PLCS 0-1" ±.004	R FLASH GROWTH ALLOWANCE .015"
ABOVE 1" ±.001/INCH	ANGLES ±0.5°
UNSPECIFIED FEATURE DIMENSIONS: RADII=.06 DRAFT ANGLES = 1.5°	

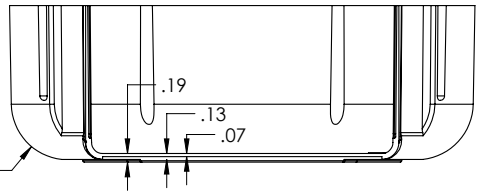
REV. DESC: NEW			
REV: -	VERSION: 00	REVISED: 10:49:25 09/23/2019	TDR: 000001108372
MODEL NO. 36CB3503			
BY: ENMARS0			B

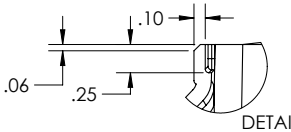
BALDOR - RELIANCE®

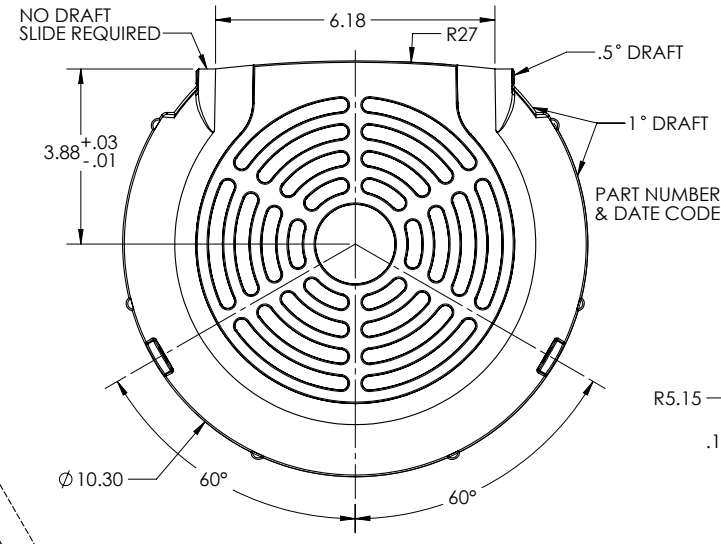
36 & 37 FRAME TOP ECM COVER, ALUMINUM

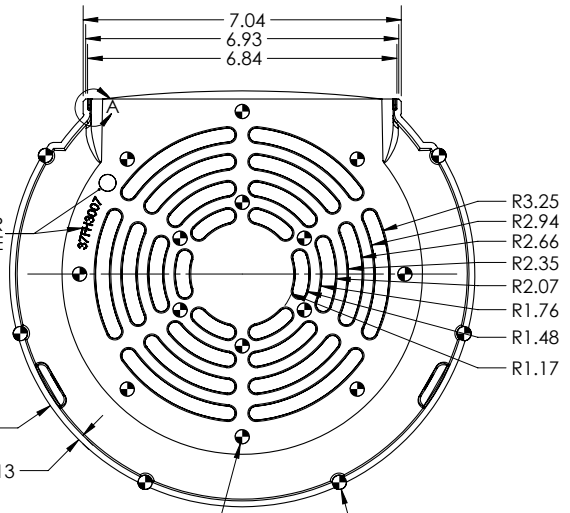
36CB3503

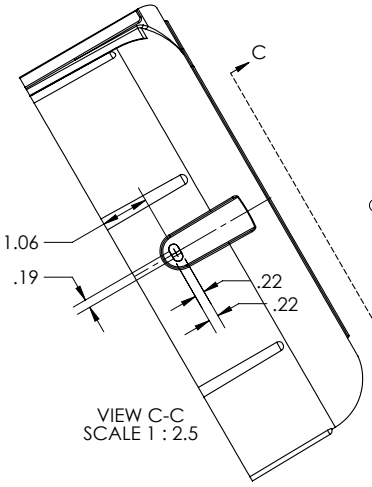


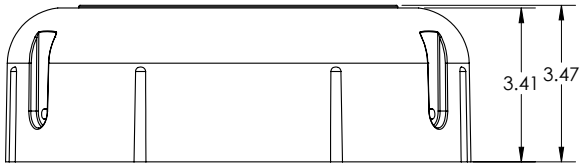












NOTES:
1. Density = 0.097 pounds per cubic inch
2. Mass = 1.866 pounds
3. Volume = 19.235 cubic inches
4. MAT'L SPEC = SEE DOCUMENT MA9002A02 OR MA9007
5. PARTIALLY DEFINED DRAWING SHALL BE USED WITH THE 3D DESIGN MODEL
   FOR COMPLETE PRODUCT DEFINITION. QUERY OF THE 3D MODEL IS REQUIRED
   FOR UNDERDIMENSIONED 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°

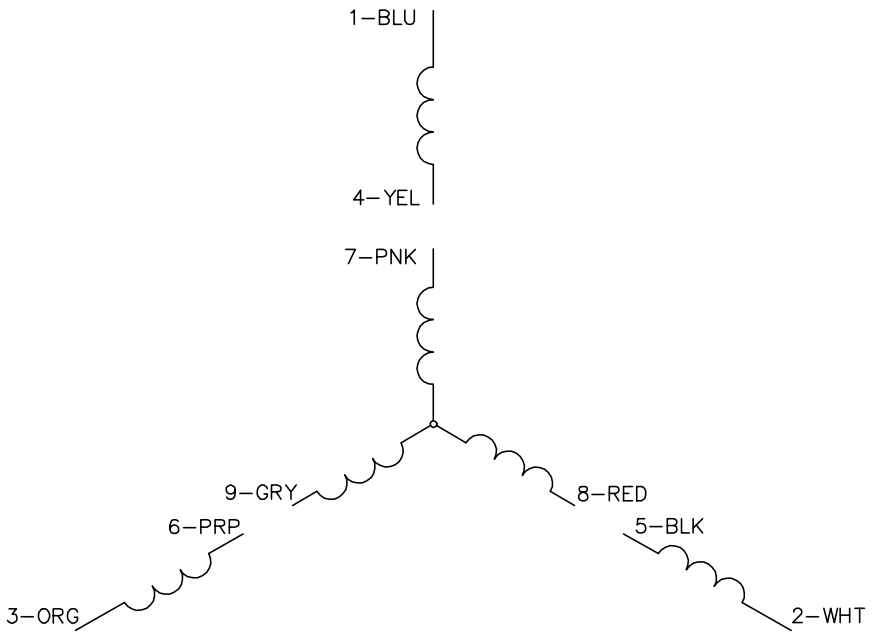
REV. DESC: NEW			
REV: -	VERSION: 00	REVISED: 03:52:50 08/27/2019	TDR: 000001114720
MODEL NO. 37FH3007			
BY: ENMARS0			B

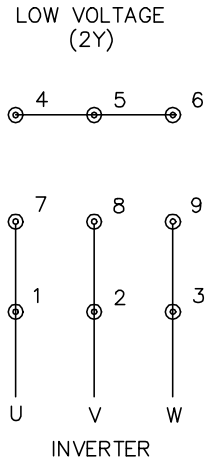
BALDOR - RELIANCE®

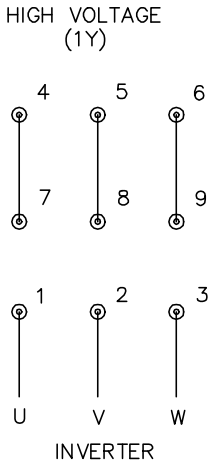
37 FRAME TOP ECM FAN HOUSING, ALUMINUM

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

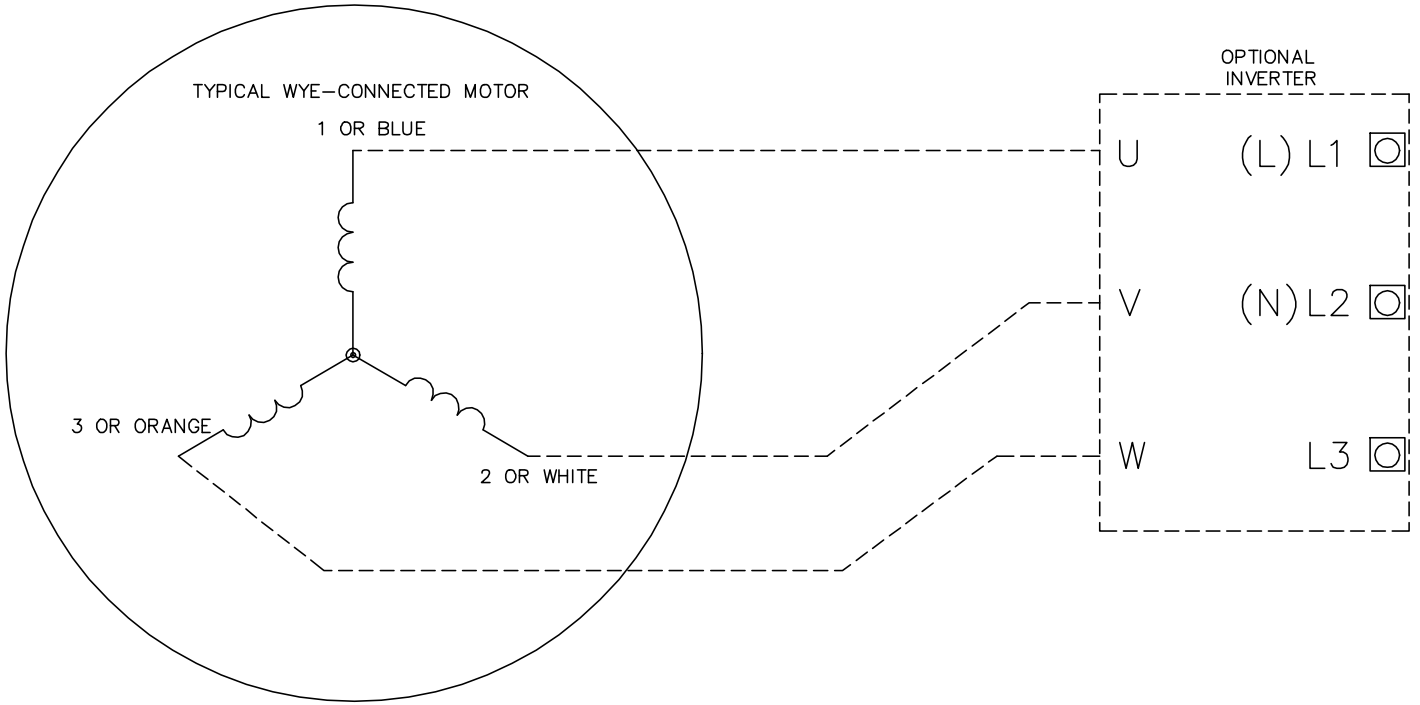
REV. DESC: NEW		
REV. LTR: –	VERSION: 00	TDR: 000001135746
FILE: \AAA\00253\082	REVISED: 01:10:57 03/30/2020	BY: ENMARSO
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, ECS

SH 1 of 1

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