ABB BALDOR RELIANCE

Customer information packet

ECS100A2H3EB4

3HP, 1800RPM, 3PH, 60HZ, 182TC, TEFC, AXIAL
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	182TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
Agency Approvals	UL
	WEEE
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	6
Current @ Voltage	7.300 A @ 230.0 V
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.8 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	7.3 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0023
Layout	36LYT292
Eff. date	01-16-2026
CD Diagram	CD0006B03
Poles	04
Leads	3#14 15" LONG LEADS
Proprietary	False
Created date	08-31-2020

Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3624B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	22.25 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1800 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

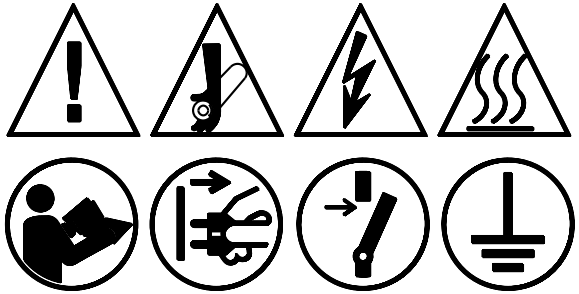
BALDOR·RELIANCE

EC-Titanium™

CAT. NO.	ECS100A2H3EB4						
SPEC.	36-0001560				YR	***	
FRAME	182TC		ENCL.	TEFC	IP	54	
HP	3	RATING	40C AMB-CONT				
NOM. EFF.	92.8	PF	97	SF	1.0		
VOLTS	230		FLA	7.3			
RPM	1800	RPM MAX	4000				
HZ	60	PH.	3	CLASS	F		
BEMF (V)	106		Rs (Ω)	0.97			
Ld (mH)	14.4		Lq (mH)	54.4			
INV TYP	VPWM	CHP	60 TO 133 HZ				
	CT	6 TO 60 HZ	VT	1 TO 133 HZ			
MATCHED INV	EC12A10P5						
BEARING	DE	6206	ODE	6205			
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

c UL us 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™

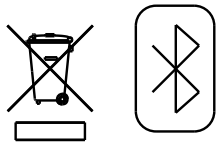
PART NO.	EC12A10P5				
U1	240	PH	3	HZ	60
I1 MAX	9.3	W/EXT. CHOKE			7.8
SERIAL #	***				



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	208-230	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	7.4-7.3	Max Amps		Cs Diagram	CS1127	BEMF	106
HP	3	VFD#	ECIN2A10P5			LD	14.4
RPM	1800	S.F.	1.00			LQ	54.4
Phase/Hz	3/60	Rating	40C AMB-CONT			Rs	1.0504 Meas. L-L

60034-2-3 Motor Performance at Standardized Operating Points

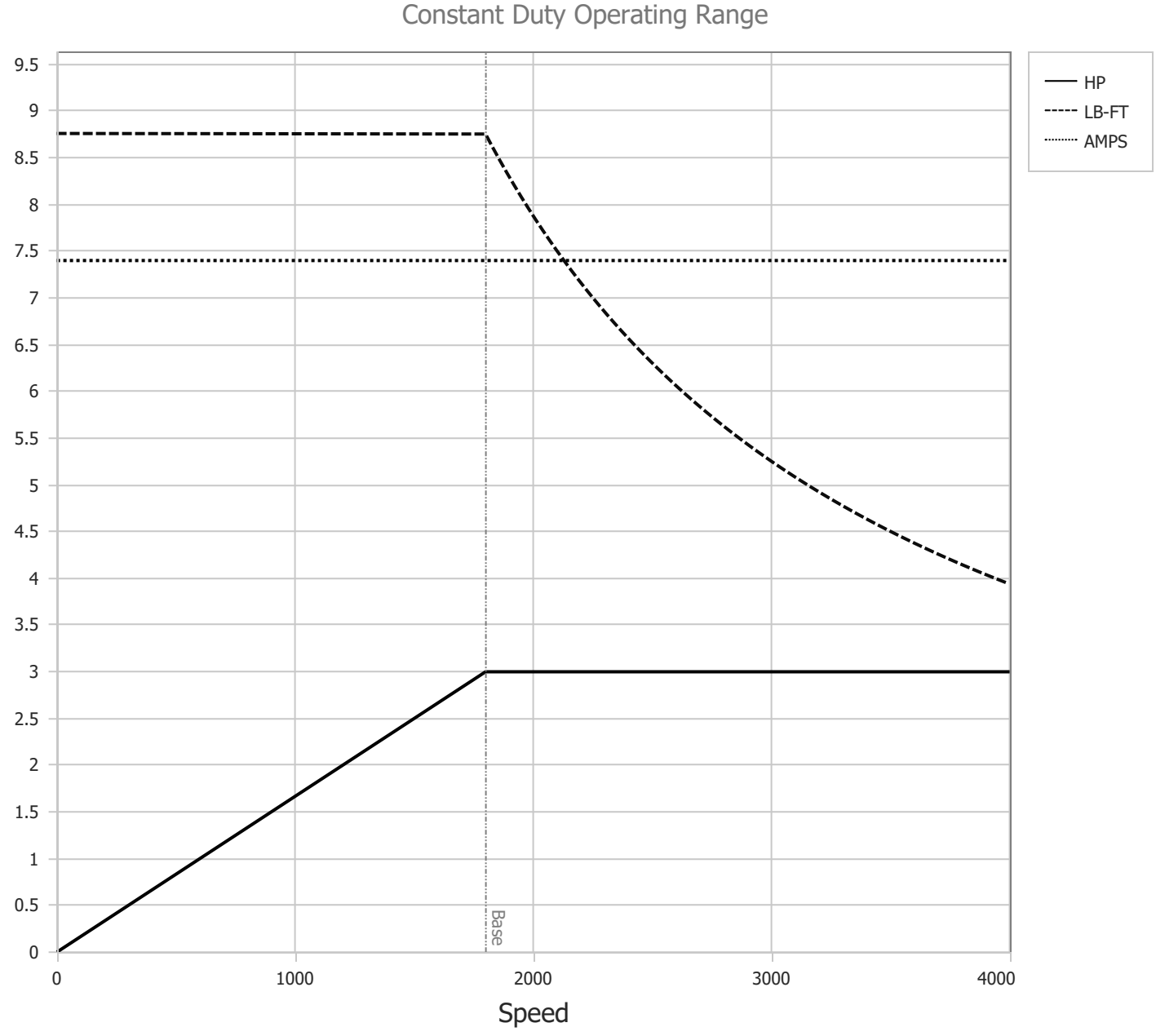
	RPM	% Speed	LB-FT	% Torque	HP	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1629	90%	8.8	100%	2.7	92.0	7.86%	178
P2	904	50%	8.8	100%	1.5	90.1	5.50%	125
P3	452	25%	8.8	100%	0.8	84.6	4.51%	102
P4	1628	90%	4.4	50%	1.4	92.3	3.75%	85
P5	905	50%	4.4	50%	0.8	90.7	2.54%	58
P6	905	50%	2.2	25%	0.4	89.2	1.51%	34
P7	452	25%	2.2	25%	0.2	86.7	0.96%	22

61800-9-2 PDS Performance at Reference Operating Points

	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1810	100%	8.8	100%	3.0	90.3	10.73%	243
P2	904	50%	8.8	100%	1.5	84.5	9.12%	206
P3	301	17%	8.8	100%	0.5	68.5	7.60%	172
P4	1808	100%	4.4	50%	1.5	88.7	6.33%	143
P5	905	50%	4.4	50%	0.8	84.5	4.54%	103
P6	301	17%	4.4	50%	0.3	69.6	3.61%	82
P7	905	50%	2.2	25%	0.4	81.7	2.79%	63
P8	301	17%	2.2	25%	0.1	66.9	2.04%	46

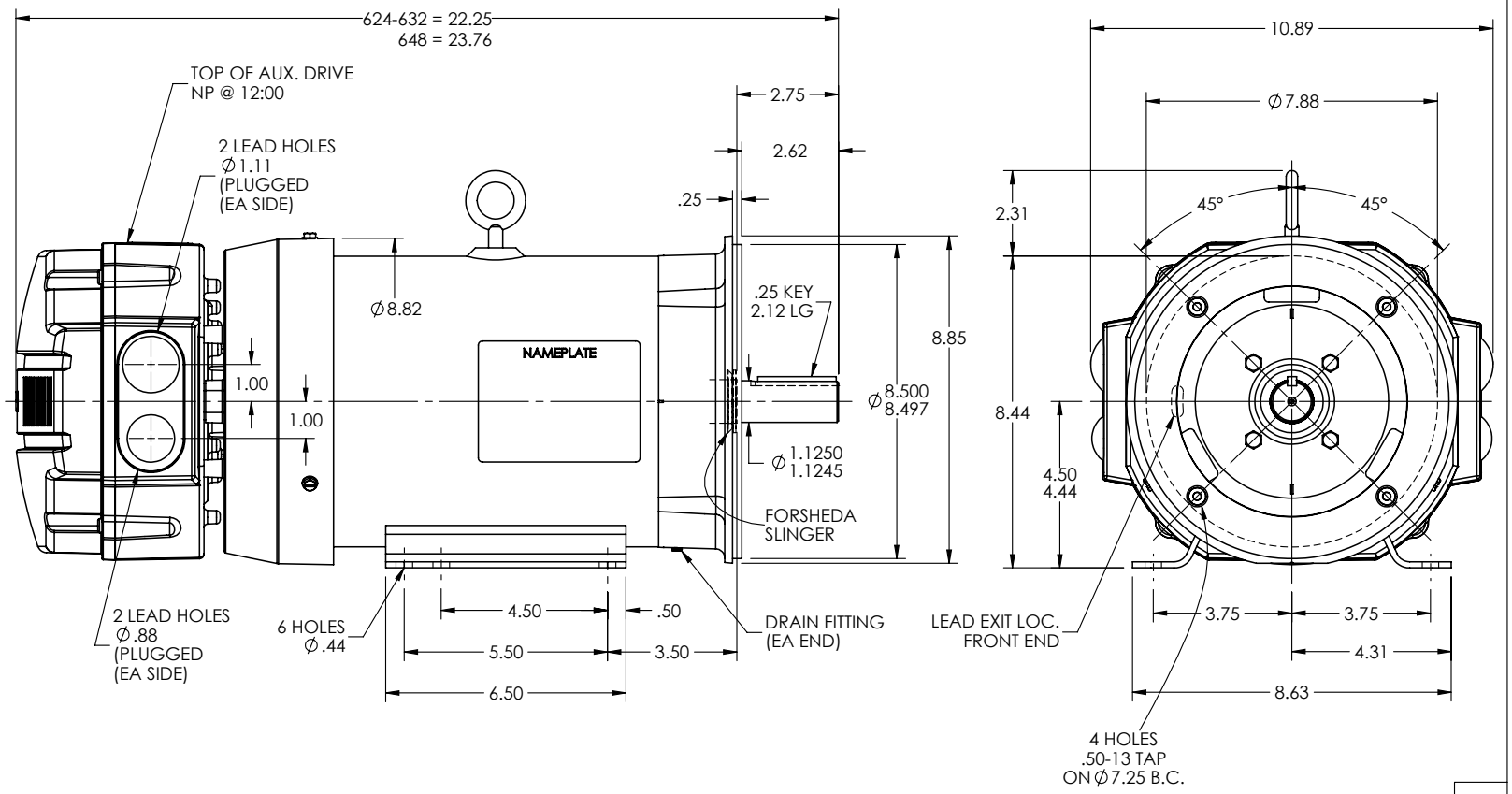
Points not taken in certified order.

Volts	208-230	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	7.4-7.3	Max Amps		Cs Diagram	CS1127	BEMF	106
HP	3	VFD #	ECIN2A10P5			LD	14.4
RPM	1800	S.F.	1.00			LQ	54.4
Phase/Hz	3/60	Rating	40C AMB-CONT			Rs	1.0504 Meas L-L



BALDOR • RELIANCE	DR By: R & D CK By: USBIBAK APP By: USWEQUA1 Date: 01/28/2025	**AC MOTOR PERFORMANCE CURVES**	**36WGA0023** 36-0000-0620 *Test - 111850*

36LYT292



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT ABB'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

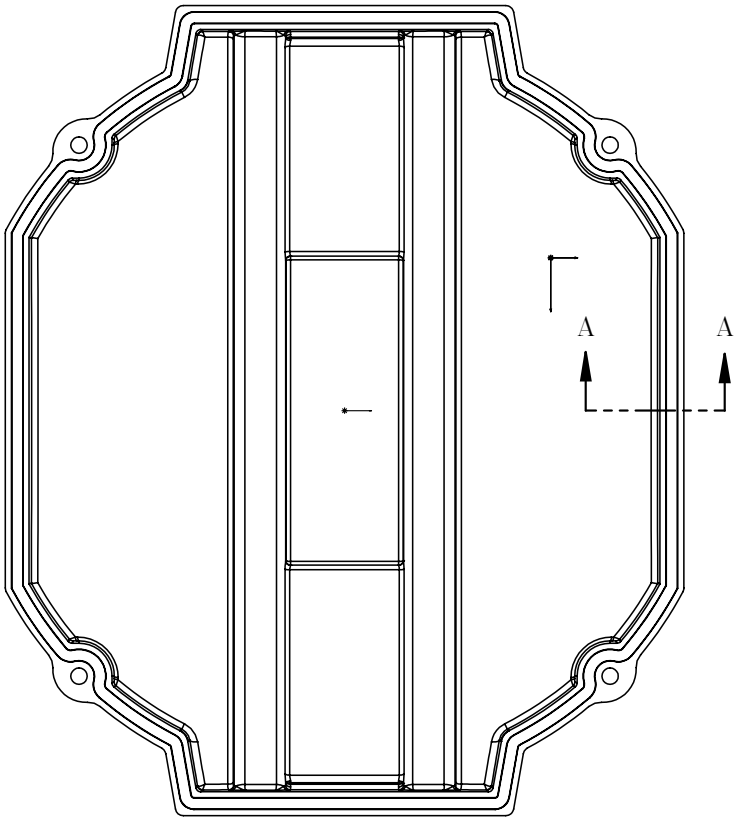
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REV: A	VERSION: 01	REVISED: 09:55:14 04/05/2022	TDR: 000001187699
	MODEL NO. 36LYT292		REF: -
	BY: ENJEFD0	Material: -	

BALDOR

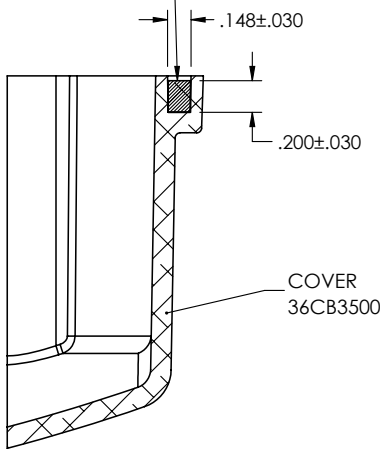
HOR 182-4TC TEFC B ODE MOUNT DRV INT SH GND ECS

36LYT292

36CB3500A00



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



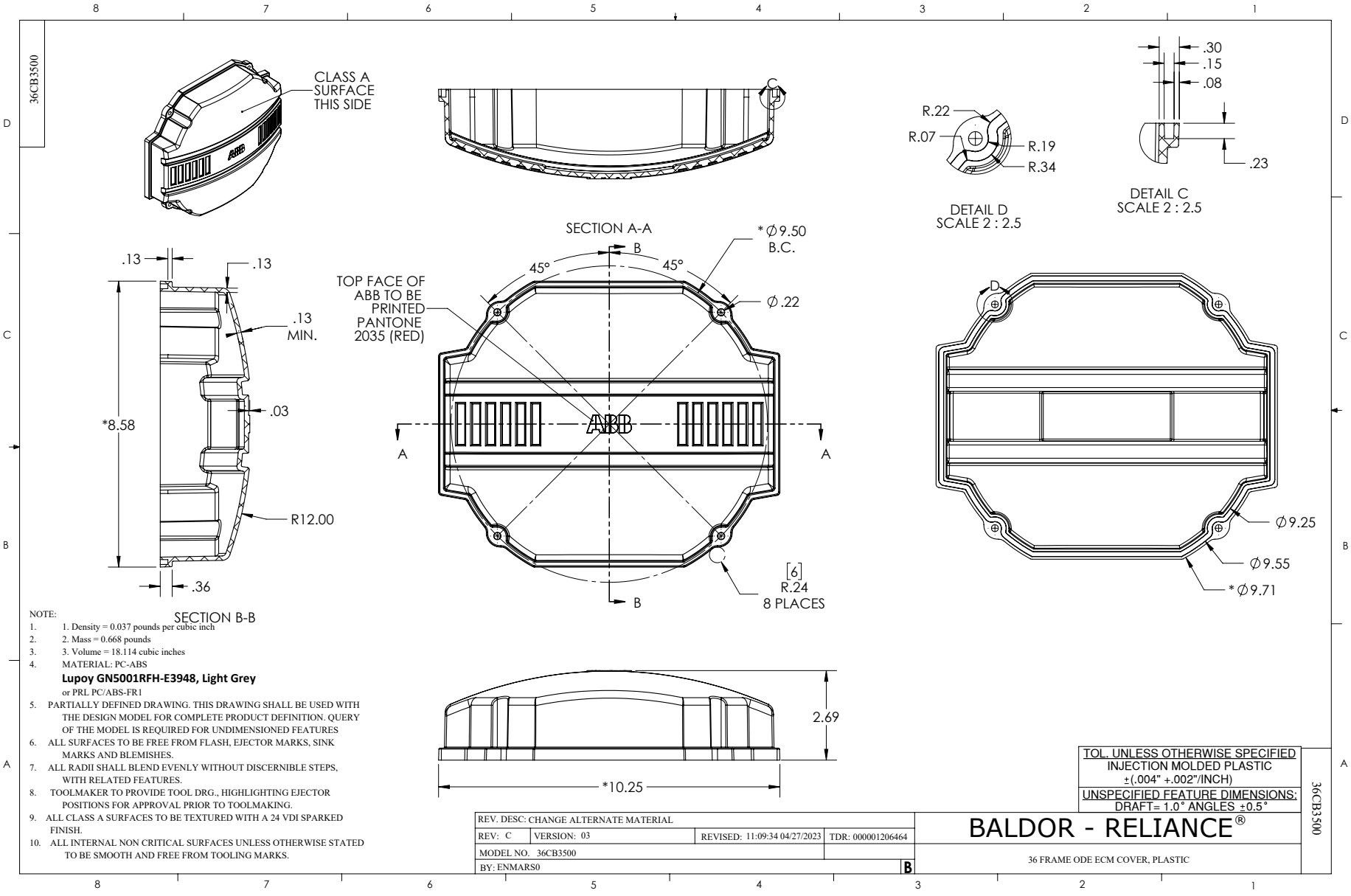
SECTION A–A

36CB3500A00

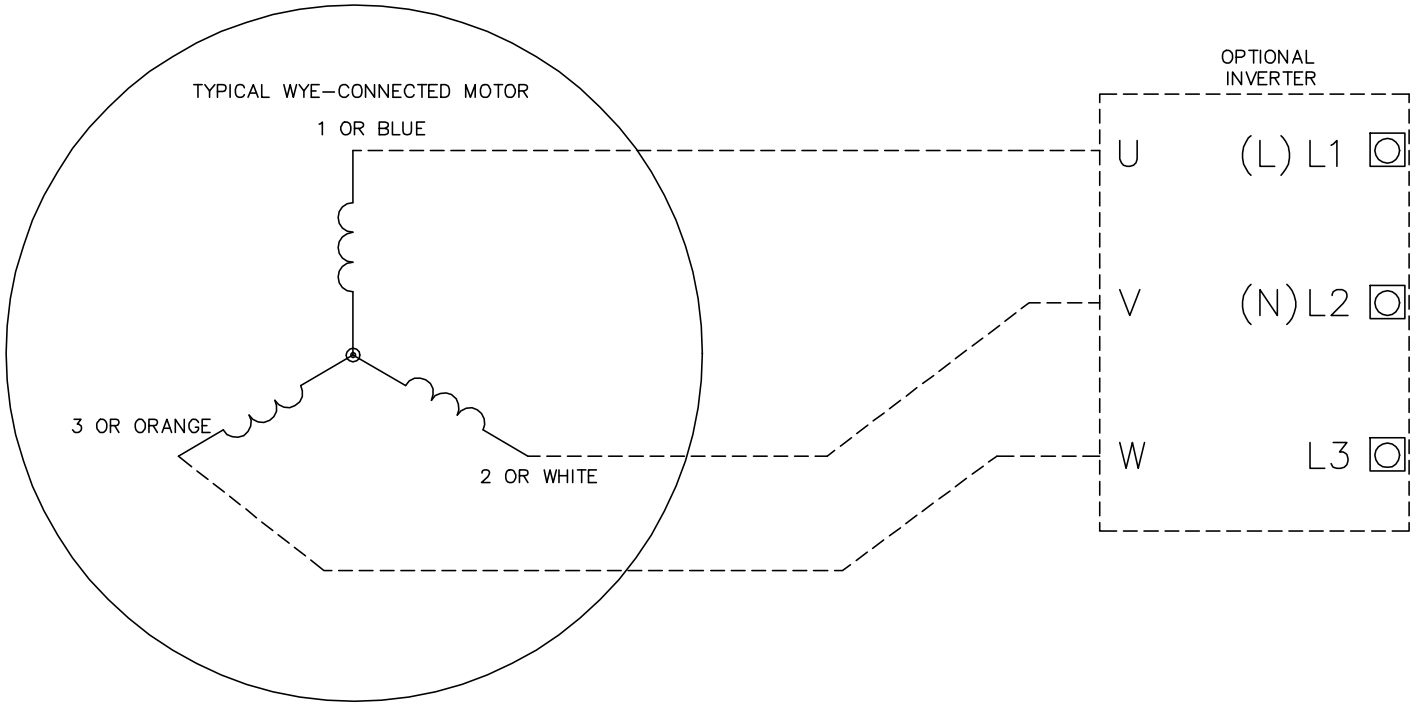
REV. DESC: UPDATE MATERIAL			
REV: A	VERSION: 01	REVISED: 10:45:08 03/29/2019	TDR: 000001101646
	MODEL NO. 36CB3500A00		REF: -
	BY: ENMARS0	Material: -	

BALDOR - RELIANCE®

36 FRAME ODE ECM COVER WITH FOAM SEAL


36CB3500
CLASS A SURFACE THIS SIDE
SECTION A-A
SECTION B-B
DETAIL D SCALE 2 : 2.5
DETAIL C SCALE 2 : 2.5
TOP FACE OF ABB TO BE PRINTED PANTONE 2035 (RED)
*Ø9.50 B.C.
Ø.22
45°
45°
.13
.13
.13 MIN.
.03
*8.58
R12.00
.36
R.22
R.07
R.19
R.34
.30
.15
.08
.23
Ø9.25
Ø9.55
*Ø9.71
[6] R.24 8 PLACES
2.69
*10.25
NOTE:
1. 1. Density = 0.037 pounds per cubic inch
2. 2. Mass = 0.668 pounds
3. 3. Volume = 18.114 cubic inches
4. MATERIAL: PC-ABS
Lupoy GN5001RFH-E3948, Light Grey
or PRL PC/ABS-FR1
5. PARTIALLY DEFINED DRAWING. THIS DRAWING SHALL BE USED WITH THE DESIGN MODEL FOR COMPLETE PRODUCT DEFINITION. QUERY OF THE MODEL IS REQUIRED FOR UNDIMENSIONED FEATURES
6. ALL SURFACES TO BE FREE FROM FLASH, EJECTOR MARKS, SINK MARKS AND BLEMISHES.
7. ALL RADII SHALL BLEND EVENLY WITHOUT DISCERNIBLE STEPS, WITH RELATED FEATURES.
8. TOOLMAKER TO PROVIDE TOOL DRG., HIGHLIGHTING EJECTOR POSITIONS FOR APPROVAL PRIOR TO TOOLMAKING.
9. ALL CLASS A SURFACES TO BE TEXTURED WITH A 24 VDI SPARKED FINISH.
10. ALL INTERNAL NON CRITICAL SURFACES UNLESS OTHERWISE STATED TO BE SMOOTH AND FREE FROM TOOLING MARKS.
TOL. UNLESS OTHERWISE SPECIFIED
INJECTION MOLDED PLASTIC
±(.004" +.002"/INCH)
UNSPECIFIED FEATURE DIMENSIONS:
DRAFT= 1.0° ANGLES ±0.5°
REV. DESC: CHANGE ALTERNATE MATERIAL
REV: C VERSION: 03 REVISED: 11:09:34 04/27/2023 TDR: 000001206464
MODEL NO. 36CB3500
BY: ENMARS0
B
BALDOR - RELIANCE®
36 FRAME ODE ECM COVER, PLASTIC
36CB3500

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