



Customer information packet

ECS100T4H7EC4

7.5HP, 1800RPM, 3PH, 60HZ, 184TC, 3648B, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UL WEEE
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	6
Current @ Voltage	8.800 A @ 460.0 V
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	8.8 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
Lifting Lugs	Standard Lifting Lugs

Part detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0026
Layout	36LYT270
Eff. date	06-16-2025
CD Diagram	CD0006B03
Poles	04
Leads	3#14 19" LONG LEADS
Proprietary	False
Created date	09-28-2020

Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3648B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.21 IN
Power Factor	94
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.	ECS100T4H7EC4									
SPEC.	36-0001720								YR	***
FRAME	184TC				ENCL.	TEFC		IP	54	
HP	7.5		RATING	40C AMB-CONT						
NOM. EFF.	94.0			PF	94		SF	1.0		
VOLTS	460				FLA	8.8				
RPM	1800			RPM MAX			4000			
HZ	60			PH.	3	CLASS			F	
BEMF (V)	212				Rs (Ω)		1.30			
Ld (mH)	25.0				Lq (mH)		91.6			
INV TYP	VPWM	CHP	60		TO		133		HZ	
	CT	6			TO		60 HZ		VT	1 TO 133 HZ
MATCHED INV	EC14A9P5									
BEARING	DE	6206				ODE	6205			
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.

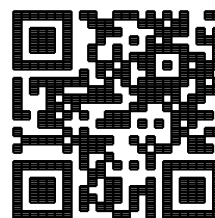
FERRITE ASSISTED
SYNCHRONOUS RELUCTANCE MOTOR
FOR INVERTER USE ONLY



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



UL **us**
LISTED
E46145

BALDOR • RELIANCE

EC-Titanium™

PART NO. EC14A9P5

U1 480 PH 3 HZ 60

I1 MAX 10.0 W /EXT. CHOKE 8.4

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	460	Max RPM	4000	Conn Diag.	CD0006	Leads	3
Amps	9.0	Max Amps		Cs Diagram	CS1126	BEMF	212
HP	7.5	VFD#	EC14A9P5			LD	25
RPM	1800	S.F.	1.00			LQ	91.6
Phase/Hz	3/60	Rating	40C AMB			Rs	1.3196
							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	1620	90%	21.9	100%	6.8	92.4	7.39%	418
P2	901	50%	21.9	100%	3.8	90.5	5.23%	296
P3	451	25%	22.0	100%	1.9	85.2	4.31%	244
P4	1623	90%	10.9	50%	3.4	92.9	3.43%	194
P5	902	50%	10.9	50%	1.9	90.9	2.48%	140
P6	902	50%	5.5	25%	0.9	89.3	1.49%	84
P7	451	25%	5.5	25%	0.5	85.1	1.08%	61

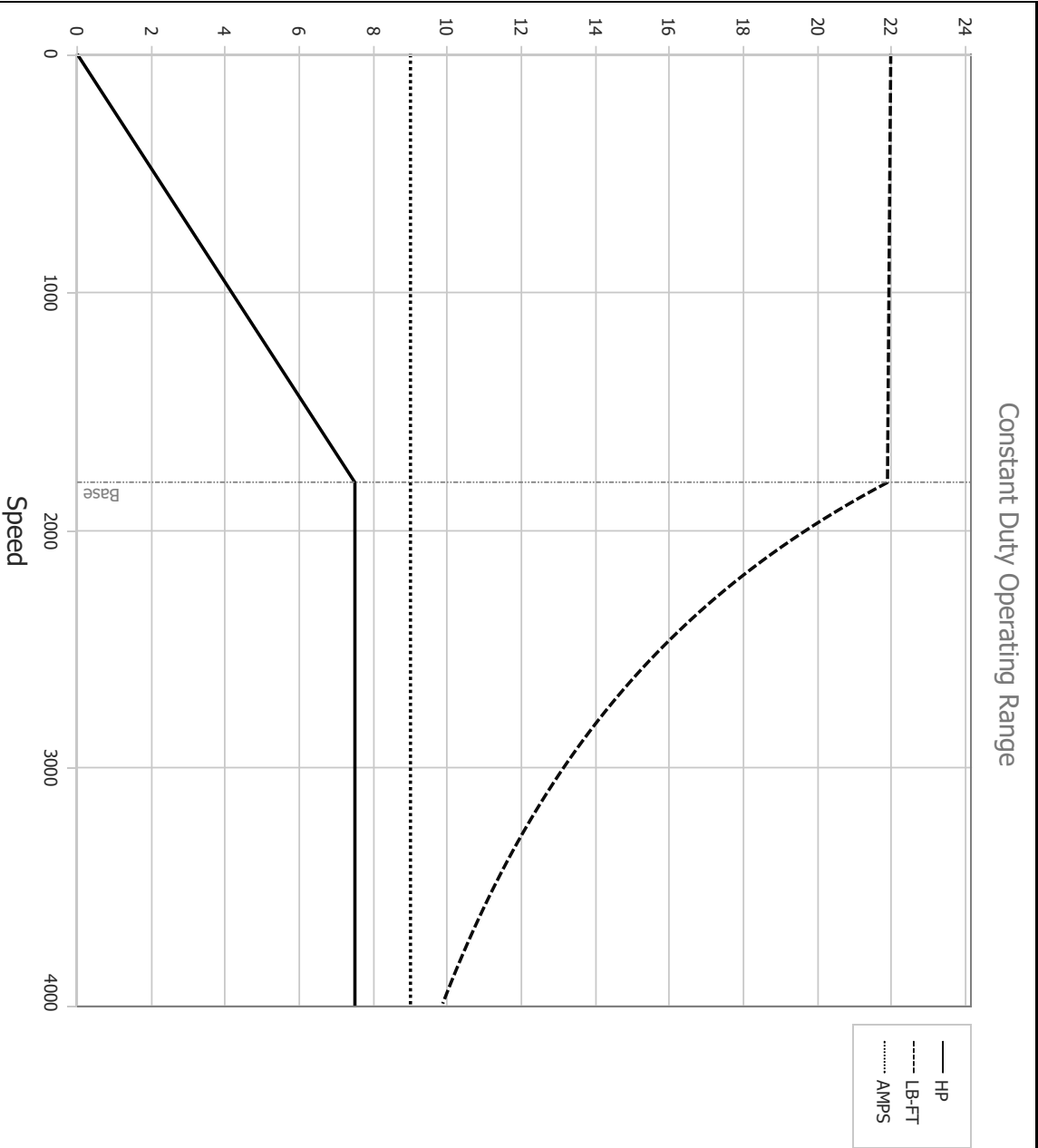
61800-9-2 PDS Performance at Reference Operating Points

	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1802	100%	21.9	100%	7.5	91.5	9.22%	522
P2	901	50%	21.9	100%	3.8	87.1	7.36%	416
P3	300	17%	21.9	100%	1.3	73.5	5.95%	337
P4	1803	100%	10.9	50%	3.8	91.1	4.85%	275
P5	902	50%	10.9	50%	1.9	87.1	3.65%	207
P6	300	17%	10.9	50%	0.6	74.3	2.85%	161
P7	902	50%	5.5	25%	0.9	84.6	2.25%	128
P8	300	17%	5.5	25%	0.3	70.8	1.70%	96

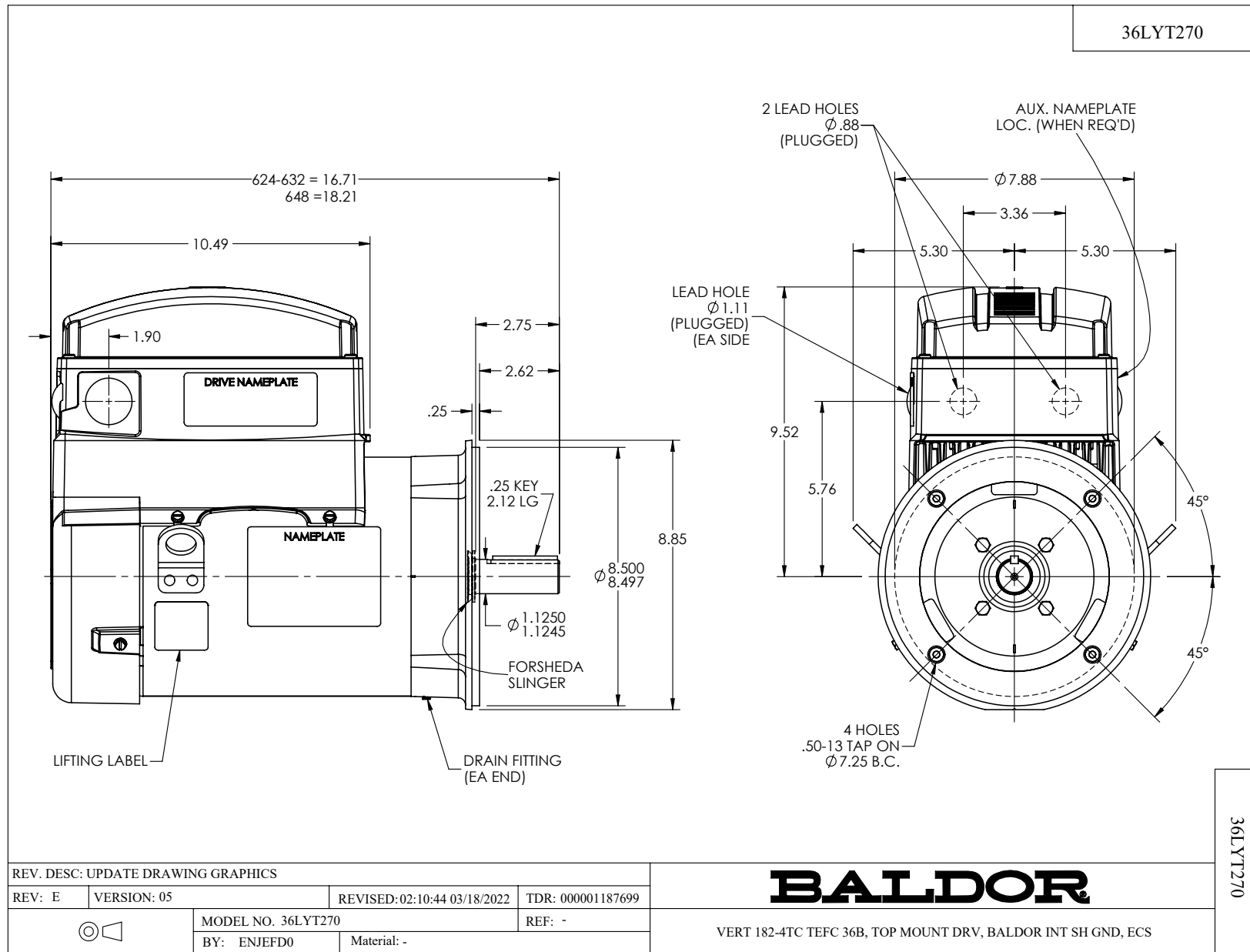
Points not taken in certified order.

BALDOR • RELIANCE	DR By:	<u>R & D</u>	AC MOTOR PERFORMANCE CURVES	36WGL111 36T258L111G1 Test - 111285
	CK By:	<u>USTOSAN</u>		
	APP By:	<u>USJAROB1</u>		
	Date:	<u>09/12/2024</u>		

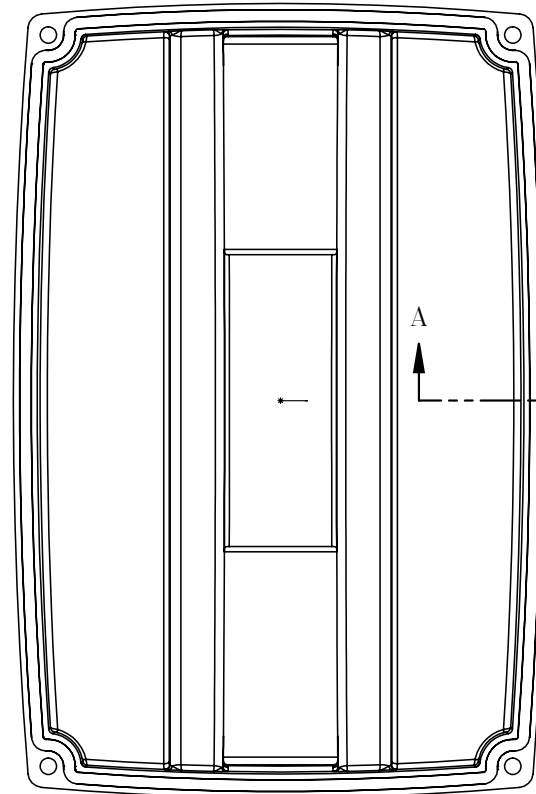
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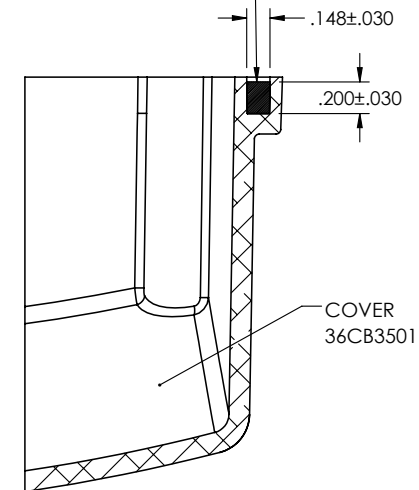
BALDOR • RELIANCE	DR By: <u>R & D</u> CK By: <u>USTOSAN</u> APP By: <u>USJAROB1</u> Date: <u>09/12/2024</u>	AC MOTOR PERFORMANCE CURVES	36WGL111 36T258L111G1 Test - 111285
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36CB3501A00



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



SECTION A-A

REV. DESC: UPDATE MATERIAL

REV: A

VERSION: 01

REVISED: 10:46:37 03/29/2019

TDR: 000001101646



MODEL NO. 36CB3501A00

REF: -

BY: ENMARS0

Material: -

BALDOR - RELIANCE®

36 & 37 FRAME TOP ECM COVER WITH FOAM SEAL

36CB3501A00

