

ABB BALDOR RELIANCE III

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

Volts	460	Max RPM	4000	Conn Diag.	CD0006	Leads	3
Amps	9.0	Max Amps		Cs Diagram	CS1126	BEMF	212
HP	7.5	VFD#	ECI4A9P5			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

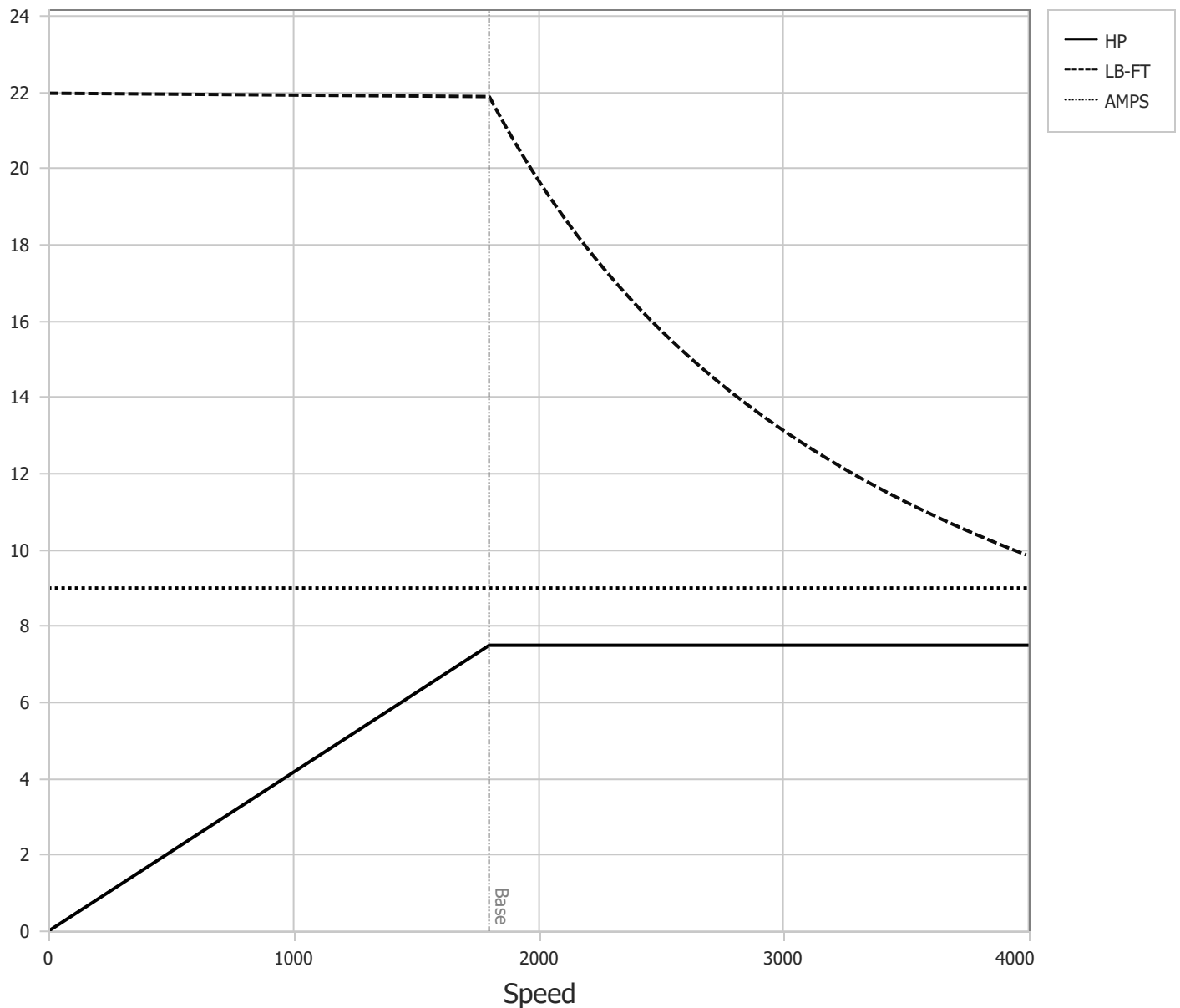
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1802	100%	21.9	100%	7.5	91.5	9.22%	522
P2	901	50%	21.9	100%	3.8	87.1	7.36%	416
P3	300	17%	21.9	100%	1.3	73.5	5.95%	337
P4	1803	100%	10.9	50%	3.8	91.1	4.85%	275
P5	902	50%	10.9	50%	1.9	87.1	3.65%	207
P6	300	17%	10.9	50%	0.6	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:	R & D	AC MOTOR PERFORMANCE CURVES	36WGL111 36T258L111G1 Test - 111285
	CK By:	USTOSAN		
	APP By:	USJAROB1		
	Date:	09/12/2024		

Volts	460	Max RPM	4000	Conn Diag.	CD0006	Leads	3
Amps	9.0	Max Amps		Cs Diagram	CS1126	BEMF	212
HP	7.5	VFD #	ECI4A9P5			LD	25
RPM	1800	S.F.	1.00			LQ	91.6
Phase/Hz	3/60	Rating	40C AMB			Rs	1.3196 Meas L-L

Constant Duty Operating Range


BALDOR • RELIANCE

 DR By: R & D

 CK By: USTOSAN

 APP By: USJAROB1

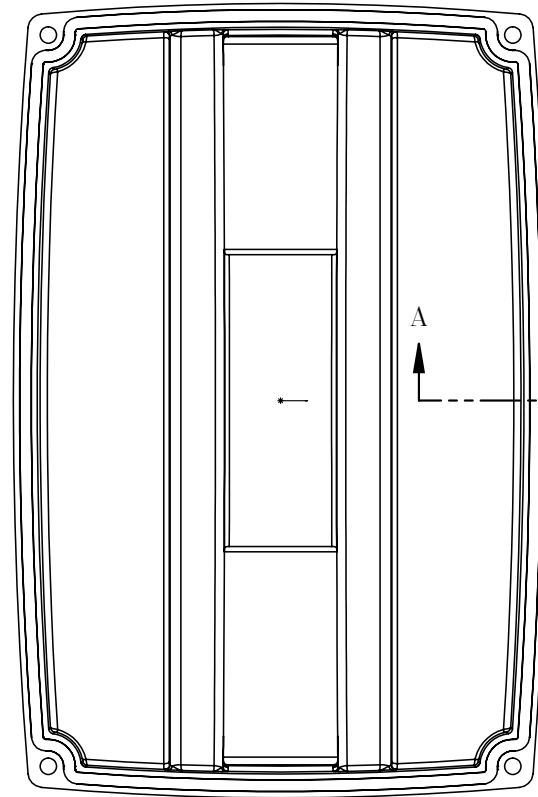
 Date: 09/12/2024
**AC MOTOR
PERFORMANCE
CURVES**
36WGL111

36T258L111G1

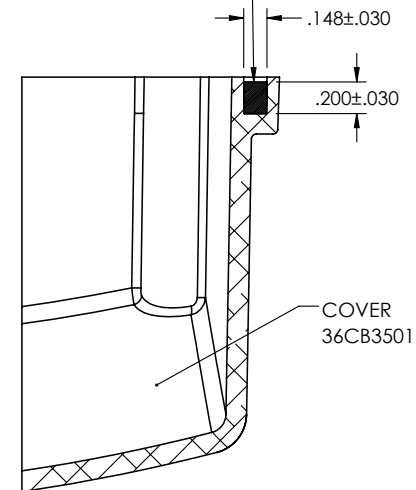
Test - 111285



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

