

ABB BALDOR RELIANCE III

Customer information packet

ECS101A8K1P5DD4

1.5KW, 1500RPM, 3PH, 50HZ, D90D, 3524B, TEFC, B

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D90D
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	1.500 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ
Agency Approvals	CE CULUS UKCA 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	5
Current @ Voltage	3.400 A @ 230.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	3.4 a

Part Detail

Revision	B
Type	AC
Mech. spec.	35EE440
Base	
Status	PRD/A
Elec. spec.	35WGG964
Layout	35LYEE440
Eff. date	11-15-2024
CD Diagram	CD0006B03
Poles	04
Leads	3#16 13" LONG LEADS Y
Proprietary	False
Created date	04-30-2024

Insulation Class	F
Inverter Code	03
KVA Code	-
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	3524B
Mounting Arrangement	B5
Number of Poles	4
Overall Length	16.42 IN
Power Factor	93
Product Family	General Purpose
Pulley Face Code	D-Flange
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.945 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

NP3968B01A01									
CAT.NO.	ECS101A8K1P5DD4								
SPEC.	35EE440G964			YR					
FRAME	D90D		IP	55		WT.	45		
KW	1.5		HZ	50		PH	3	DUTY-IPM	CONT
INS CL	F		CLASS RISE			AMB-C		40	
EFF. CL	IE5		EFF	90.6		COSφ	93		
VOLTS	230		FLA	3.4					
1/MIN	1500					1/MIN MAX	3000		
BEMF (V)	123					RS (OHMS)	2.94		
LD (MH)	22.1					LQ (MH)	97.1		
VPWM	CP =	50		TO	133				
CT	5		TO	50		VT	5		TO 50
MATCHED INV	ECIN8A7P0								
DE	6205		ODE	6203					
SERIAL #									

NP3978A00

PART NO.	ECIN8A7P0				
U1	240	PH	1	HZ	50
I1	5.3	W/EXT. CHOKE			5.1
SERIAL #					

Volts	230	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	3.4	Max Amps		Cs Diagram	CS1127	BEMF	123
KW	1.5	VFD#	ECIN8A7P0			LD	22.1
RPM	1500	S.F.	1.00			LQ	97.1
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	2.9307 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	1360	90%	7.0	100%	1.8	89.6	10.41%	158
P2	751	50%	7.0	100%	1.0	84.8	8.88%	135
P3	366	25%	7.0	100%	0.5	76.0	7.63%	116
P4	1353	90%	3.5	50%	0.9	90.7	4.57%	69
P5	751	50%	3.5	50%	0.5	88.1	3.36%	51
P6	751	50%	1.8	25%	0.3	87.9	1.70%	26
P7	366	25%	1.8	25%	0.1	82.9	1.24%	19

61800-9-2 PDS Performance at Reference Operating Points

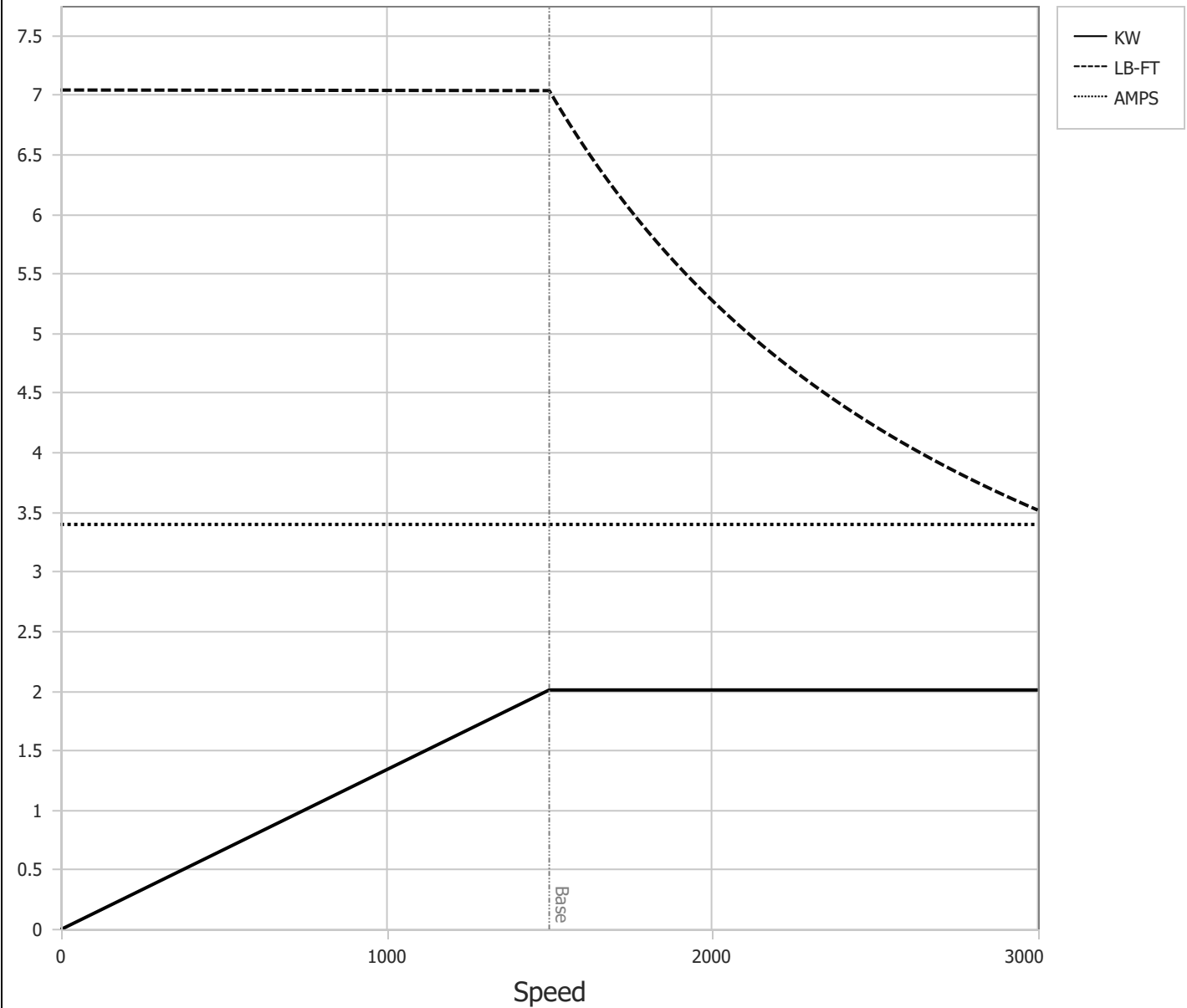
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1508	100%	7.0	100%	2.0	86.2	15.88%	241
P2	751	50%	7.0	100%	1.0	80.8	11.75%	178
P3	246	17%	7.0	100%	0.3	62.3	9.83%	149
P4	1488	100%	3.5	50%	1.0	87.9	6.72%	102
P5	751	50%	3.5	50%	0.5	83.4	4.91%	74
P6	246	17%	3.5	50%	0.2	66.6	4.07%	62
P7	751	50%	1.8	25%	0.3	82.0	2.71%	41
P8	246	17%	1.8	25%	0.1	66.5	2.04%	31

Points not taken in certified order.

BALDOR • RELIANCE	DR By:	<u>R & D</u>	AC MOTOR PERFORMANCE CURVES	35WGG964 35EE436G964 Test - 112228
	CK By:	<u>USGAHIL</u>		
	APP By:			
	Date:	<u>04/09/2025</u>		

Volts	230	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	3.4	Max Amps		Cs Diagram	CS1127	BEMF	123
KW	1.5	VFD #	ECIN8A7P0			LD	22.1
RPM	1500	S.F.	1.00			LQ	97.1
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	2.9307 Meas L-L

Constant Duty Operating Range

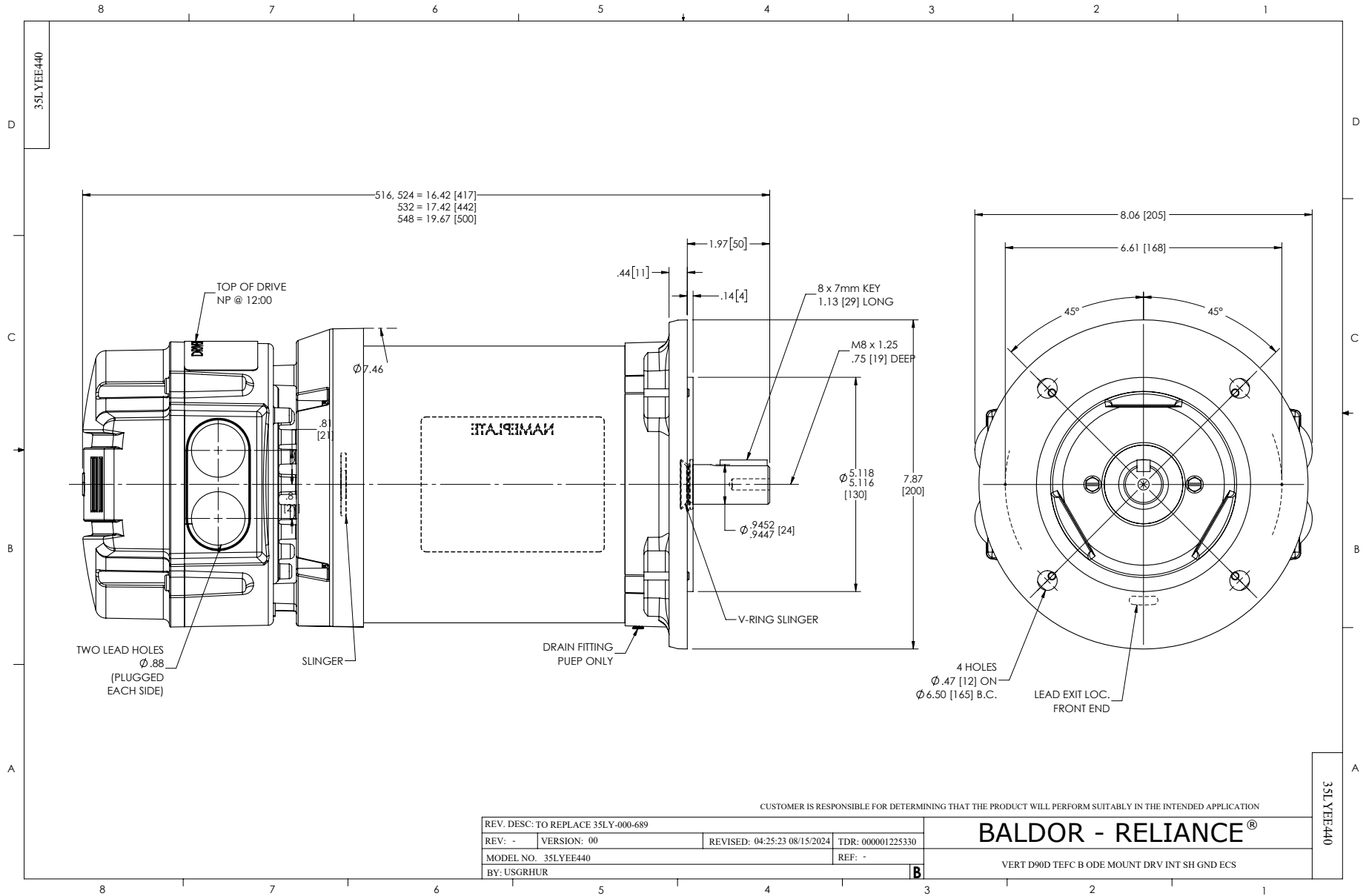


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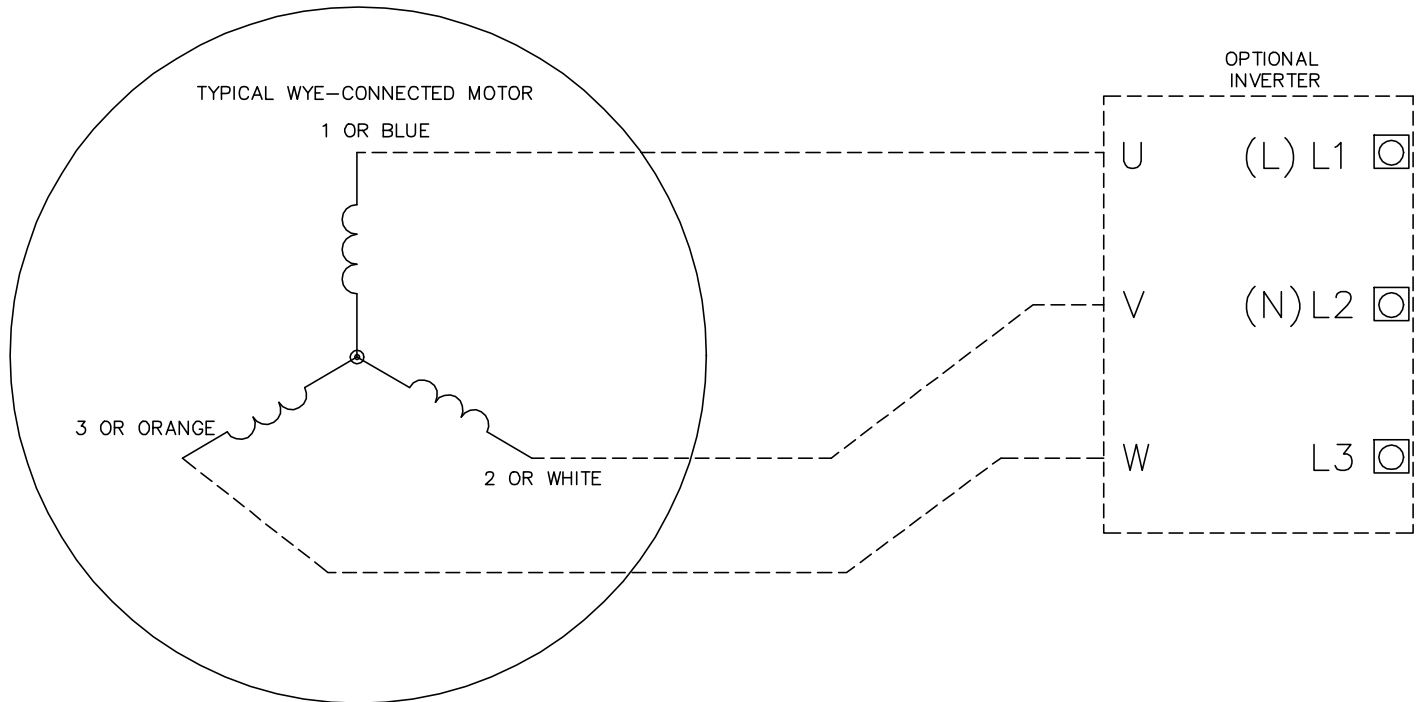
DR By: R & D
 CK By: USGAHIL
 APP By:
 Date: 04/09/2025

**AC MOTOR
PERFORMANCE
CURVES**

35WGG964
 35EE436G964
 Test - 112228



CD0006B03



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.

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, 3V, 3 LEADS, WYE CONNECTED, ECS

SH 1 of 1

CD0006B03