

ABB BALDOR RELIANCE III

Customer information packet

ECS101T2K0P8DF4

.75KW, 1500RPM, 3PH, 50HZ, D90S, 3516B, TEFC, B

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D90S
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	.750 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	5
Current @ Voltage	2.500 A @ 230.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a

Part Detail

Revision	C
Type	AC
Mech. spec.	35EE436
Base	
Status	PRD/A
Elec. spec.	35WGG932
Layout	35LYEE436
Eff. date	11-22-2024
CD Diagram	CD0006B03
Poles	04
Leads	3#14 13" LONG LEADS Y
Proprietary	False
Created date	04-16-2024

Insulation Class	F
Inverter Code	03
KVA Code	-
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516B
Mounting Arrangement	B3
Number of Poles	4
Overall Length	12.04 IN
Power Factor	98
Product Family	General Purpose
Pulley Face Code	Standard
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.	ECS101T2K0P8DF4								
SPEC.	35EE436G932			YR					
FRAME	D90S		IP	55	WT.	36			
KW	.75	HZ	50	PH	3	DUTY-IPM	CONT		
INS CL	F	CLASS RISE				AMB-C	40		
EFF. CL	IE5	EFF	88.1	COSØ	98				
VOLTS	230		FLA	2.5					
1/MIN	1500			1/MIN MAX	3000				
BEMF (V)	113			RS (OHMS)	4.9				
LD (MH)	30.8			LQ (MH)	135				
VPWM	CP =	50		TO	100				
CT	5	TO	50	VT	5	TO	50		
MATCHED INV	ECIN2A4P3								
DE	6205		ODE	6203					
SERIAL #									

NP3978A00

PART NO.	ECIN2A4P3				
U1	240	PH	3	HZ	50
I1	3.2	W/EXT. CHOKE			3
SERIAL #					

Volts	230	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.5	Max Amps	2.5	Cs Diagram	CS1127	BEMF	135
KW	0.75	VFD#	ECIN2A4P3			LD	30.8
RPM	1500	S.F.	1.00			LQ	135
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	4.9221 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	1347	90%	3.5	100%	0.7	87.8	12.47%	94
P2	748	50%	3.5	100%	0.4	83.8	9.66%	72
P3	374	25%	3.5	100%	0.2	74.9	8.33%	63
P4	1346	90%	1.8	50%	0.3	88.4	5.88%	44
P5	748	50%	1.8	50%	0.2	85.9	4.09%	31
P6	748	50%	0.9	25%	0.1	85.3	2.15%	16
P7	374	25%	0.9	25%	0.0	81.1	1.47%	11

61800-9-2 PDS Performance at Reference Operating Points

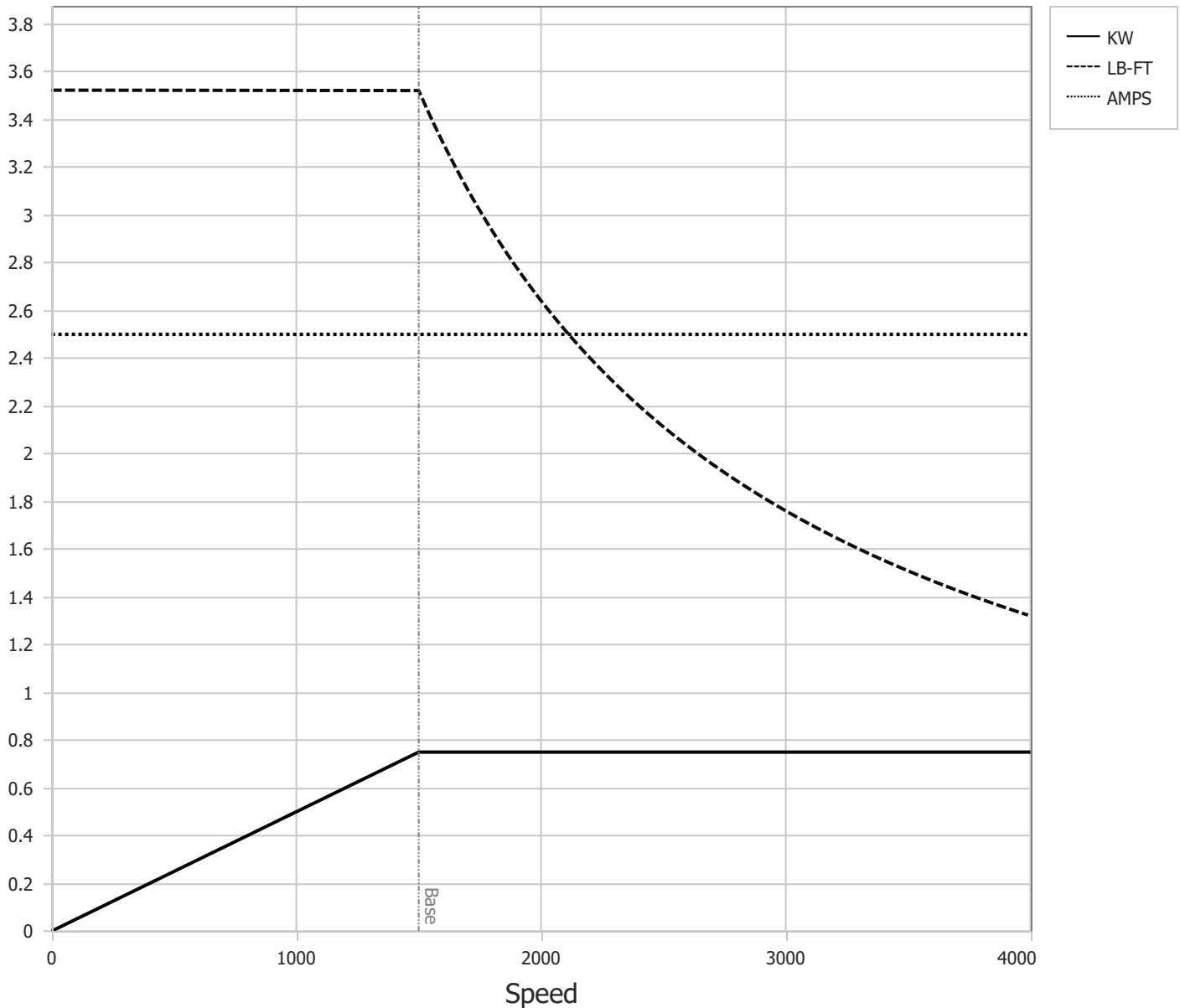
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1496	100%	3.5	100%	0.7	85.3	17.22%	129
P2	748	50%	3.5	100%	0.4	79.6	12.77%	96
P3	254	17%	3.5	100%	0.1	60.8	10.92%	82
P4	1496	100%	1.8	50%	0.4	85.1	8.71%	65
P5	748	50%	1.8	50%	0.2	80.5	6.02%	45
P6	255	17%	1.8	50%	0.1	63.7	4.85%	36
P7	748	50%	0.9	25%	0.1	78.1	3.47%	26
P8	254	17%	0.9	25%	0.0	62.5	2.53%	19

Points not taken in certified order.

BALDOR • RELIANCE	DR By:	<u>R & D</u>	AC MOTOR PERFORMANCE CURVES	35WGG932 35E5209G932 Test - 111044
	CK By:	<u>USJORAD2</u>		
	APP By:	<u>USJAROB1</u>		
	Date:	<u>07/27/2024</u>		

Volts	230	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.5	Max Amps	2.5	Cs Diagram	CS1127	BEMF	135
KW	0.75	VFD #	ECIN2A4P3			LD	30.8
RPM	1500	S.F.	1.00			LQ	135
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	4.9221 Meas L-L

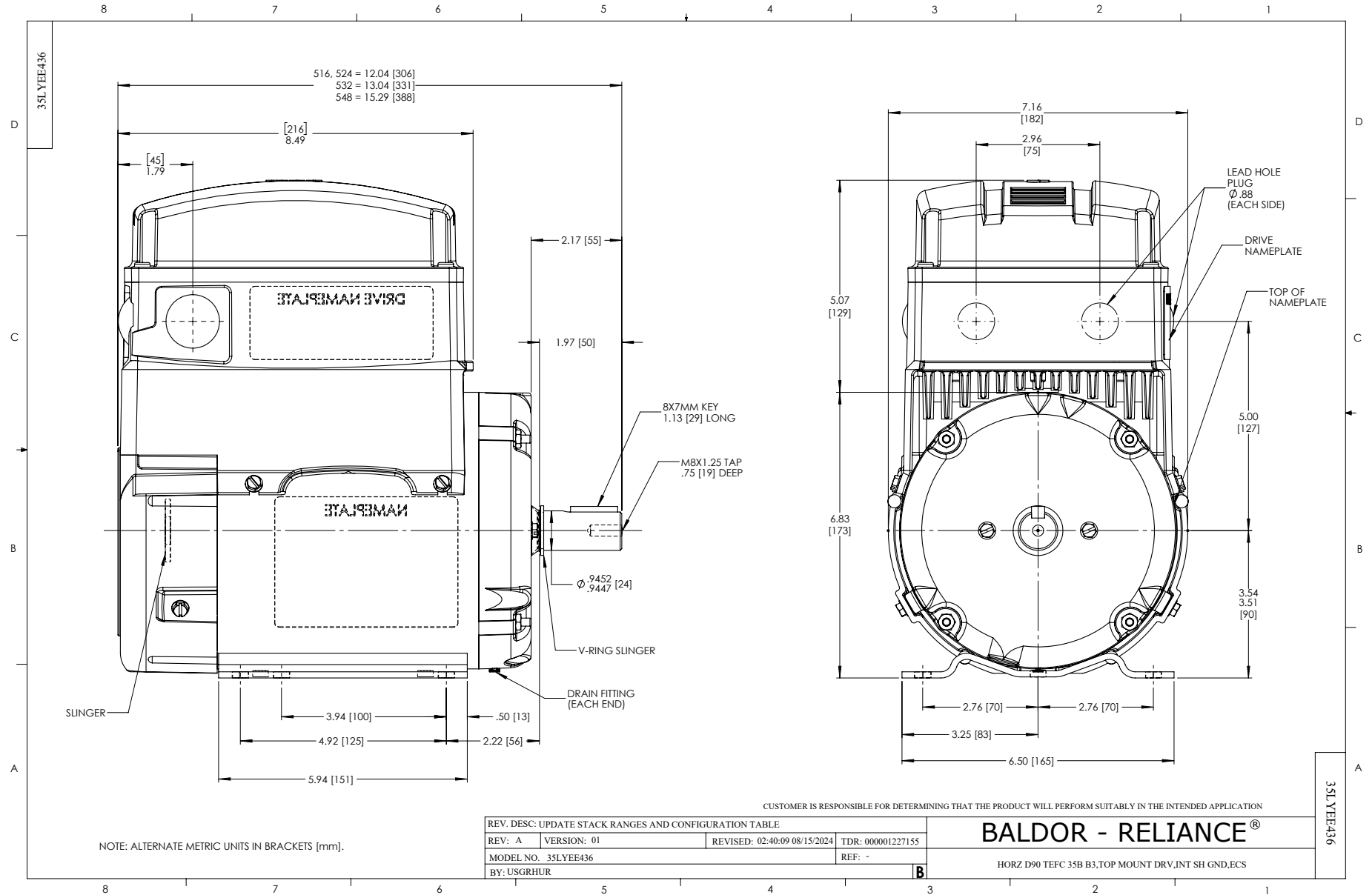
Constant Duty Operating Range



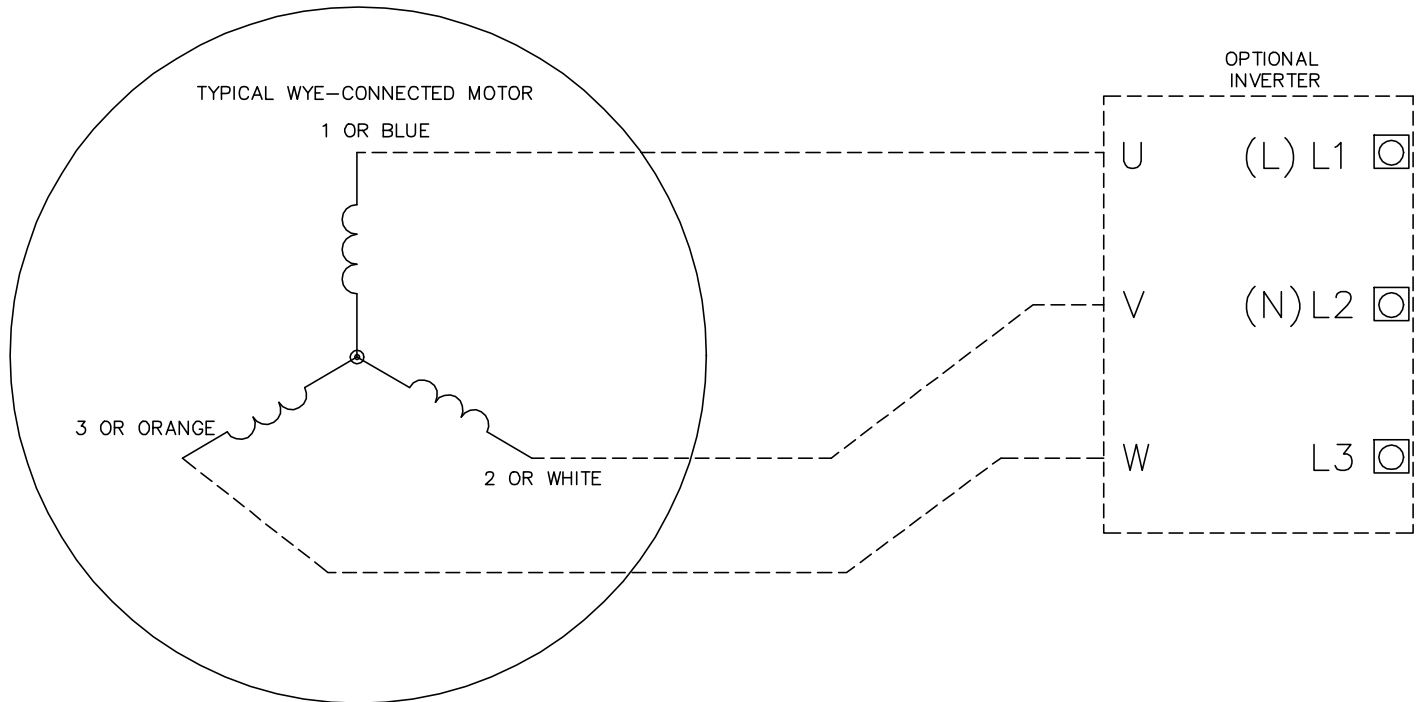
DR By: R & D
 CK By: USJORAD2
 APP By: USJAROB1
 Date: 07/27/2024

**AC MOTOR
PERFORMANCE
CURVES**

35WGG932
 35E5209G932
 Test - 111044



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

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