

**BALDOR • RELIANCE**

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# Customer information packet

## ECS101T3K1P5DF4

1.5KW, 1500RPM, 3PH, 50HZ, D90S, 3524B, 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	1.500 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	380.0 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	2.360 A @ 380.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	87.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	2.4 a

## Part detail

Revision	C
Type	AC
Mech. spec.	35EE436
Base	
Status	PRD/A
Elec. spec.	35WGG963
Layout	35LYEE436
Eff. date	11-22-2024
CD Diagram	CD0006B03
Poles	04
Leads	3#16 13" LONG LEADS Y
Proprietary	False
Created date	04-16-2024

<b>Insulation Class</b>	F
<b>Inverter Code</b>	03
<b>KVA Code</b>	-
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Quantity/Wire Size</b>	3 @ 16 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3524B
<b>Mounting Arrangement</b>	B3
<b>Number of Poles</b>	4
<b>Overall Length</b>	12.04 IN
<b>Power Factor</b>	95
<b>Product Family</b>	General Purpose
<b>Pulley Face Code</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	0.945 IN
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1500 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP3968B01A01</b>									
<b>CAT.NO.</b>	ECS101T3K1P5DF4								
<b>SPEC.</b>	35EE436G963			<b>YR</b>					
<b>FRAME</b>	D90S	<b>IP</b>	55	<b>WT.</b>	44				
<b>KW</b>	1.5	<b>HZ</b>	50	<b>PH</b>	3	<b>DUTY-IPM</b>	CONT		
<b>INS CL</b>	F	<b>CLASS RISE</b>			<b>AMB-C</b>	40			
<b>EFF. CL</b>	IE5	<b>EFF</b>	87.7	<b>COS0</b>	95				
<b>VOLTS</b>	380		<b>FLA</b>	2.36					
<b>1/MIN</b>	1500			<b>1/MIN MAX</b>	3000				
<b>BEMF (V)</b>	247			<b>RS (OHMS)</b>	11.7				
<b>LD (MH)</b>	78.9			<b>LQ (MH)</b>	406				
<b>VPWM</b>	<b>CP =</b>	50		<b>TO</b>	133				
<b>CT</b>	5	<b>TO</b>	50	<b>VT</b>	5	<b>TO</b>	50		
<b>MATCHED INV</b>	ECIN4A4P1								
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>SERIAL #</b>									

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**NP3978A00**

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<b>PART NO.</b>	ECIN4A4P1				
<b>U1</b>	400	<b>PH</b>	3	<b>HZ</b>	50
<b>I1</b>	2.9	<b>W/EXT. CHOKE</b>			2.7
<b>SERIAL #</b>					

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Volts	380	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.2	Max Amps		Cs Diagram	CS1126	BEMF	296
KW	1.5	VFD#	ECIN4A44P1			LD	78.9
RPM	1500	S.F.	1.00			LQ	406
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	11.7387 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	1361	90%	7.0	100%	1.4	88.8	11.51%	173
P2	755	50%	7.0	100%	0.8	84.6	9.15%	137
P3	363	25%	7.0	100%	0.4	74.2	8.40%	126
P4	1358	90%	3.5	50%	0.7	91.2	4.40%	66
P5	755	50%	3.5	50%	0.4	87.8	3.50%	53
P6	755	50%	1.8	25%	0.2	89.4	1.51%	23
P7	363	25%	1.8	25%	0.1	84.3	1.13%	17

**61800-9-2 PDS Performance at Reference Operating Points**

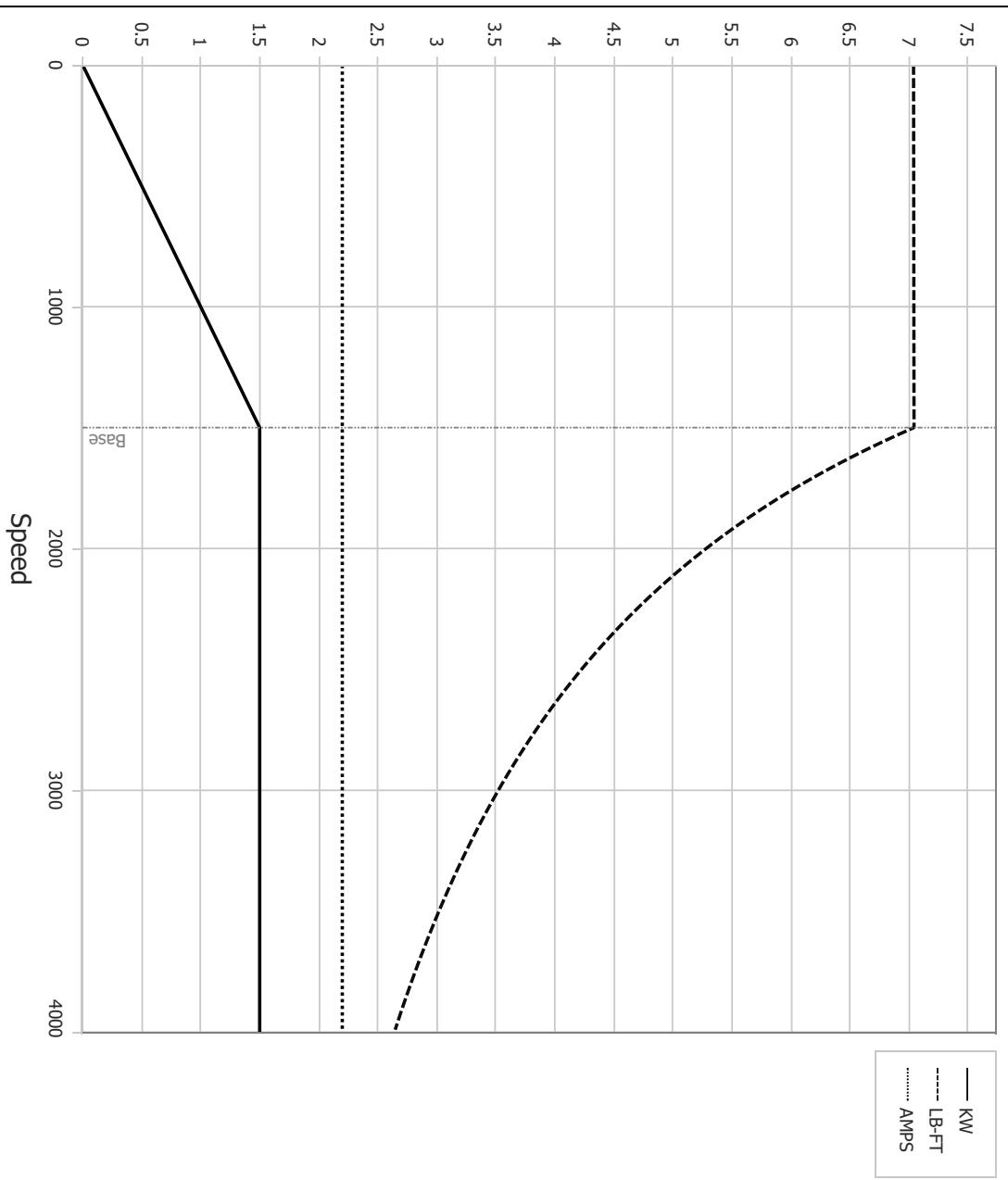
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1511	100%	7.0	100%	1.5	85.4	17.18%	258
P2	755	50%	7.0	100%	0.8	81.3	11.59%	174
P3	245	17%	7.0	100%	0.2	61.1	10.37%	155
P4	1509	100%	3.5	50%	0.8	88.4	6.59%	99
P5	755	50%	3.5	50%	0.4	82.9	5.18%	78
P6	245	17%	3.5	50%	0.1	65.2	4.36%	65
P7	755	50%	1.8	25%	0.2	81.9	2.80%	42
P8	245	17%	1.8	25%	0.1	64.1	2.29%	34

Points not taken in certified order.

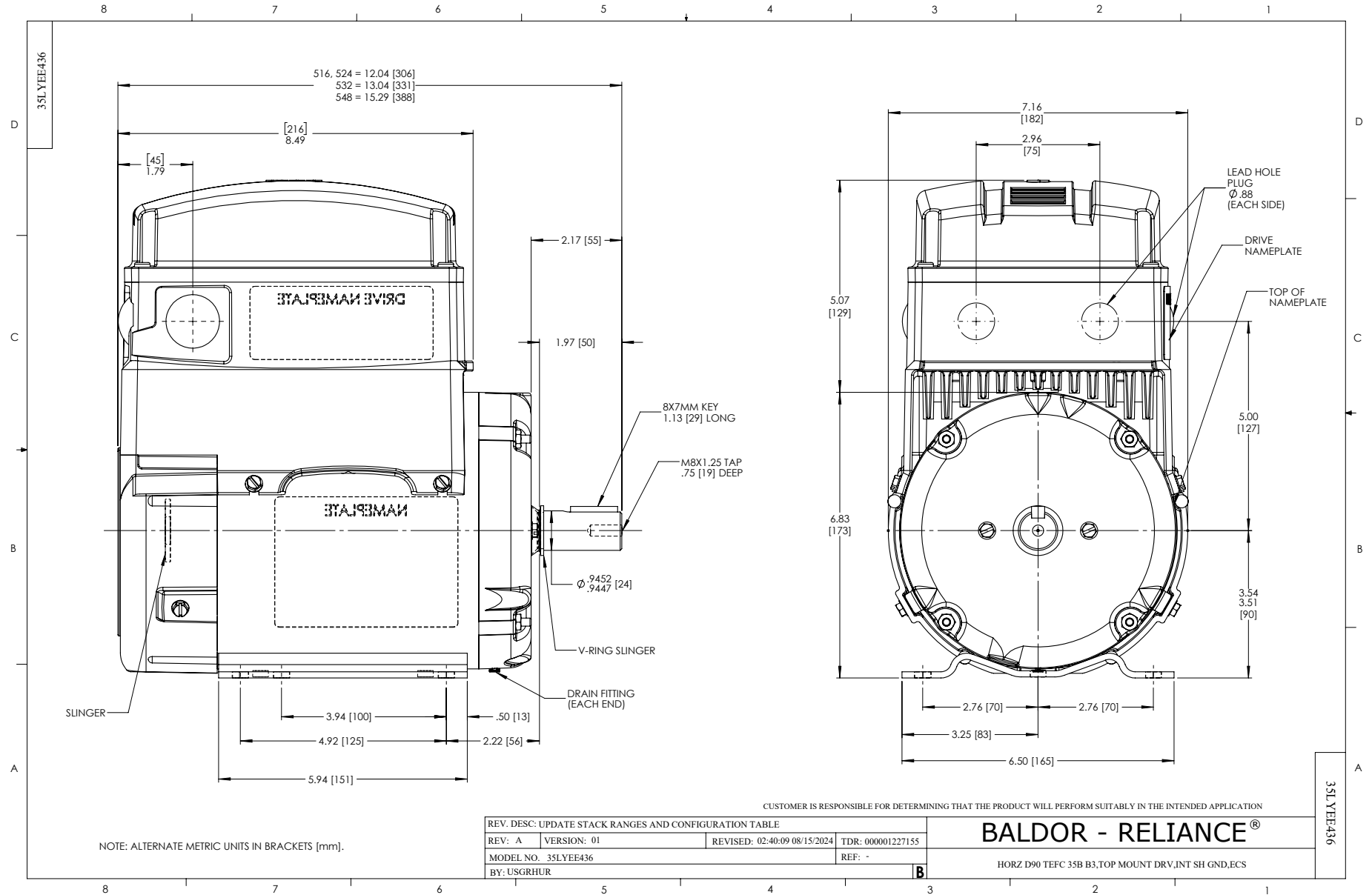
	DR By:	<u>R &amp; D</u>	<b>AC MOTOR PERFORMANCE CURVES</b>	<b>35WGG963</b> 35E5209G963 Test - 111107
	CK By:	<u>USTOSAN</u>		
	App By:	<u>USJAROB1</u>		
Date:		<u>08/08/2024</u>		

Volts	380	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.2	Max Amps		Cs Diagram	CS1126	BEMF	296
KW	1.5	VFD #	ECIN4A44P1			LD	78.9
RPM	1500	S.F.	1.00			LQ	406
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	11.7387 Meas L-L

Constant Duty Operating Range



<p><b>BALDOR • RELIANCE</b></p>	DR By:	<u>R &amp; D</u>	<p><b>AC MOTOR PERFORMANCE CURVES</b></p>	<p><b>35WGG963</b> 35E5209G963 Test - 1111107</p>
	CK By:	<u>USTOSAN</u>		
	APP By:	<u>USJAROB1</u>		
	Date:	<u>08/08/2024</u>		



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, 3V, 3 LEADS, WYE CONNECTED, ECS

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