

**BALDOR • RELIANCE**

---

# Customer information packet

## ECS100A4H1DF4

1HP, 1800RPM, 3PH, 60HZ, 143T, 3516B, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	143T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Brushless Wound Field PM Rotor
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	BLUETOOTH CULUS 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	1.050 A @ 460.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.3 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	1.1 a
Insulation Class	F
Inverter Code	03

## Part detail

Revision	H
Type	AC
Mech. spec.	35E5247
Base	
Status	PRD/A
Elec. spec.	35WGG965
Layout	35LYE5247
Eff. date	05-05-2026
CD Diagram	CD0006B03
Poles	04
Leads	3#14 13" LONG LEADS Y
Proprietary	False
Created date	05-06-2024

<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 @ 14 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3516B
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	16.71 IN
<b>Power Factor</b>	97
<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>	0.875 IN
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1800 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>NP3968A01A01</b>									
<b>CAT.NO.</b>	ECS100A4H1DF4								
<b>SPEC.</b>	35E5247G965G1								
<b>FRAME</b>	143T		<b>ENCL.</b>	TEFC	<b>IP</b>	54			
<b>HP</b>	1	40	<b>C AMB</b>		<b>CONT</b>				
<b>NOM. EFF.</b>	89.5	<b>PF</b>	97	<b>SF</b>	1				
<b>VOLTS</b>	460		<b>FLA</b>	1.2					
<b>RPM</b>	1800		<b>RPM-MAX</b>	3600					
<b>HZ</b>	60	<b>PH.</b>	3	<b>CLASS</b>	F				
<b>BEMF (V)</b>	269		<b>RS (OHMS)</b>	19.7					
<b>LD (MH)</b>	117		<b>LQ (MH)</b>	500					
<b>VPWM</b>	<b>CHP</b>	60	<b>TO</b>	120					
<b>CT</b>	6	<b>TO</b>	60	<b>VT</b>	6	<b>TO</b>	60		
<b>MATCHED INV</b>	ECI4A2P2								
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>SERIAL #</b>									

---

**NP3978A01**

---

<b>PART NO.</b>	ECI4A2P2				
<b>U1</b>	480	<b>PH</b>	3	<b>HZ</b>	60
<b>I1</b>	1.8	<b>W/EXT. CHOKE</b>			1.7
<b>SERIAL #</b>					

---

Volts	460	Max RPM	3600	Conn Diag.	CD0006B03	Leads	3
Amps	1.05	Max Amps		Cs Diagram	CS1126	BEMF	269
HP	1	VFD#	ECIN4A2P2			LD	117
RPM	1800	S.F.	1.00			LQ	500
Phase/Hz	3/60	Rating	50C AMB-CONT			Rs	19.8095 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	1618	90%	2.9	100%	0.9	88.2	11.94%	90
P2	900	50%	2.9	100%	0.5	86.0	8.08%	61
P3	450	25%	2.9	100%	0.3	79.2	6.50%	49
P4	1621	90%	1.5	50%	0.5	87.1	6.62%	50
P5	900	50%	1.5	50%	0.2	87.4	3.55%	27
P6	900	50%	0.7	25%	0.1	86.0	2.02%	15
P7	450	25%	0.7	25%	0.1	83.8	1.21%	9

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

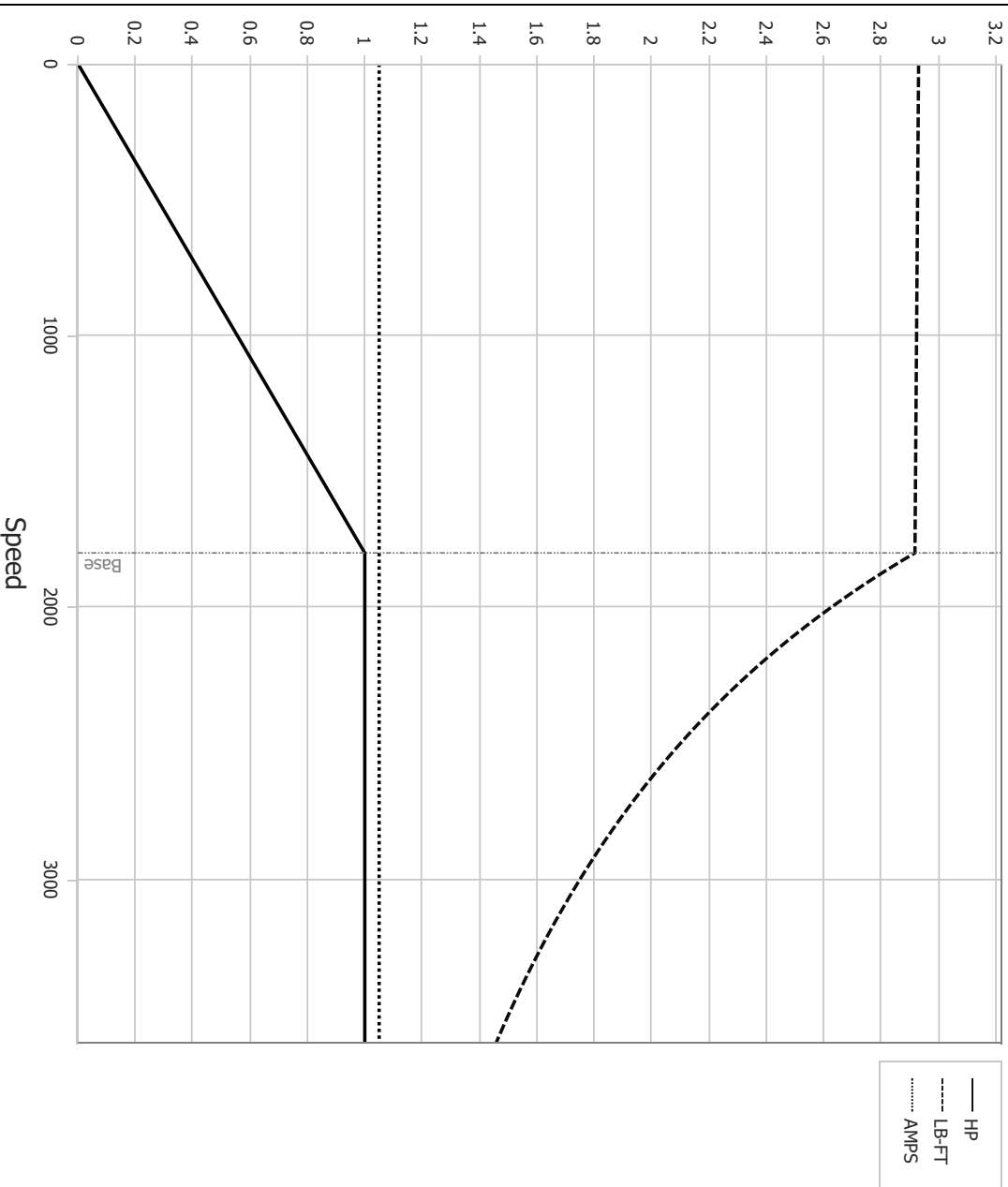
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1799	100%	2.9	100%	1.0	87.0	14.73%	111
P2	900	50%	2.9	100%	0.5	81.0	11.61%	88
P3	300	17%	2.9	100%	0.2	63.2	9.59%	72
P4	1802	100%	1.5	50%	0.5	83.5	9.78%	74
P5	900	50%	1.5	50%	0.2	79.4	6.41%	48
P6	300	17%	1.5	50%	0.1	61.5	5.17%	39
P7	900	50%	0.7	25%	0.1	73.2	4.53%	34
P8	300	17%	0.7	25%	0.0	53.7	3.56%	27

Points not taken in certified order.

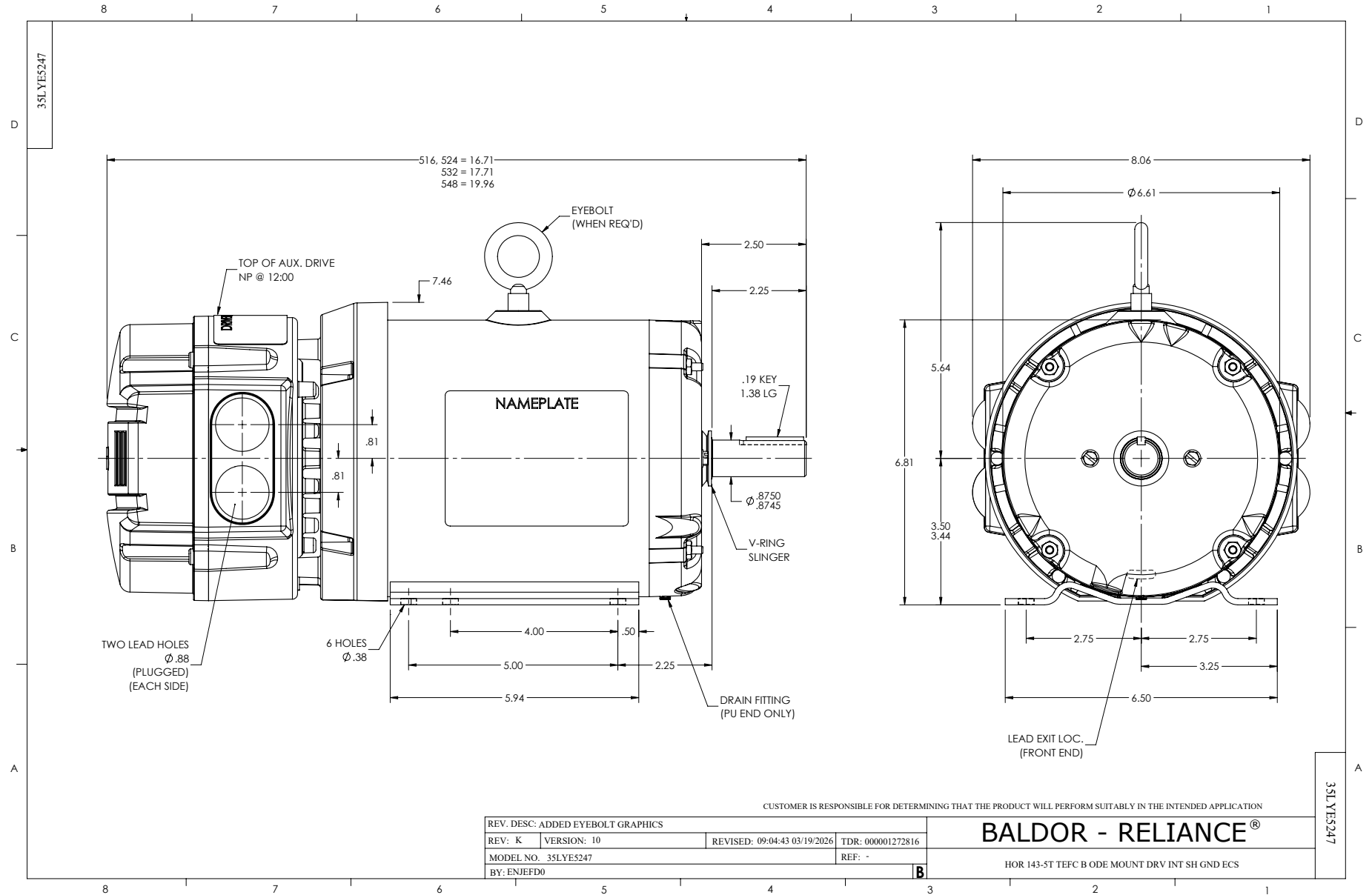
<b>BALDOR • RELIANCE</b>	DR By: <u>R &amp; D</u>	<b>AC MOTOR PERFORMANCE CURVES</b>	<b>35WGG965</b> 35-0000-1623 Test - 111577
	CK By: <u>USTOSAN</u>		
	App By: <u>USWEQUA1</u>		
Date: <u>11/14/2024</u>			

Volts	460	Max RPM	3600	Conn Diag.	CD0006B03	Leads	3
Amps	1.05	Max Amps		Cs Diagram	CS1126	BEMF	269
HP	1	VFD #	ECIN4A2P2			LD	117
RPM	1800	S.F.	1.00			LQ	500
Phase/Hz	3/60	Rating	50C AMB-CONT			Rs	19.8095 Meas L-L

Constant Duty Operating Range



<p><b>BALDOR • RELIANCE</b></p>	DR By:	R & D	<p><b>AC MOTOR PERFORMANCE CURVES</b></p>	<p><b>35WGG965</b> 35-0000-1623 Test - 111577</p>
	CK By:	USTOSAN		
	APP By:	USWEQUA1		
	Date:	11/14/2024		



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

SH 1 of 1