

# **ABB BALDOR RELIANCE III**

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## **Customer information packet**

ECS100A4H3DF4

3HP, 1800RPM, 3PH, 60HZ, 145T, 3532B, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	145T
<b>Frame Material</b>	Steel
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	None
<b>Haz Area Division</b>	Not Applicable
<b>Motor Letter Type</b>	Brushless Wound Field PM Rotor
<b>Output @ Frequency</b>	3.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	BLUETOOTH CULUS WEEE
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Auxiliary Box Lead Termination</b>	None
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Blower</b>	None
<b>Constant Torque Speed Range</b>	6
<b>Current @ Voltage</b>	3.500 A @ 460.0 V
<b>Design Code</b>	-
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	91.0 %
<b>Electrically Isolated Bearing</b>	Not Electrically Isolated
<b>Feedback Device</b>	NO FEEDBACK
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	3.5 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	03

**Part Detail**

<b>Revision</b>	H
<b>Type</b>	AC
<b>Mech. spec.</b>	35E5247
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	35WGG943
<b>Layout</b>	35LYE5247
<b>Eff. date</b>	05-05-2026
<b>CD Diagram</b>	CD0006B03
<b>Poles</b>	04
<b>Leads</b>	3#16 13" LONG LEADS Y
<b>Proprietary</b>	False
<b>Created date</b>	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 @ 116 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3532B
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	18.58 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>	1.15
<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

Volts	460	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	3.7	Max Amps		Cs Diagram	CS1126	BEMF	172
HP	3	VFD#	ECI4A4P1			LD	51
RPM	1800	S.F.	1.00			LQ	177
Phase/Hz	3/60	Rating	40C AMB CONT			Rs	3.8460 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	1627	90%	8.8	100%	2.7	91.3	8.59%	194
P2	904	50%	8.8	100%	1.5	89.3	6.00%	136
P3	452	25%	8.8	100%	0.8	83.4	4.94%	112
P4	1628	90%	4.4	50%	1.4	91.8	3.99%	90
P5	904	50%	4.4	50%	0.8	89.9	2.80%	63
P6	904	50%	2.2	25%	0.4	87.9	1.70%	39
P7	452	25%	2.2	25%	0.2	83.7	1.21%	27

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

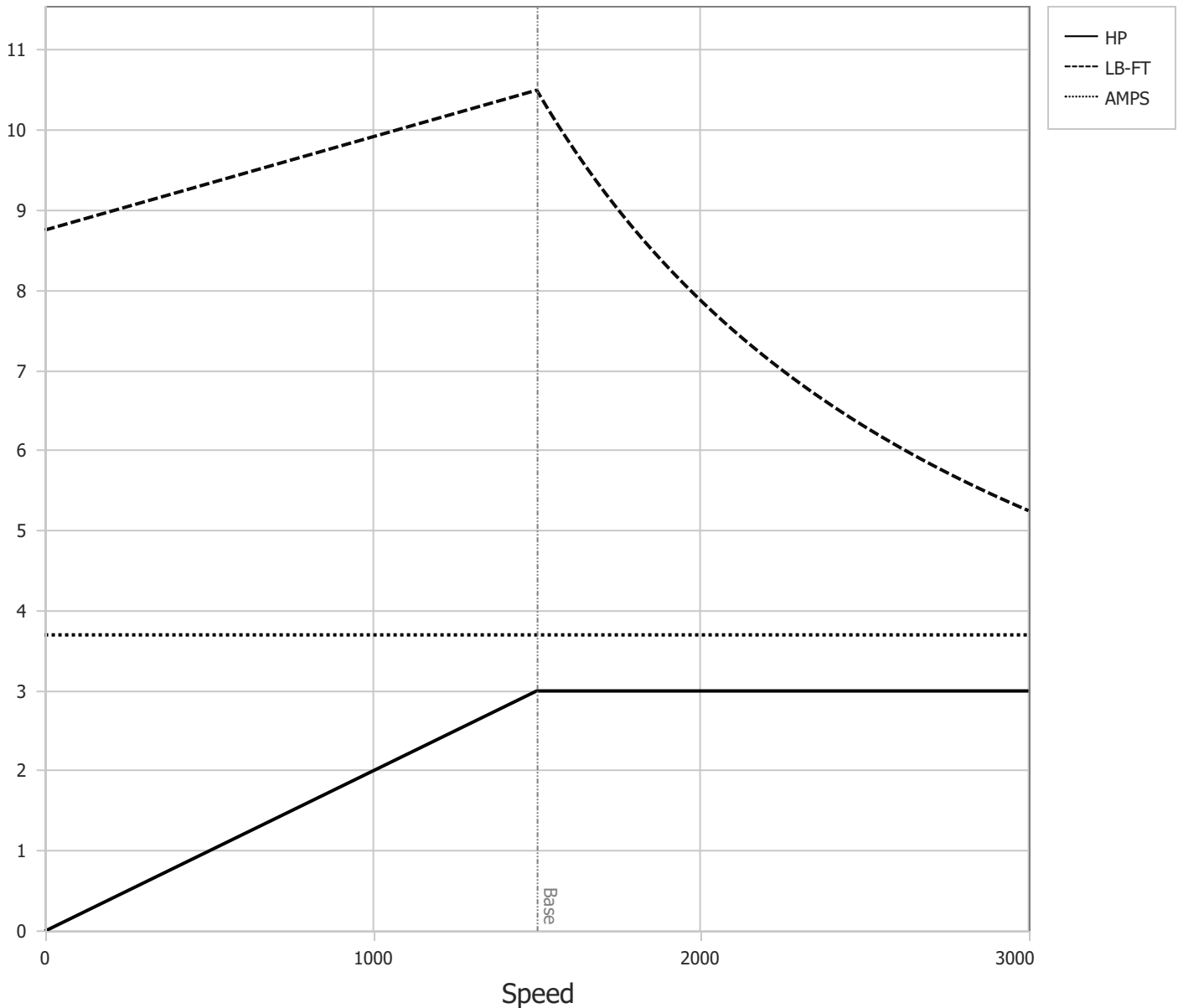
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1804	100%	8.8	100%	3.0	89.8	11.23%	254
P2	904	50%	8.8	100%	1.5	84.8	8.87%	201
P3	301	17%	8.8	100%	0.5	69.2	7.37%	167
P4	1809	100%	4.4	50%	1.5	88.5	6.44%	146
P5	904	50%	4.4	50%	0.8	84.1	4.70%	106
P6	301	17%	4.4	50%	0.3	68.2	3.86%	87
P7	904	50%	2.2	25%	0.4	80.2	3.06%	69
P8	301	17%	2.2	25%	0.1	62.6	2.46%	56

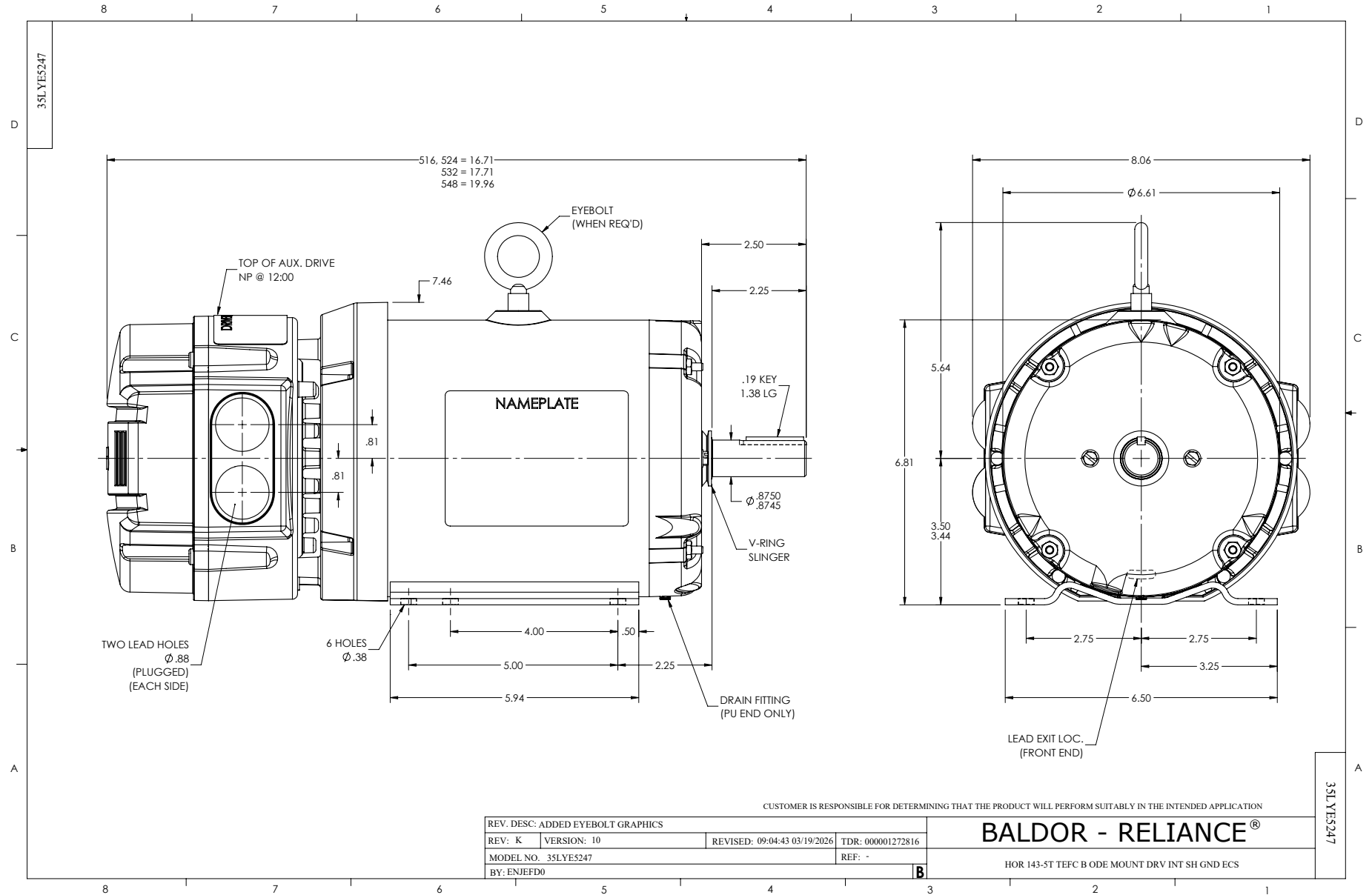
Points not taken in certified order.

	DR By:	<u>R &amp; D</u>	<b>AC MOTOR PERFORMANCE CURVES</b>	<b>36WGA0025</b> 36-0000-3655 Test - 111781
	CK By:	<u>USBIBAK</u>		
	APP By:	<u>USJAROB1</u>		
	Date:	<u>01/09/2025</u>		

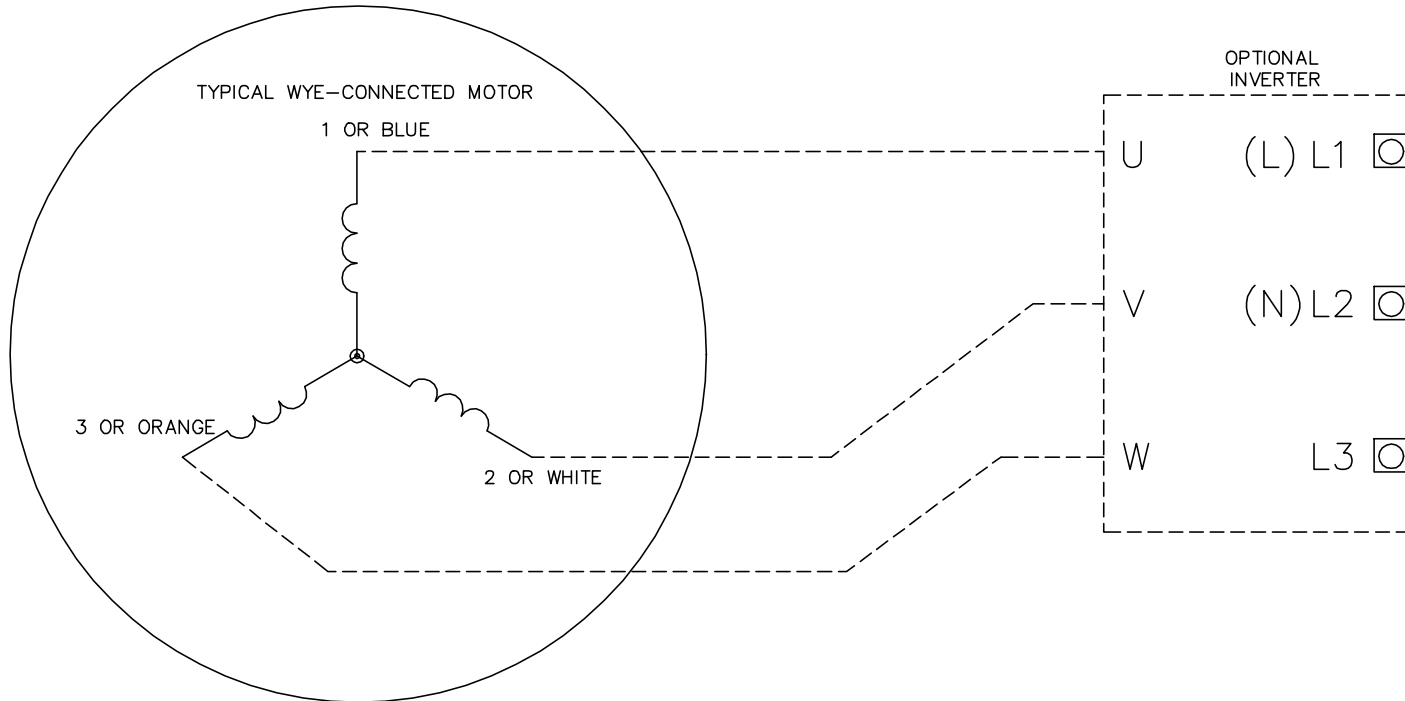
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Constant Duty Operating Range





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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