

# ABB BALDOR RELIANCE III

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## Customer information packet

ECS101M0H2DB4

2HP, 1800RPM, 3PH, 60HZ, 145TC, 3524B, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	145TC
<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>	2.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	230.0 V @ 60 HZ 460.0 V @ 60 HZ
<b>Agency Approvals</b>	WEEE CULUS
<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>	1.500 A @ 460.0 V 3.000 A @ 230.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	88.5 %
<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>	1.5 a
<b>Insulation Class</b>	F

**Part Detail**

<b>Revision</b>	C
<b>Type</b>	AC
<b>Mech. spec.</b>	35E5263
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	35WGG983
<b>Layout</b>	35LYE5263
<b>Eff. date</b>	02-12-2026
<b>CD Diagram</b>	CD0005A25
<b>Poles</b>	04
<b>Leads</b>	9#16 Y
<b>Proprietary</b>	False
<b>Created date</b>	03-15-2024

<b>Inverter Code</b>	Inverter Duty
<b>KVA Code</b>	N
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Quantity/Wire Size</b>	9 @ 16 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3524B
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	13.29 IN
<b>Power Factor</b>	93
<b>Product Family</b>	General Purpose
<b>Pulley Face Code</b>	C-Face
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	Y
<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>	ECS101M0H2DB4								
<b>SPEC.</b>	35E5263G983								
<b>FRAME</b>	145TC		<b>ENCL.</b>	TEFC	<b>IP</b>	54			
<b>HP</b>	2	40	<b>C AMB</b>	CONT					
<b>NOM. EFF.</b>	91.9	<b>PF</b>	93	<b>SF</b>	1.5				
<b>VOLTS</b>	230/460		<b>FLA</b>	4.4/2.2					
<b>RPM</b>	1800	<b>RPM-MAX</b>	4000						
<b>HZ</b>	60	<b>PH.</b>	3	<b>CLASS</b>	F				
<b>BEMF (V)</b>	148/296		<b>RS (OHMS)</b>	2.9/11.7					
<b>LD (MH)</b>	19.7/78.9			<b>LQ (MH)</b>	101.5/406				
<b>VPWM</b>	<b>CHP</b>	60	<b>TO</b>	133					
<b>CT</b>	6	<b>TO</b>	60	<b>VT</b>	6	<b>TO</b>	60		
<b>MATCHED INV</b>	ACS380-04XX-04A8-1 / 02A6-4								
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>SERIAL #</b>									

Volts	460	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	1.75	Max Amps		Cs Diagram	CS1126	BEMF	296
HP	2	VFD#	ECIN4A2P2			LD	78.9
RPM	1800	S.F.	1.00			LQ	406
Phase/Hz	3/60	Rating	50C AMB-CONT			Rs	11.7741 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	1622	90%	5.8	100%	1.8	91.2	8.59%	130
P2	895	50%	5.8	100%	1.0	86.9	7.45%	112
P3	448	25%	5.8	100%	0.5	80.2	6.10%	92
P4	1623	90%	2.9	50%	0.9	91.7	4.08%	62
P5	900	50%	2.9	50%	0.5	89.7	2.85%	43
P6	898	50%	1.5	25%	0.2	88.8	1.56%	24
P7	445	25%	1.5	25%	0.1	84.8	1.11%	17

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

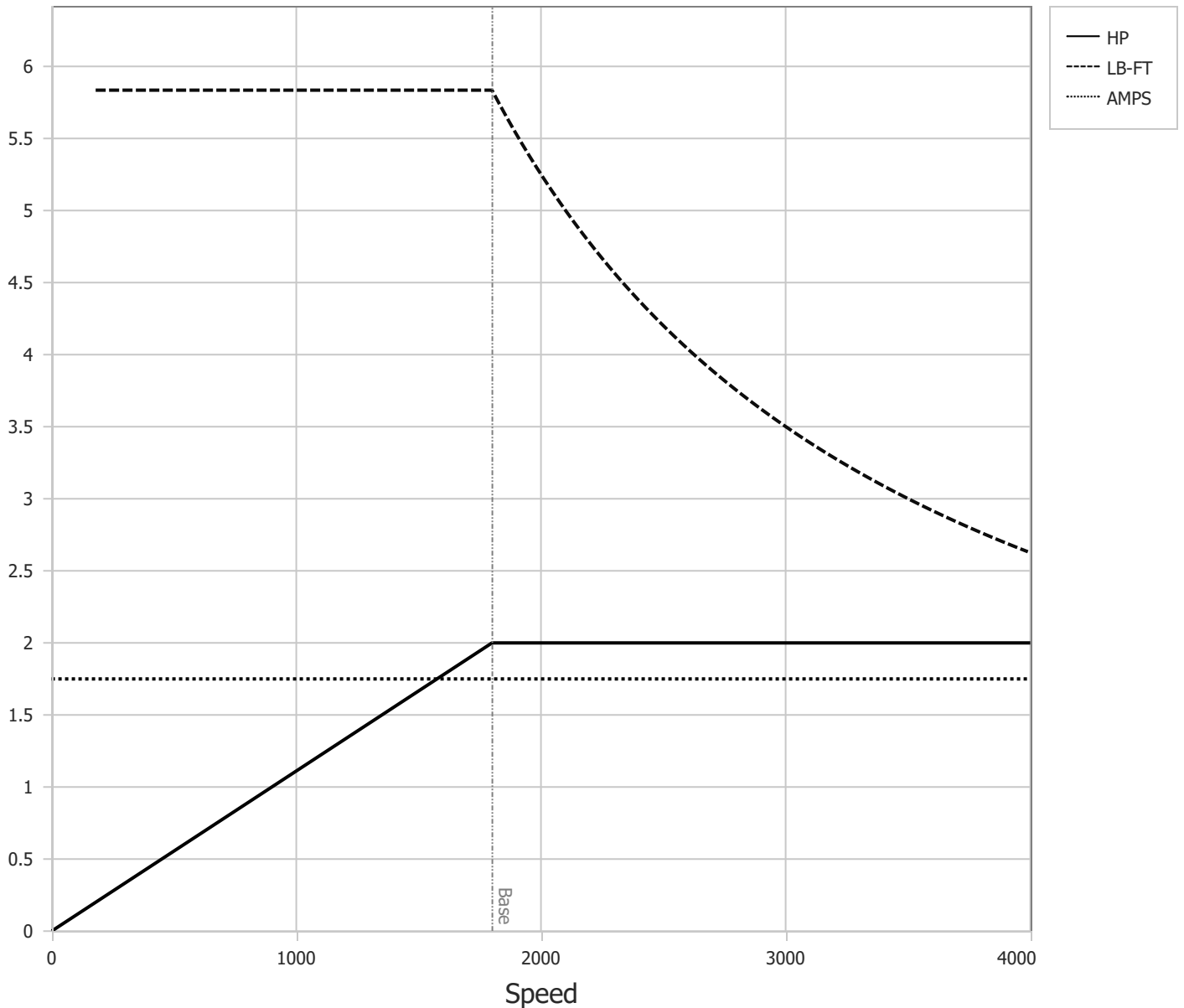
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1806	100%	5.8	100%	2.0	88.6	12.70%	192
P2	895	50%	5.8	100%	1.0	82.7	10.27%	155
P3	299	17%	5.8	100%	0.3	66.2	8.39%	127
P4	1807	100%	2.9	50%	1.0	89.0	6.15%	93
P5	900	50%	2.9	50%	0.5	83.4	4.92%	74
P6	300	17%	2.9	50%	0.2	66.8	4.10%	62
P7	898	50%	1.5	25%	0.2	78.9	3.30%	50
P8	298	17%	1.5	25%	0.1	60.7	2.65%	40

Points not taken in certified order.

<b>BALDOR • RELIANCE</b>	DR By:	<u>R &amp; D</u>	<b>AC MOTOR PERFORMANCE CURVES</b>	<b>35WGG963</b> 35-0000-1627 Test - 111378
	CK By:	<u>USTOSAN</u>		
	APP By:	<u>USJAROB1</u>		
	Date:	<u>10/02/2024</u>		

Volts	460	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	1.75	Max Amps		Cs Diagram	CS1126	BEMF	296
HP	2	VFD #	ECIN4A2P2			LD	78.9
RPM	1800	S.F.	1.00			LQ	406
Phase/Hz	3/60	Rating	50C AMB-CONT			Rs	11.7741 Meas L-L

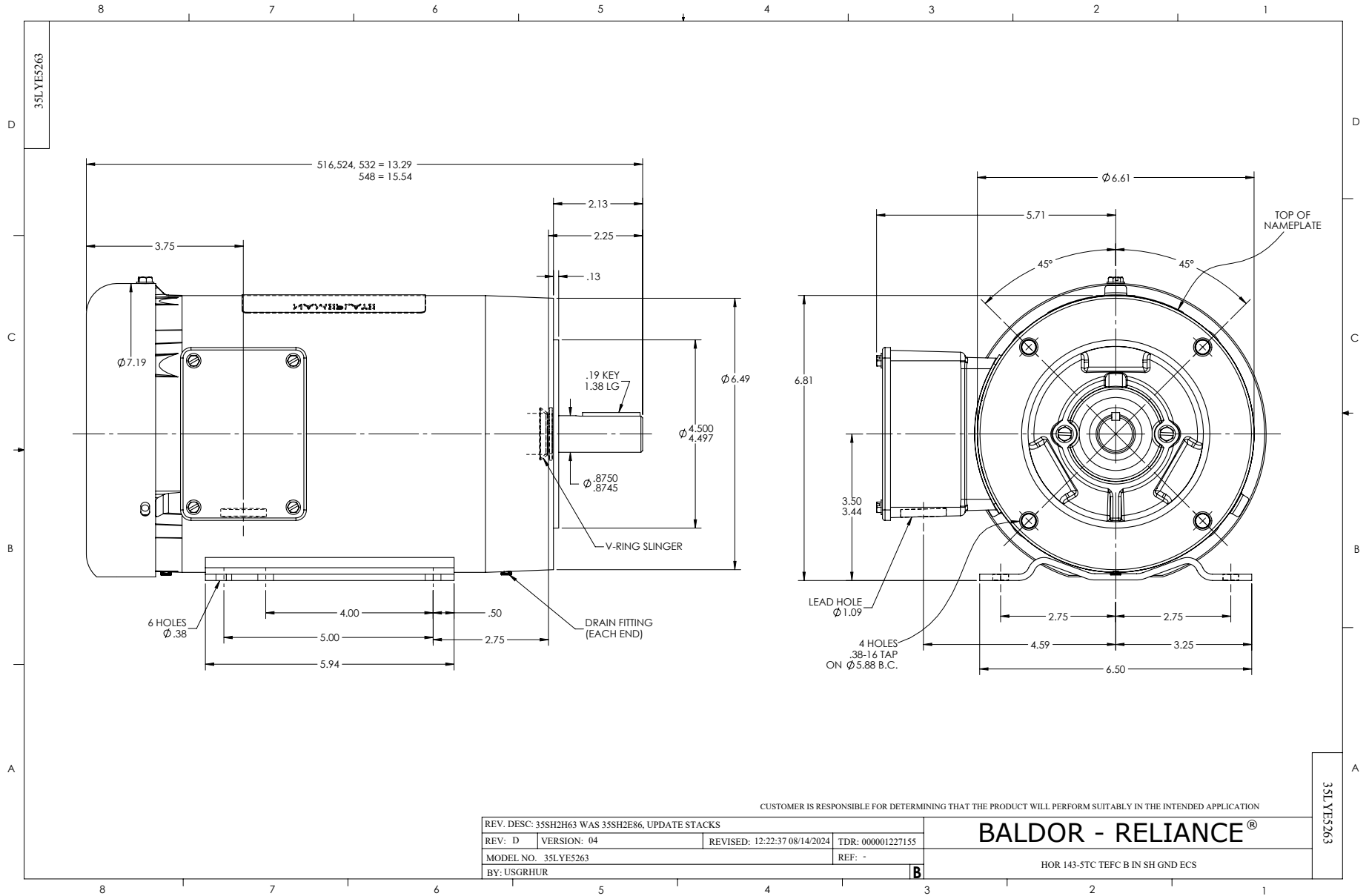
Constant Duty Operating Range



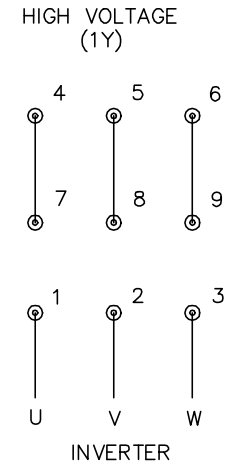
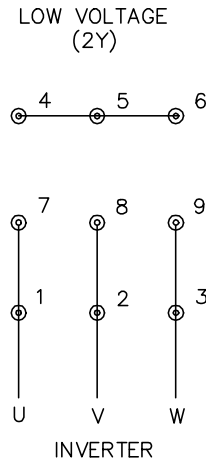
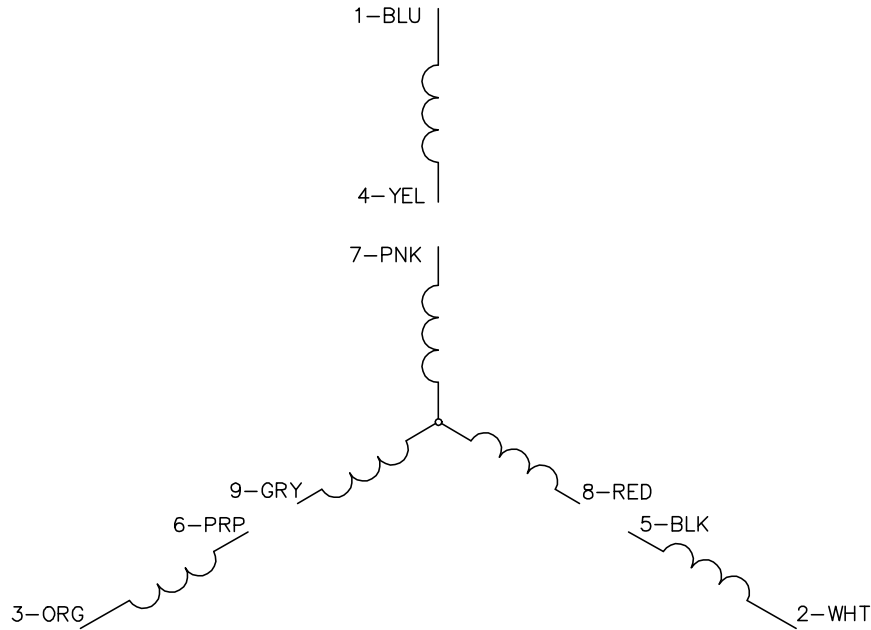
DR By: R & D  
 CK By: USTOSAN  
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 Date: 10/02/2024

**AC MOTOR  
PERFORMANCE  
CURVES**

**35WGG963**  
 35-0000-1627  
 Test - 111378



CD0005A25



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005A25

REV. DESC: NEW		
REV. LTR: -	VERSION: 00	TDR: 000001135746
FILE: \AAA\00253\082	REVISED: 01:10:57 03/30/2020	BY: ENMARSO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, ECS  
SH 1 of 1