

ABB BALDOR RELIANCE III

Customer information packet

ECS101M0H2DB4

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
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	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	WEEE CULUS
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	1.500 A @ 460.0 V 3.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F

Part Detail

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

Inverter Code	Inverter Duty
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.29 IN
Power Factor	93
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	Y
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1800 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

NP3968A01A01									
CAT.NO.	ECS101M0H2DB4								
SPEC.	35E5263G983								
FRAME	145TC			ENCL.		TEFC		IP	54
HP	2	40	C AMB			CONT			
NOM. EFF.	91.9	PF	93	SF		1.5			
VOLTS	230/460			FLA		4.4/2.2			
RPM	1800			RPM-MAX		4000			
HZ	60		PH.	3	CLASS		F		
BEMF (V)	148/296			RS (OHMS)			2.9/11.7		
LD (MH)	19.7/78.9				LQ (MH)		101.5/406		
VPWM	CHP	60	TO		133				
CT	6	TO	60	VT		6	TO	60	
MATCHED INV	ACS380-04XX-04A8-1 / 02A6-4								
DE	6205			ODE		6203			
SERIAL #									

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

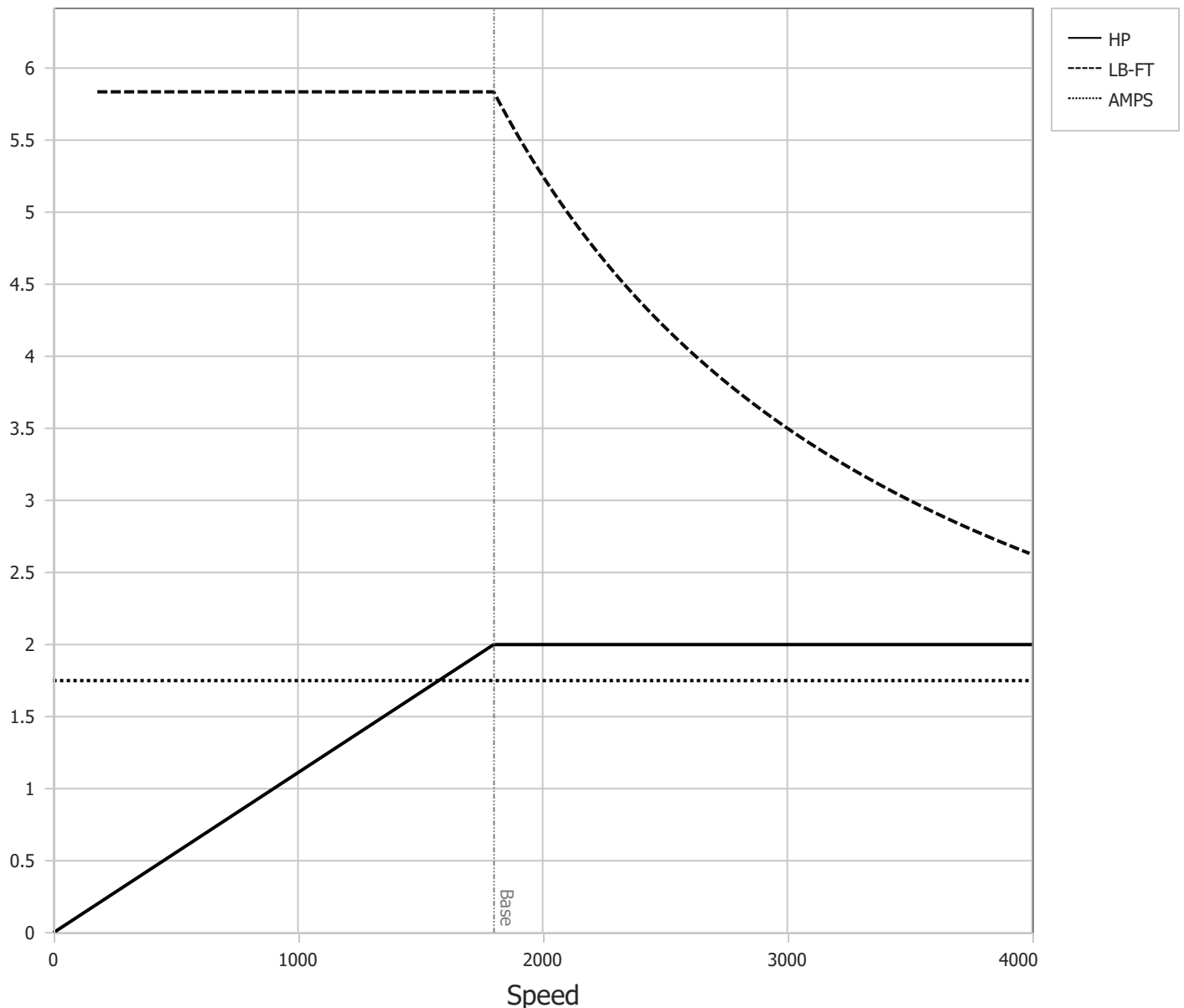
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1806	100%	5.8	100%	2.0	88.6	12.70%	192
P2	895	50%	5.8	100%	1.0	82.7	10.27%	155
P3	299	17%	5.8	100%	0.3	66.2	8.39%	127
P4	1807	100%	2.9	50%	1.0	89.0	6.15%	93
P5	900	50%	2.9	50%	0.5	83.4	4.92%	74
P6	300	17%	2.9	50%	0.2	66.8	4.10%	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.

	DR By:	R & D	AC MOTOR PERFORMANCE CURVES	35WGG963 35-0000-1627 Test - 111378
	CK By:	USTOSAN		
	APP By:	USJAROB1		
	Date:	10/02/2024		

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


BALDOR • RELIANCE

 DR By: R & D

 CK By: USTOSAN

 APP By: USJAROB1

 Date: 10/02/2024
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PERFORMANCE
CURVES**
35WGG963

35-0000-1627

Test - 111378

