

ABB BALDOR RELIANCE III

Customer information packet

ECS100T4H3DF4

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145T
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	3.000 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	3.500 A @ 460.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	3.5 a
Insulation Class	F
Inverter Code	03

Part Detail

Revision	D
Type	AC
Mech. spec.	35E5209
Base	
Status	PRD/A
Elec. spec.	35WGG943
Layout	35LYE5209
Eff. date	06-16-2025
CD Diagram	CD0006B03
Poles	04
Leads	3#16
Proprietary	False
Created date	05-06-2024

KVA Code	-
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 116 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3532B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.26 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
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

Parts List

Part number	Description	Quantity
SA427607	SA 35E5209G943G1	1.000 ea
RA419748	RA 35E5209G943G1	1.000 ea
ECI4A4P1SP	380-480V, 2.0HP, 4.1A, NO BK CHOP, RTC,	1.000 ea
35EP3122K00	MASTER ODE,203 BRG, .683SH, #26 DRN, FH MTG	1.000 ea
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123C00	MASTER DE,205 BRG, .998 SH, #26 DRN, LCK BR	1.000 ea
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 ea
51XN1032A18	10-32 X 1 1/8 HX WS SL SR (ESKAY)	2.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH3006	35 FRAME TOP ECM FAN HOUSING	1.000 ea
35CB3505A00	35 FRAME TOP ECM PLASTIC COVER WITH FOAM	1.000 ea
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	2.000 ea
15XN0832A12	SCREW, 8/32 X 3/4" PAN HDPHIL, MS	3.000 ea
HS0052A00	35 FRAME TOP ECM HEATSINK MACHINING	1.000 ea
GS0025	35 FRAME TOP MOUNT GASKET	1.000 ea
WD4100A30	HEYCO #3833 RUBBER PLUG KOS-LT - 1/2	4.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	4.000 ea
15XN1032A10	SCREW PAN HD 10-32 X .625 (PHILLIPS)	4.000 ea
MJ5002A02	NON-CORROSIVE SILICONE, DOW 748, 10.3 OZ	0.001 ea
NP3968	MYLAR BLANK 4.375W X 3.375L	1.000 ea
NP3978	MYLAR BLANK 4.375W X 1.75L	1.000 ea
HW4600B32SP	V-RING SLINGER 1.000 X 1.540 X .24 VITON	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga

MJ5002A02	NON-CORROSIVE SILICONE, DOW 748, 10.3 OZ	0.001 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
MN451	EC Titanium Quick Start 06/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

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

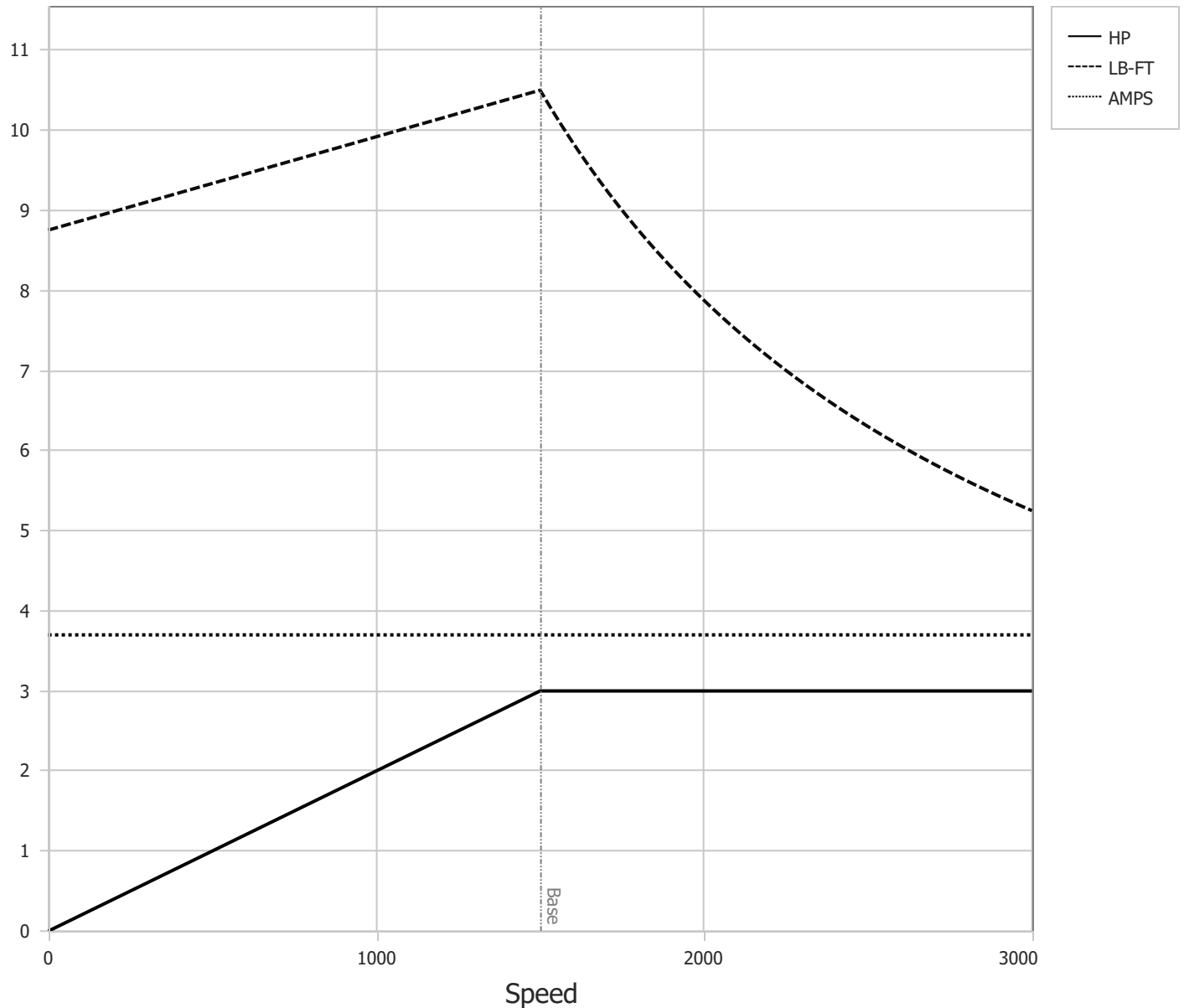
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1804	100%	8.8	100%	3.0	89.8	11.23%	254
P2	904	50%	8.8	100%	1.5	84.8	8.87%	201
P3	301	17%	8.8	100%	0.5	69.2	7.37%	167
P4	1809	100%	4.4	50%	1.5	88.5	6.44%	146
P5	904	50%	4.4	50%	0.8	84.1	4.70%	106
P6	301	17%	4.4	50%	0.3	68.2	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:	R & D	AC MOTOR PERFORMANCE CURVES	36WGA0025 36-0000-3655 Test - 111781
	CK By:	USBIBAK		
	APP By:	USJAROB1		
	Date:	01/09/2025		

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

Constant Duty Operating Range


BALDOR • RELIANCE

 DR By: R & D

 CK By: USBIBAK

 APP By: USJAROB1

 Date: 01/09/2025
**AC MOTOR
PERFORMANCE
CURVES**
36WGA0025

36-0000-3655

Test - 111781

