

ABB BALDOR RELIANCE III

Customer information packet

EL11304

.5HP, 1725RPM, 1PH, 60HZ, 56, 3424LC, ODP, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
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
Current @ Voltage	2.350 A @ 230.0 V 4.700 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	76.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.4 a
Insulation Class	F

Part Detail

Revision	N
Type	AC
Mech. spec.	34F353
Base	
Status	PRD/A
Elec. spec.	34WGR141
Layout	34LYF353
Eff. date	02-25-2025
CD Diagram	CD0055
Poles	04
Leads	6#18
Proprietary	False
Created date	03-11-2014

Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3424LC
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.00 IN
Power Factor	98
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1725 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

NP3155L											
CAT.NO.	EL11304										
SPEC.	34F353R141G1										
HP	.5										
VOLTS	115/230										
AMP	4.7/2.35										
RPM	1725										
FRAME	56		HZ	60				PH	1		
SER.F.	1.25	CODE	K	DES	N	CL	F				
F.L. AVG. EFF.	76.2	PF	98								
RATING	40C AMB-CONT										
CC											
DE	6203		ODE	6203							
ENCL	ODP	SN									
	SFA 5.9/2.95										

Parts List

Part number	Description	Quantity
SA277757	SA 34F353R141G1	1.000 ea
RA264305	RA 34F353R141G1	1.000 ea
OC3030F11SP	CAPACITOR 30 MFD 370 VAC	1.000 ea
EC1324A02	ELEC CAP, 324-389 MFD, 125V, 1.48D X 3.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
SP1006A01	INSULATOR MODEL 35 SWITCH	1.000 ea
34EP3210A01SP	FR ENDPLATE, MACH	1.000 ea
34CB3801	CAPACITOR BOX, DIE CAST	1.000 ea
51XB1214A08	12-14 X 1/2HX WS SL SR TYBX	2.000 ea
34GS5003A01	FOAM SLEEVE, ID = 2 1/16" X 4 3/8"	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3212A02	PU ENDPLATE, MODEL 34 OPEN	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
34GS5003A01	FOAM SLEEVE, ID = 2 1/16" X 4 3/8"	2.000 ea
SP5051B17	MDL 34 TORQ STAT SW,TYPE LC, STD F1 & F2	1.000 ea
HA3100A45	THRUBOLT 10-32 X 8.875	4.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.014 ga
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
NP3155L	ALUM SUPER-E UL CC "SEMS"	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

AC Induction Motor Performance Data

Record # 46811

Typical performance - not guaranteed values

Winding: 34WGR141-R001			Type: 3424LC		Enclosure: OPEN	
Nameplate Data			115 V, 60 Hz: Low Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.51 LB-FT	
Volts		115/230	Start Configuration		direct on line	
Full Load Amps		4.7/2.35	Breakdown Torque		4.01 LB-FT	
R.P.M.		1725	Pull-up Torque		3.75 LB-FT	
Hz		60	Phase		1	
NEMA Design Code		N	KVA Code		K	
Service Factor (S.F.)		1.25	No-load Current		1.06 A	
NEMA Nom. Eff.		76.2	Power Factor		98	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps		5.9/2.95	Temp. Rise @ S.F. Load		55°C	

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	89	94	95	95	95	94	95
Efficiency	59.9	73	76.8	76.6	73.3	67.1	73.3
Speed	1782.8	1767.7	1748.6	1726.8	1694.2	1648.1	1694
Line amperes	1.56	2.34	3.34	4.39	5.8	7.69	5.8

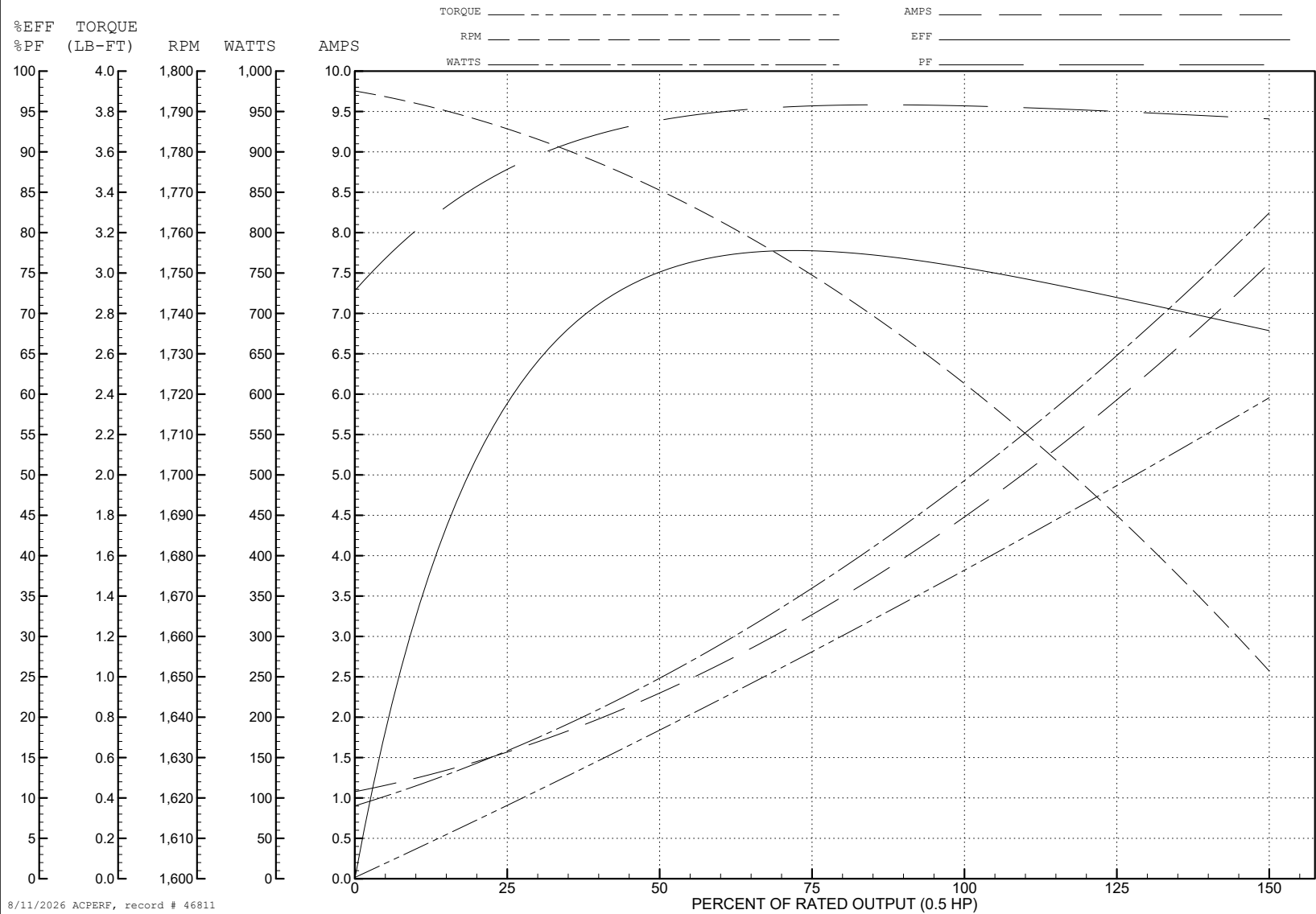
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WINDING # 34WGR141

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1725 RPM 115 V 3424LC

TORQUES (LB-FT): PO=4.01 PU=3.75 LR=6.42 LRA=31.9



AC Induction Motor Performance Data

Record # 49832

Typical performance - not guaranteed values

Winding: 34WGR141-R001			Type: 3424LC		Enclosure: OPEN		
Nameplate Data			230 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.51 LB-FT		
Volts		115/230	Start Configuration		direct on line		
Full Load Amps		4.7/2.35	Breakdown Torque		4.01 LB-FT		
R.P.M.		1725	Pull-up Torque		2.84 LB-FT		
Hz	60	Phase	1	Locked-rotor Torque		4.87 LB-FT	
NEMA Design Code		N	KVA Code	K	Starting Current		14.97 A
Service Factor (S.F.)		1.25		No-load Current		0.571 A	
NEMA Nom. Eff.		76.2	Power Factor	98	Line-line Res. @ 25°C		6.38 Ω A Ph 2.09 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		40°C	
S.F. Amps		5.9/2.95		Temp. Rise @ S.F. Load		53°C	
				Rotor inertia		0.057 LB-FT2	

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	89	93	95	96	95	94	95
Efficiency	57.8	71.3	75.5	75.6	72.6	66.9	72.6
Speed	1783	1768	1749	1727	1694	1648	1694
Line amperes	0.809	1.2	1.7	2.22	2.93	3.87	2.93

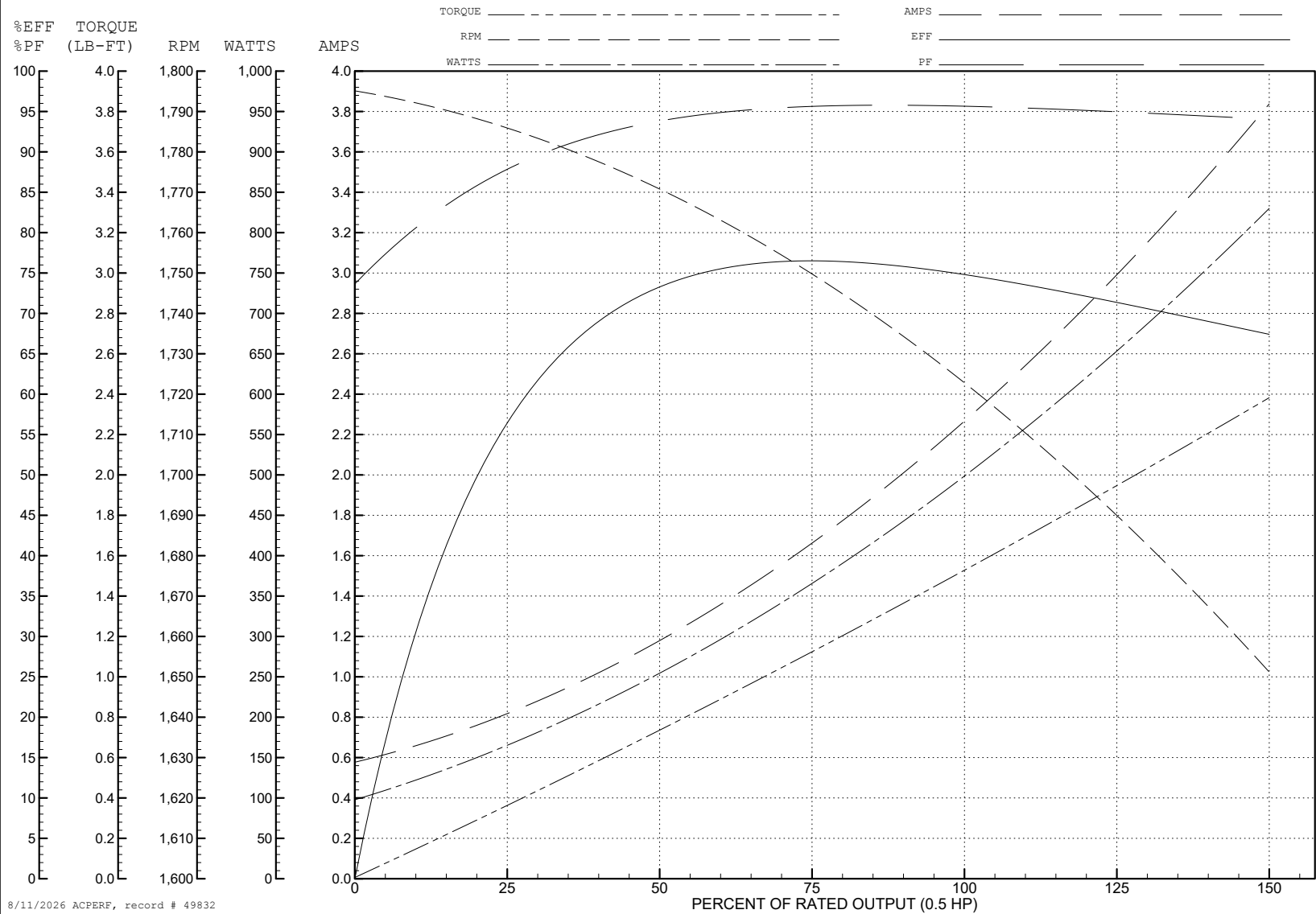
ABB Motors and Mechanical Inc.

WINDING # 34WGR141

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1725 RPM 230 V 3424LC

TORQUES (LB-FT): PO=4.01 PU=2.84 LR=4.87 LRA=14.97





CD0055

