

ABB BALDOR RELIANCE III

Customer information packet

VEL11309A

1HP, 3480RPM, 1PH, 60HZ, 56C, 3524LC, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	56C
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	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV WEEE
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	7.800 A @ 115.0 V 4.300 A @ 208.0 V 3.900 A @ 230.0 V
Design Code	N
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	3.9 a

Part Detail

Revision	C
Type	AC
Mech. spec.	35EL001
Base	
Status	PRD/A
Elec. spec.	35WGG103
Layout	35LYEL001
Eff. date	04-30-2024
CD Diagram	CD0320
Poles	02
Leads	4#16 A&J,2#18 B PH,1#14 #4TH
Proprietary	False
Created date	02-07-2023

Insulation Class	B
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A&J
Motor Lead Termination	None
Motor Standards	NEMA
Motor Type	3524LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.22 IN
Power Factor	99
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3480 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	Automatic Thermal Overload
Winding Thermal 1 Location	SB
Winding Thermal 2	None

Nameplate

NP4423B14M36L												
CAT #	VEL11309A				WGT	43		LBS				
SPEC	35EL001G103G1				ENCL	OPEN						
SER #					CC			IP	23			
HP	1		NEMA NOM. EFF					82				
VOLTS	115/230											
AMPS	7.8/3.9					PF		99				
RATING	40C AMB-CONT											
RPM	3480											
FRAME	56C	HZ		60	CODE		H	CLASS		B		
SER.F.	1.25	SF AMP		10/5				PH	1	DES		N
DE	6205		ODE		6203							
LUBRICATION	POLYREX EM											
							QR					
YR												

AC Induction Motor Performance Data

Record # 97104

Typical performance - not guaranteed values

Winding: 35WGG103-R002			Type: 3524LC		Enclosure: OPEN		
Nameplate Data			115 V, 60 Hz: Low Voltage Connection				
Rated Output (HP)		1	Full Load Torque		1.51 LB-FT		
Volts		115/230	Start Configuration		direct on line		
Full Load Amps		7.8/3.9	Breakdown Torque		4.54 LB-FT		
R.P.M.		3480	Pull-up Torque		2.68 LB-FT		
Hz	60	Phase	1	Locked-rotor Torque		5.62 LB-FT	
NEMA Design Code		N	KVA Code	H	Starting Current		60 A
Service Factor (S.F.)		1.25		No-load Current		1.8 A	
NEMA Nom. Eff.		82	Power Factor	99	Line-line Res. @ 25°C		0.599 Ω A Ph 0.913 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		11°C	
S.F. Amps		10/5		Temp. Rise @ S.F. Load		15°C	
				Locked-rotor Power Factor		99.9	
				Rotor inertia		0.0516 lb-ft²	

Load Characteristics 115 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	90	98	100	100	99	99	99
Efficiency	67.6	79.9	83	83.5	81.9	78.7	81.9
Speed	3573	3548	3522	3492	3452	3406	3452
Line amperes	2.72	4.17	5.87	7.77	9.99	12.5	9.99

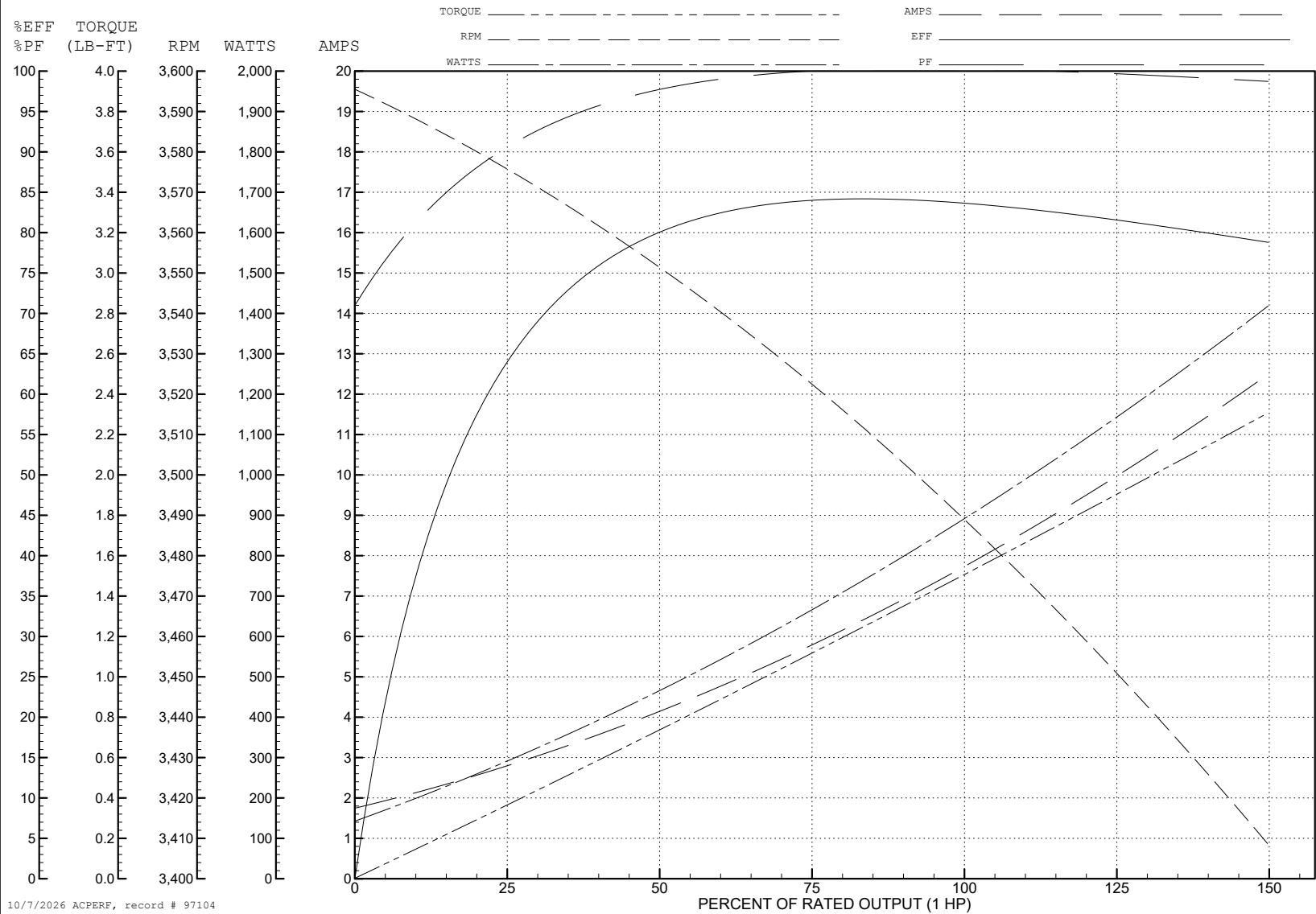
ABB Motors and Mechanical Inc.

WINDING # 35WGG103

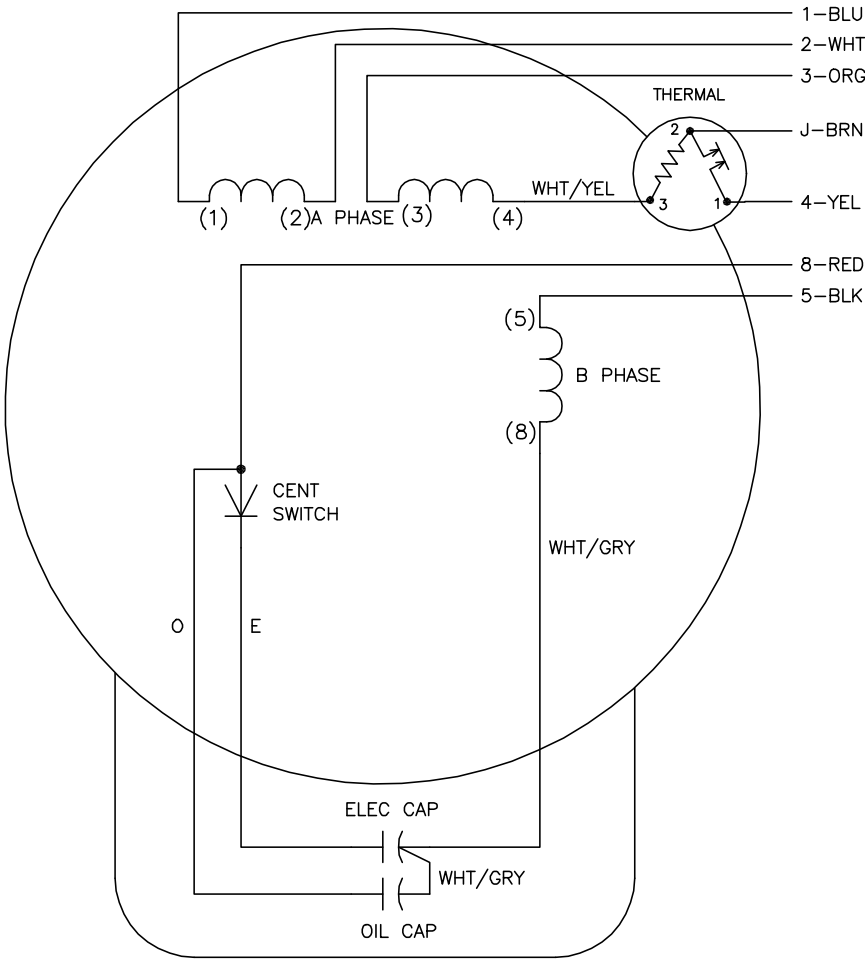
Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 3480 RPM 115 V 3524LC

TORQUES (LB-FT) : PO=4.54 PU=2.68 LR=5.62 LRA=60



CD0320



	LINE A	LINE B	JOIN	JOIN
HIGH STD	1,8	4	2,3,5	J
HIGH OPP	1,5	4	2,3,8	J
LOW STD	1,3,8	4	—	2,J,5
LOW OPP	1,3,5	4	—	2,J,8

- NOTES:
1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
 2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
 3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

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REV. DESC: ADD INTERNAL CONNECTION TO HELP MANUFACTURING		
REV. LTR: G	VERSION: 01	TDR: 000000941594
FILE: \AAA\00007\422	REVISED: 02: 21: 00 08/28/2015	BY: ENALEMO
MTL: —	© □	

BALDOR

TYPE LC, DV, REV, THERMAL, B PH AMPS THRU HTR HVC, 7 LEAD
SH 1 of 1