

ABB BALDOR RELIANCE III

Customer information packet

L3509M

1HP, 3450RPM, 1PH, 60HZ, 56/56H, 3524L, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56/56H
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction 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	C UR US
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	12.000 A @ 115.0 V 6.000 A @ 230.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
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	6.0 a
Insulation Class	B

Part Detail

Revision	BA
Type	AC
Mech. spec.	35J383
Base	
Status	PRD/A
Elec. spec.	35WG0480
Layout	35LYJ383
Eff. date	02-19-2026
CD Diagram	CD0008
Poles	02
Leads	4#16 A&J,2#18 B PH,1#14 #4TH
Proprietary	False
Created date	06-22-2007

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	4 @ 16 AWG, A&J
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.91 IN
Power Factor	81
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	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Manual Thermal Overload
Winding Thermal 1 Location	SB
Winding Thermal 2	None

Nameplate

NP1257L											
CAT.NO.	L3509M										
SPEC.	35J383-480										
HP	1										
VOLTS	115/230										
AMP	12/6										
RPM	3450										
FRAME	56/56H				HZ		60		PH		1
SER.F.	1.25	CODE	K	DES		N	CL	B			
NEMA-NOM-EFF	66	PF	81								
RATING	40C AMB-CONT										
CC											
DE	6205	ODE		6203							
ENCL	TEFC	SN									
	SFA 14.4/7.2										

Accessories

Part number	Description	Multiplier
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 8067

Typical performance - not guaranteed values

Winding: 35WG0480-R001			Type: 3524L		Enclosure: TEFC		
Nameplate Data			230 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT		
Volts		115/230	Start Configuration		direct on line		
Full Load Amps		12/6	Breakdown Torque		3.7 LB-FT		
R.P.M.		3450	Pull-up Torque		3.3 LB-FT		
Hz	60	Phase	1	Locked-rotor Torque		4.5 LB-FT	
NEMA Design Code		N	KVA Code	K	Starting Current		38 A
Service Factor (S.F.)		1.25		No-load Current		3.15 A	
NEMA Nom. Eff.		66	Power Factor	81	Line-line Res. @ 25°C		2.37 Ω A Ph 1.75 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		61°C	
S.F. Amps		14.4/7.2		Temp. Rise @ S.F. Load		78°C	

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	67	77	83	86	88	86
Efficiency	44.7	59.7	66.2	68.9	69.4	68.5	69.4
Speed	3563	3538	3511	3480	3444	3400	3444
Line amperes	3.5	4.05	4.8	5.7	6.8	8.1	6.8

ABB Motors and Mechanical Inc.

WINDING # 35WG0480

Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 3450 RPM 230 V 3524L

TORQUES (LB-FT): PO=3.7 PU=3.3 LR=4.5 LRA=38





