

ABB BALDOR RELIANCE III

Customer information packet

EM31159

1.5HP, 1170RPM, 3PH, 60HZ, 56H, 3540M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	56H
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 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	5.200 A @ 208.0 V 5.000 A @ 230.0 V 2.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a
Insulation Class	F

Part Detail

Revision	H
Type	AC
Mech. spec.	35J382
Base	
Status	PRD/A
Elec. spec.	35WGG334
Layout	35LYJ382
Eff. date	01-08-2026
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	09-09-2022

Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3540M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	14.00 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1170 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

NP3155LUA									
CAT.NO.	EM31159								
SPEC.	35J382G334G1								
HP	1.5								
VOLTS	230/460								
AMPS	5/2.5								
RPM	1170								
FRAME	56H		HZ	60			PH	3	
SF	1.15	CODE	L	DES	B	CLASS	F		
F.L. AVG. EFF.	84	PF	66						
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	ODP	SN							
USABLE AT	N/A								

Parts List

Part number	Description	Quantity
SA407325	SA 35J382G334G1	1.000 ea
RA398824	RA 35J382G334G1	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3209G00	MASTER ODE,203 BRG	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3210B00	MASTER DE,205 BRG,1.000SH	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	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
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
HA3100A26	THRUBOLT 10-32 X 11.500	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP3155LUA	ALUM SUPER-E UL CC "SEMS" "USABLE AT" VE	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 87765

Preliminary Data Sheet

Winding: 35WGG334-R002			Type: 3540M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5	Full Load Torque		6.78 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		5/2.5	Breakdown Torque		24.05 LB-FT	
R.P.M.		1170	Pull-up Torque		13.05 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		15.2 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		15.6 A	
Service Factor (S.F.)		1.15	No-load Current		1.66 A	
NEMA Nom. Eff.		84 Power Factor	Line-line Res. @ 25°C		10.6 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		69°C	
S.F. Amps		5.6/2.8	Temp. Rise @ S.F. Load		82°C	
			Locked-rotor Power Factor		43.7	
			Rotor inertia		0.29 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	45	57	66	72	75	70
Efficiency	72.7	81.1	83.6	83.7	82.9	81.1	83.2
Speed	1193	1186	1179	1171	1162	1152	1166
Line amperes	1.72	1.9	2.19	2.55	2.96	3.45	2.8

ABB Motors and Mechanical Inc.

WINDING # 35WGG334

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1170 RPM 460 V 3540M

TORQUES (LB-FT): PO=24.05 PU=13.05 LR=15.2 LRA=15.6





