

ABB BALDOR RELIANCE III

Customer information packet

EM31155

2HP, 3450RPM, 3PH, 60HZ, 56, 3524M, ODP, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	56
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	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 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	5.600 A @ 208.0 V 5.200 A @ 230.0 V 2.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
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	2.6 a

Part Detail

Revision	R
Type	AC
Mech. spec.	35B011
Base	
Status	PRD/A
Elec. spec.	35WGS254
Layout	35LYB011
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-27-2014

Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.07 IN
Power Factor	85
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	1.15
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	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3155LUA											
CAT.NO.	EM31155										
SPEC.	35B011S254G1										
HP	2										
VOLTS	230/460										
AMPS	5.2/2.6										
RPM	3450										
FRAME	56		HZ	60			PH	3			
SF	1.15		CODE	K	DES	B	CLASS	F			
F.L. AVG. EFF.	85.5		PF	85							
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	OPEN		SN								
USABLE AT	50HZ 2HP 190/380V 6.2/3.1A								SF1.0		

AC Induction Motor Performance Data

Record # 57243

Typical performance - not guaranteed values

Winding: 35WGS254-R009		Type: 3524M	Enclosure: OPEN
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2	Full Load Torque	3 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	5.2/2.6	Breakdown Torque	11.6 LB-FT
R.P.M.	3450	Pull-up Torque	8.2 LB-FT
Hz	60 Phase	Locked-rotor Torque	10.7 LB-FT
NEMA Design Code	B KVA Code	Starting Current	18.8 A
Service Factor (S.F.)	1.15	No-load Current	1 A
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	8.08 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	36°C
S.F. Amps		Temp. Rise @ S.F. Load	43°C
		Locked-rotor Power Factor	53.6
		Rotor inertia	0.0657 LB-FT ²

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	73	82	86	88	88	87
Efficiency	78.2	84.9	86.2	85.8	84.5	82.9	85
Speed	3566	3536	3504	3469	3429	3387	3445
Line amperes	1.2	1.6	2.1	2.6	3.2	3.8	3

ABB Motors and Mechanical Inc.

WINDING # 35WGS254

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 3450 RPM 460 V 3524M

TORQUES (LB-FT): PO=11.6 PU=8.2 LR=10.7 LRA=18.8





