

ABB BALDOR RELIANCE III

Customer information packet

VEM31155

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

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	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	No Mounting
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	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.	35E4017
Base	
Status	PRD/A
Elec. spec.	35WGS254
Layout	35LYE4017
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-30-2014

Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	13.22 IN
Power Factor	85
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	1.15
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.	VEM31155											
SPEC.	35E4017S254G1											
HP	2											
VOLTS	230/460											
AMPS	5.2/2.6											
RPM	3450											
FRAME	56C		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		3	Locked-rotor Torque	10.7 LB-FT	
NEMA Design Code		B	KVA Code		K	Starting Current		18.8 A
Service Factor (S.F.)		1.15	No-load Current		1 A			
NEMA Nom. Eff.		85.5	Power Factor		85	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-FT2	

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





