

ABB BALDOR RELIANCE III

Customer information packet

VEM31115

1HP, 3450RPM, 3PH, 60HZ, 56C, 3420M, 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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 208.0 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	1.600 A @ 460.0 V 2.900 A @ 208.0 V 3.200 A @ 230.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	34F012
Base	
Status	PRD/A
Elec. spec.	34WG3226
Layout	34LYF012
Eff. date	01-07-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	10-03-2014

High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
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	3420M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.84 IN
Power Factor	82
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 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.	VEM31115										
SPEC.	34F012-3226G1										
HP	1										
VOLTS	208-230/460										
AMPS	2.9-3.2/1.6										
RPM	3450										
FRAME	56C		HZ	60			PH	3			
SF	1.25		CODE	L	DES	B	CLASS	F			
F.L. AVG. EFF.	77		PF	82							
RATING	40C AMB-CONT										
CC											
DE	6203		ODE	6203							
ENCL	OPEN		SN								
USABLE AT	50HZ 1HP 190/380V 3.4/1.7A								SF1.0		

AC Induction Motor Performance Data

Record # 63591

Typical performance - not guaranteed values

Winding: 34WG3226-R075			Type: 3420M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		1.51 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		2.9-3.2/1.6	Breakdown Torque		7.97 LB-FT	
R.P.M.		3450	Pull-up Torque		6.2 LB-FT	
Hz		60	Locked-rotor Torque		8.7 LB-FT	
NEMA Design Code		B	Starting Current		14.5 A	
Service Factor (S.F.)		1.25	No-load Current		0.913 A	
NEMA Nom. Eff.		77	Line-line Res. @ 25°C		12.8 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		55°C	
S.F. Amps		3.5-3.4/1.7	Temp. Rise @ S.F. Load		66°C	
			Locked-rotor Power Factor		63.6	
			Rotor inertia		0.0186 LB-FT2	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	59	72	81	85	89	85
Efficiency	57.3	70.7	76.9	78.9	79.6	79.5	79.6
Speed	3560	3536	3506	3475	3445	3406	3445
Line amperes	0.967	1.09	1.27	1.47	1.7	1.99	1.7

ABB Motors and Mechanical Inc.

WINDING # 34WG3226

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3420M

TORQUES (LB-FT) : PO=7.97 PU=6.2 LR=8.7 LRA=14.5



