

ABB BALDOR RELIANCE III

Customer information packet

VEM31153

.75HP, 1180RPM, 3PH, 60HZ, 56C, 3524M, OPEN, F1

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	.750 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	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.550 A @ 460.0 V 2.900 A @ 208.0 V 3.100 A @ 230.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F

Part Detail

Revision	F
Type	AC
Mech. spec.	35E4017
Base	
Status	PRD/A
Elec. spec.	35WGG031
Layout	35LYE4017
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	06
Leads	9#18 Y
Proprietary	False
Created date	09-09-2022

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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	6
Overall Length	13.23 IN
Power Factor	55
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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	1180 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

NP3155L											
CAT.NO.	VEM31153										
SPEC.	35E4017G031G1										
HP	.75										
VOLTS	230/460										
AMP	3.1/1.55										
RPM	1180										
FRAME	56C		HZ	60				PH	3		
SER.F.	1.15	CODE	M	DES	B	CL	F				
F.L. AVG. EFF.	81.7	PF	55								
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	OPEN	SN									
	SFA 2.9/1.45										

AC Induction Motor Performance Data

Record # 77837

Typical performance - not guaranteed values

Winding: 35WGG031-R001			Type: 3524M		Enclosure: OPEN			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.75		Full Load Torque		3.35 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		3.1/1.55		Breakdown Torque		12.9 LB-FT		
R.P.M.		1180		Pull-up Torque		7.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		7.7 LB-FT		
NEMA Design Code		B	KVA Code	M		Starting Current	9.7 A	
Service Factor (S.F.)		1.15		No-load Current		1.22 A		
NEMA Nom. Eff.		81.7	Power Factor	55	Line-line Res. @ 25°C		20.1 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		34°C
S.F. Amps		3.3/1.65		Temp. Rise @ S.F. Load		38°C		
				Locked-rotor Power Factor		50.5		
				Rotor inertia		0.174 lb-ft²		

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	22	35	47	55	62	67	1
Efficiency	65	76	80	82	82	81	82.4
Speed	1194	1189	1184	1179	1172	1166	1170
Line amperes	1.23	1.31	1.42	1.56	1.74	1.95	1.47

ABB Motors and Mechanical Inc.

WINDING # 35WGG031

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1180 RPM 460 V 3524M

TORQUES (LB-FT): PO=12.9 PU=7.2 LR=7.7 LRA=9.7





