

ABB BALDOR RELIANCE III

Customer information packet

EM31105

.33HP, 1140RPM, 3PH, 60HZ, 56, 3421M, ODP, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
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	.330 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	.900 A @ 460.0 V 1.600 A @ 208.0 V 1.900 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	71.4 %
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	0.9 a

Part Detail

Revision	J
Type	AC
Mech. spec.	34B061
Base	
Status	PRD/A
Elec. spec.	34WGR139
Layout	34LYB061
Eff. date	12-30-2024
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	02-26-2014

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
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	3421M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	10.88 IN
Power Factor	51
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	1.35
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	1140 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.	EM31105										
SPEC.	34B061R139G1										
HP	.33										
VOLTS	230/460										
AMP	1.9/.9										
RPM	1140										
FRAME	56		HZ	60				PH	3		
SER.F.	1.35		CODE	M	DES	B	CL	F			
F.L. AVG. EFF.	71.4		PF	51							
RATING	40C AMB-CONT										
CC											
DE	6203		ODE	6203							
ENCL	ODP		SN								
	SFA 2/1										

AC Induction Motor Performance Data

Record # 44900

Typical performance - not guaranteed values

Winding: 34WGR139-R001			Type: 3421M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.33	Full Load Torque		1.55 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		1.9/.9	Breakdown Torque		6.67 LB-FT		
R.P.M.		1140	Pull-up Torque		4.76 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		6.04 LB-FT		
NEMA Design Code		B	KVA Code		M	Starting Current	4.63 A
Service Factor (S.F.)		1.35	No-load Current		0.717 A		
NEMA Nom. Eff.		71.4	Power Factor		51	Line-line Res. @ 25°C	39.9 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		38°C		
S.F. Amps		2/1	Temp. Rise @ S.F. Load		46°C		
			Locked-rotor Power Factor		61		
			Rotor inertia		0.0499 LB-FT2		

Load Characteristics 460 V, 60 Hz, 0.33 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	22	33	43	51	58	64	60
Efficiency	49.7	64.3	69.7	72.5	72.8	72.9	72.8
Speed	1189	1179	1168	1156	1142	1128	1136
Line amperes	0.733	0.758	0.806	0.864	0.925	1.01	0.959

ABB Motors and Mechanical Inc.

WINDING # 34WGR139

Typical performance - not guaranteed values.

0.33 HP 3 PH 60 HZ 1140 RPM 460 V 3421M

TORQUES (LB-FT) : PO=6.67 PU=4.76 LR=6.04 LRA=4.63





