

ABB BALDOR RELIANCE III

Customer information packet

VSPM31155

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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM 4 WEEE
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	2.500 A @ 460.0 V 5.000 A @ 230.0 V 5.500 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a

Part Detail

Revision	C
Type	AC
Mech. spec.	35E6396
Base	
Status	PRD/A
Elec. spec.	35WGS095
Layout	35LYE6396
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-09-2024

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
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	2
Overall Length	12.07 IN
Power Factor	90
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 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

NP4423A01A01L															
CAT #	VSPM31155					WGT	43		LBS						
SPEC	35E6396S095					ENCL	OPEN								
SER #						CC	010A		IP	23					
HP	2		MAG CUR												
VOLTS	230/460					NEMA NOM. EFF							86.5		
AMPS	5/2.5							PF	90						
RATING	40C AMB-CONT														
RPM	3450					MAX RPM									
FRAME	56C		HZ	60		CODE	K		CLASS	F					
SER.F.	1.15		SF AMP							PH	3		DES	B	
DE	6205			ODE		6203									
LUBRICATION	POLYREX EM														
ID LOGO	INVERTER TYPE				VPWM		CHP	60		TO	90		1.5:1		
ID LOGO	WK2	0.07		CT	6		TO	60		10:1					
ID LOGO	SL HZ				VT	3		TO	60		20:1				
								QR							
YR															

AC Induction Motor Performance Data

Record # 112221

Typical performance - not guaranteed values

Winding: 35WGS095-R005			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		5/2.5	Breakdown Torque		11 LB-FT		
R.P.M.		3450	Pull-up Torque		7.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		9.8 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		22 A
Service Factor (S.F.)		1.15	No-load Current		0.9 A		
NEMA Nom. Eff.		86.5	Power Factor	90	Line-line Res. @ 25°C		7.37 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		23°C
S.F. Amps			Temp. Rise @ S.F. Load		28°C		
			Locked-rotor Power Factor		48.6		
			Rotor inertia		0.0664 lb-ft²		

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	77	84	85	89	88	87
Efficiency	83.8	87.8	88.1	87.2	85.6	83.6	86.2
Speed	3569	3540	3509	3475	3438	3398	3453
Line amperes	1.1	1.4	1.9	2.5	3	3.7	2.8

ABB Motors and Mechanical Inc.

WINDING # 35WGS095

Typical performance - not guaranteed values.

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

TORQUES (LB-FT) : PO=11 PU=7.6 LR=9.8 LRA=22





