

ABB BALDOR RELIANCE III

Customer information packet

SPM31156

1HP, 1170RPM, 3PH, 60HZ, 56H, 3532M, ODP, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	56H
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	1200 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.660 A @ 460.0 V 3.320 A @ 230.0 V 3.500 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a

Part Detail

Revision	C
Type	AC
Mech. spec.	35E6250
Base	
Status	PRD/A
Elec. spec.	35WGG824
Layout	35LYE6250
Eff. date	06-07-2024
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	09-08-2023

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3532M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	12.63 IN
Power Factor	67
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	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1170 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 #	SPM31156					WGT	47		LBS					
SPEC	35E6250G824					ENCL	ODP							
SER #						CC	010A		IP	23				
HP	1		MAG CUR			2.06/1.03								
VOLTS	230/460					NEMA NOM. EFF					84			
AMPS	3.32/1.66					PF	67							
RATING	40C AMB-CONT													
RPM	1170					MAX RPM			1800					
FRAME	56H		HZ	60		CODE	J		CLASS	F				
SER.F.	1.15		SF AMP	3.68/1.84			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	0.232		CT	6		TO	60		10:1				
ID LOGO	SL HZ	1.57		VT	3		TO	60		20:1				
							QR							
YR														

AC Induction Motor Performance Data

Record # 100797

Typical performance - not guaranteed values

Winding: 35WGG824-R002			Type: 3532M		Enclosure: ODP	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		4.47 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		2.06/1.03	Breakdown Torque		12.7 LB-FT	
R.P.M.		1170	Pull-up Torque		7.4 LB-FT	
Hz	60	Phase	Locked-rotor Torque		9 LB-FT	
NEMA Design Code	B	KVA Code	Starting Current		9.5 A	
Service Factor (S.F.)		1.15	No-load Current		1.03 A	
NEMA Nom. Eff.	84	Power Factor	Line-line Res. @ 25°C		18.3 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		34°C	
S.F. Amps		3.68/1.84	Temp. Rise @ S.F. Load		50°C	
			Locked-rotor Power Factor		45.8	
			Rotor inertia		0.232 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	46	59	67	72	75	70
Efficiency	74.5	82.7	84.4	84.2	82.9	80.7	83.4
Speed	1193	1186	1179	1171	1162	1151	1166
Line amperes	1.08	1.21	1.41	1.66	1.96	2.32	1.84

ABB Motors and Mechanical Inc.

WINDING # 35WGG824

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1170 RPM 460 V 3532M

TORQUES (LB-FT): PO=12.7 PU=7.4 LR=9 LRA=9.5



