

ABB BALDOR RELIANCE III

Customer information packet

VSPM3545

1HP, 3450RPM, 3PH, 60HZ, 56C, 3516M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	WEEE NEMA PREMIUM 4
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	1.300 A @ 460.0 V 2.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	F

Part Detail

Revision	B
Type	AC
Mech. spec.	35E6403
Base	
Status	PRD/A
Elec. spec.	35WGR933
Layout	35LYE6403
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-10-2024

Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	88
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 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 #	VSPM3545					WGT	35	LBS							
SPEC	35E6403R933					ENCL	TEFC								
SER #						CC	010A	IP	54						
HP	1	MAG CUR				1.3/.65									
VOLTS	230/460					NEMA NOM. EFF							82.5		
AMPS	2.6/1.3					PF	88								
RATING	40C AMB-CONT														
RPM	3450					MAX RPM				5400					
FRAME	56C	HZ	60	CODE			L	CLASS			F				
SER.F.	1.25	SF AMP	3.2/1.6				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	0.05	CT	6	TO	60	10:1								
ID LOGO	SL HZ	2.5	VT	3	TO	60	20:1								
							QR								
YR															

AC Induction Motor Performance Data

Record # 100854

Typical performance - not guaranteed values

Winding: 35WGR933-R007			Type: 3516M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		2.6/1.3	Breakdown Torque		7.5 LB-FT		
R.P.M.		3450	Pull-up Torque		4.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.6 LB-FT	
NEMA Design Code		B	KVA Code		L		
Service Factor (S.F.)		1.25	Starting Current		12.4 A		
NEMA Nom. Eff.		82.5	Power Factor		88		
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		32°C
S.F. Amps		3.2/1.6	Temp. Rise @ S.F. Load		40°C		
			Locked-rotor Power Factor		56.1		
			Rotor inertia		0.0443 lb-ft²		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	69	81	86	88	90	88
Efficiency	71.5	80.5	83.4	83.6	82.9	81.3	82.9
Speed	3560	3529	3494	3462	3423	3378	3423
Line amperes	0.7	0.85	1.04	1.28	1.58	1.86	1.58

ABB Motors and Mechanical Inc.

WINDING # 35WGR933

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

TORQUES (LB-FT): PO=7.5 PU=4.2 LR=5.6 LRA=12.4





