

ABB BALDOR RELIANCE III

Customer information packet

VSSWDM3538

.5HP, 1775RPM, 3PH, 60HZ, 56C, 3514M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
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	2.020 A @ 230.0 V 1.010 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F

Part Detail

Revision	B
Type	AC
Mech. spec.	35V824
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYV824
Eff. date	02-25-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Inverter Code	Inverter Duty
KVA Code	N
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	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.08 IN
Power Factor	63
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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

NP1951A01											
CAT.NO.	VSSWDM3538										
SPEC.	35V824G069G3										
HP	.5										
VOLTS	230/460										
AMP	2.02/1.01										
RPM	1775										
FRAME	56C			HZ		60		PH		3	
SER.F.	1.25		CODE		N	DES		B	CLASS		F
NEMA-NOM-EFF	81.5			PF		63					
RATING	40C AMB-CONT										
CC											
DE	6205			ODE		6203					
ENCL	TENV	SN									
	SFA 2.2/1.1										
	20:1CT 20:1VT										

Parts List

Part number	Description	Quantity
SA418449	SA 35V824G069G3	1.000 ea
RA410352	RA 35V824G069G3	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB5001A08	CONDUIT BOX KIT, S/P 9-2 (ALL STAINLESS)	1.000 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP1913A01	FRONT TENV 203 BRG NO GRSR S/P 9-2 (STAI	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1914A02	PU EP FOR LOCKED 6205 BRG	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW4606A02	JM CLIPPER/SEAL (LWE-0938-1624-AL23)	1.000 ea
12XN1032S22	10-32 X 1 3/8 SLOT HEX, STAINLESS STEEL	2.000 ea
HA1049A01	DUBO LOK WASHER SIZE 10 (NYLON LOCK SEAL	2.000 ea
HA1049A01	DUBO LOK WASHER SIZE 10 (NYLON LOCK SEAL	4.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100S45	THRU BOLT HEX-HEAD 7.95 10-32	4.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000007	ZRTG FE ASSEMBLY	1.000 ea
PE-0000012	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 100503

Typical performance - not guaranteed values

Winding: 35WGG069-R077			Type: 3514M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.48 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		2.02/1.01	Breakdown Torque		8 LB-FT		
R.P.M.		1775	Pull-up Torque		4.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.1 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		8.4 A
Service Factor (S.F.)		1.25	No-load Current		0.85 A		
NEMA Nom. Eff.		81.5	Power Factor	63	Line-line Res. @ 25°C		30.3 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		44°C
S.F. Amps		2.2/1.1	Temp. Rise @ S.F. Load		51°C		
			Locked-rotor Power Factor		66.8		
			Rotor inertia		0.101 lb-ft²		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	24	37	48	58	65	71	65
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.6
Speed	1793	1788	1782	1776	1771	1763	1771
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.11

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4





