

ABB BALDOR RELIANCE III

Customer information packet

VSSWDM3537

.5HP, 3450RPM, 3PH, 60HZ, 56C, 3512M, 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	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 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	1.900 A @ 208.0 V 1.800 A @ 230.0 V .900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	70.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AG
Type	AC
Mech. spec.	35V824
Base	
Status	PRD/A
Elec. spec.	35WG1706
Layout	35LYV824
Eff. date	02-19-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	06-22-2007

Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	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	3512M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.09 IN
Power Factor	76
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
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	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

Nameplate

NP1951A01												
CAT.NO.	VSSWDM3537											
SPEC.	35V824-1706G1											
HP	.5											
VOLTS	208-230/460											
AMP	1.9-1.8/.9											
RPM	3450											
FRAME	56C			HZ		60		PH		3		
SER.F.	1.00	CODE		L	DES		B	CLASS		F		
NEMA-NOM-EFF	70			PF		76						
RATING	40C AMB-CONT											
CC												
DE	6205			ODE		6203						
ENCL	TENV	SN										
	10:1CT 20:1VT											

Parts List

Part number	Description	Quantity
SA145414	SA 35V824-1706G1	1.000 ea
RA134563	RA 35V824-1706G1	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
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	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 # 20962

Typical performance - not guaranteed values

Winding: 35WG1706-R008			Type: 3512M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		0.752 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		1.9-1.8/.9	Breakdown Torque		3.06 LB-FT	
R.P.M.		3450	Pull-up Torque		2.14 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		2.44 LB-FT
NEMA Design Code		B	KVA Code	L	Starting Current	
Service Factor (S.F.)		1	No-load Current		0.525 A	
NEMA Nom. Eff.		70	Power Factor		76	Line-line Res. @ 25°C
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
					Locked-rotor Power Factor	
					Rotor inertia	
					0.0332 LB-FT2	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	48	62	72	79	83	86
Efficiency	43.9	59.7	67.1	70.5	72.1	72.5
Speed	3557	3530	3502	3471	3438	3402
Line amperes	0.565	0.636	0.727	0.839	0.961	1.1

ABB Motors and Mechanical Inc.

WINDING # 35WG1706

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 3450 RPM 460 V 3512M

TORQUES (LB-FT): PO=3.06 PU=2.14 LR=2.44 LRA=5.71





