

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										

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		5.71 A
Service Factor (S.F.)			1	No-load Current		0.525 A	
NEMA Nom. Eff.		70	Power Factor	76	Line-line Res. @ 25°C		37.8 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
				Locked-rotor Power Factor		72.9	
				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





