

ABB BALDOR RELIANCE III

Customer information packet

BM3539

.5HP, 1140RPM, 3PH, 60HZ, 56, BRAKE, 3418M

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
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	.500 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	CSA UR
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
Brake Torque	6.0 lb-ft
Current @ Voltage	1.200 A @ 460.0 V 2.400 A @ 230.0 V 2.700 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting
Front Shaft Indicator	None

Part Detail

Revision	Z
Type	AC
Mech. spec.	34-3108
Base	
Status	PRD/A
Elec. spec.	34WG5884
Layout	34LY3108
Eff. date	11-06-2024
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	01-01-0001

Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No 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	3418M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	16.45 IN
Power Factor	55
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
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	1140 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

NP1256L									
CAT.NO.	BM3539								
SPEC.	34-3108-5884-C								
HP	.5								
VOLTS	230/460								
AMP	2.4/1.2								
RPM	1140								
FRAME	56		HZ	60			PH	3	
SER.F.	1.25		CODE	J		DES	B	CLASS	B
NEMA-NOM-EFF	72		PF	55					
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	TEFC		SN						
	SFA 2.6/1.3								

Parts List

Part number	Description	Quantity
SA008800	SA 34-3108-5884-C	1.000 ea
RA005247	RA 34-3108-5884-C	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
34GS1029A01	GASKET, CONDUIT BOX	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
34EP3900T09	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3102A02SP	FR/PU ENDPLATE, MACH	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
18XN2520A08	1/4-20X1/2 FLAT HD SLTD X	2.000 ea
HW2500A13	KEY, USA #605, WOODRUFF	1.000 ea
34FN3002A03	EXTERNAL FAN, PLASTIC, .500 HUB I.D. W/5	1.000 ea
34FH4002A05	IEC FH W/DEEPER DIMPLES FOR BRAKE COVER,	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	3.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1185	LABEL,BRAKE CONNECTION (ON ROLLS)	1.000 ea
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
48BK7101BP-D	DRILL BRAKE COVER	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
27PA1001	PKG GRP, PRINT PK1027A06	1.000 ea

AC Induction Motor Performance Data

Record # 50820

Typical performance - not guaranteed values

Winding: 34WG5884-R001			Type: 3418M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		.5	Full Load Torque		2.3 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		2.4/1.2	Breakdown Torque		7.7 LB-FT			
R.P.M.		1140	Pull-up Torque		6 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		6.2 LB-FT		
NEMA Design Code		B	KVA Code	J	Starting Current		5 A	
Service Factor (S.F.)		1.25	No-load Current		0.95 A			
NEMA Nom. Eff.		72	Power Factor		55	Line-line Res. @ 25°C		39.6 Ω
Rating - Duty			40C AMB-CONT		Temp. Rise @ Rated Load			
S.F. Amps			2.6/1.3		Temp. Rise @ S.F. Load			

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	20	34	45	55	62	68	62
Efficiency	48	63	67	72	72	71	72
Speed	1185	1170	1155	1140	1120	1100	1120
Line amperes	0.95	1	1.1	1.2	1.3	1.5	1.3

ABB Motors and Mechanical Inc.

WINDING # 34WG5884

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1140 RPM 460 V 3418M

TORQUES (LB-FT) : PO=7.7 PU=6 LR=6.2 LRA=5





