

ABB BALDOR RELIANCE III

Customer information packet

VENM3538

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	.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	C UR US
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	1.010 A @ 460.0 V 2.020 A @ 230.0 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
Inverter Code	Inverter Ready

Part Detail

Revision	D
Type	AC
Mech. spec.	35E010
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYE010
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

KVA Code	P
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	11.06 IN
Power Factor	58
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
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

NP2116L									
CAT.NO.	VENM3538								
SPEC.	35E010G069G5								
HP	.5								
VOLTS	230/460								
AMP	2.02/1.01								
RPM	1775								
FRAME	56C		HZ	60		PH	3		
SER.F.	1.15	CODE	P	DES	B	CL	F		
NEMA-NOM-EFF	81.5	PF	58						
RATING	40C AMB-CONT								
CC									
DE	6205	ODE	6203						
ENCL	TENV	SN							
	SFA 2.2/1.1								

Parts List

Part number	Description	Quantity
SA418471	SA 35E010G069G5	1.000 ea
RA410374	RA 35E010G069G5	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
35EP3122F00	MASTER ODE,203 BRG,#26 DRN	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2116L	ALUM SUPER-E UL CC	1.000 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-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 102249

Typical performance - not guaranteed values

Winding: 35WGG069-R082			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		P	
Service Factor (S.F.)		1.15	Starting Current		8.4 A	
NEMA Nom. Eff.		81.5	Power Factor		58	
Rating - Duty		40C	AMB-CONT			
S.F. Amps			Temp. Rise @ Rated Load		19°C	
			Temp. Rise @ S.F. Load		21°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	62
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.2
Speed	1793	1788	1782	1776	1771	1763	1773
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.07

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





