



Customer information packet

VEM3538

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

MDS OF MICHIGAN INC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	CSA UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary 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	C
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYJ302
Eff. date	07-22-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Inverter Code	Not Inverter
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	12.23 IN
Power Factor	63
Product Family	General Purpose
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

NP2116L											
CAT.NO.	VEM3538										
SPEC.	35J302G069										
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	CL	F			
NEMA-NOM-EFF	81.5	PF	63								
RATING	40C AMB-CONT										
CC											
DE	6205	ODE		6203							
ENCL	TEFC	SN									
	SFA 2.2/1.1										

Parts list

Part number	Description	Quantity
SA418464	SA 35J302G069	1.000 ea
RA410367	RA 35J302G069	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	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
35EP3122K00	MASTER ODE,203 BRG.,683SH,#26 DRN,FH MTG	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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 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
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 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 *** NLA IN 5 GALLON	0.017 ga
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
NP2116L	ALUM SUPER-E UL CC	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A06	1.000 ea
PK3082	STYROFOAM CRADLE	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 # 101707

Typical performance - not guaranteed values

Winding: 35WGG069-R098			Type: 3514M		Enclosure: TEFC			
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		19°C	
S.F. Amps		2.2/1.1	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	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





