

ABB BALDOR RELIANCE III

Customer information packet

VEM3609

2HP, 1750RPM, 3PH, 60HZ, 184C, 3526M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184C
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	2.000 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	CURUSEEV NEMA PREMIUM
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	2.600 A @ 460.0 V 5.200 A @ 230.0 V 5.800 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.6 a

Part Detail

Revision	-
Type	AC
Mech. spec.	35H324
Base	
Status	PRD/A
Elec. spec.	35WGZ165
Layout	35LYH324
Eff. date	02-19-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	11-04-2025

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
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	3526M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.31 IN
Power Factor	82
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	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 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

NP1259L									
CAT.NO.	VEM3609								
SPEC.	35H324Z165								
HP	2								
VOLTS	230/460								
AMP	5.6/2.8								
RPM	1760								
FRAME	184C	HZ		60		PH		3	
SER.F.	1.15	CODE		K	DES	B	CL	F	
NEMA-NOM-EFF	86.5	PF		78					
RATING	40C AMB-CONT								
CC	010A								
DE	6205	ODE		6203					
ENCL	TEFC	SN							
	SFA 6.3/3.15								

Parts List

Part number	Description	Quantity
SA444206	SA 35H324Z165	1.000 ea
RA436732	RA 35H324Z165	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	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
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307C00	MASTER DE,205 BRG,1.232SH,#26 DRN,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	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
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES 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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	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
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	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 # 114535

Typical performance - not guaranteed values

Winding: 35WGZ165-R001			Type: 3526M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		5.979 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		5.2/2.6	Breakdown Torque		18.4 LB-FT		
R.P.M.		1750	Pull-up Torque		13.7 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		14.5 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		17.9 A
Service Factor (S.F.)		1.15	No-load Current		1.24 A		
NEMA Nom. Eff.		86.5	Power Factor	82	Line-line Res. @ 25°C		10.857 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		59°C
S.F. Amps		6/3	Temp. Rise @ S.F. Load		75°C		
			Locked-rotor Power Factor		59.3		

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	76	82	86	87	84
Efficiency	82.7	87.6	87.8	86.6	84.6	82	85.4
Speed	1788.4	1776.9	1763.5	1748.9	1731.7	1711.8	1739
Line amperes	1.35	1.65	2.09	2.61	3.21	3.91	2.97

ABB Motors and Mechanical Inc.

WINDING # 35WGZ165

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1750 RPM 460 V 3526M

TORQUES (LB-FT): PO=18.4 PU=13.7 LR=14.5 LRA=17.9



