

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3651-E

3HP, 1760RPM, 3PH, 60HZ, 56C, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	3.000 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	CSA UR 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	8.400 A @ 230.0 V 4.200 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	4.2 a
Insulation Class	H

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGS987
Layout	36LY-000-048
Eff. date	01-16-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	05-23-2019

Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3636M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.54 IN
Power Factor	76
Product Family	WD All SS Encapsulated
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1760 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

NP1953N01									
CAT.NO.	VFSWDM3651-E								
SPEC.	36-0000-0049								
HP	3								
VOLTS	230/460								
AMPS	8.4/4.2								
R.P.M.	1760								
FRAME	56C			HZ	60		PH	3	
SER.F.	1.15		CODE	K	DES.	B	CLASS	H	
NEMA NOM. EFF.	89.5			P.F.	76				
RATING	40C AMB-CONT								
CC	010A		USABLE AT 208V					N/A	
DE	6207			ODE	6206				
ENCL	TEFC	SN							
	4:1 CT, 10:1 VT								

Parts List

Part number	Description	Quantity
SA369997	SA 36-0000-0049	1.000 ea
RA359618	RA 36-0000-0049	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
36FH4007	FAN COVER #304 STAINLESS W/OUT GREASER	1.000 ea
10XN1032FS06	HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF	3.000 ea
36FN3000A01SP	EXFN, PLASTIC, 7.00 OD, .912 ID	1.000 ea
11XB1214S16	12-14X1.00 HXWSSLD TYP B STAINLESS	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3101FS29	THRUBOLT, 1/4-20 X 13.000 SS FOOD SAFE	4.000 ea
RM1070A14	O-RING, -010 VITON/FKM .070CS X .239ID	4.000 ea
35CB1017A02	5/36 MID SECT - 3 PC. CONDUIT BOX 3/4 N	1.000 ea
HA3424S48	STUD - M6X1.0 THDS X 3.00"	1.000 ea
36EP1920A02	FREP TEFC 206 BRG WD11/12 (STAINLESS)	1.000 ea
HW4600F25	30 X 48 X 4.5 AFX SEAL, GRAPHITE INFUSED	1.000 ea
HW4600G02	30 X 47 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
RM1070A42	O-RING,(#70-7.239) FLOUROELASTOMER COMPO	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
36EP1926A02	PUEP 182-4C ENCL 207 BRG WD11/12 (STAINL	1.000 ea
HW4600F79	35 X 52 X 4.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HW4600F35	35 X 52 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
RM1070A42	O-RING,(#70-7.239) FLOUROELASTOMER COMPO	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35CB1513A01	35-36-37 MACH. LID - 3 PC. CONDUIT BOX	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
GOPA1000	PKG GRP, PRINT PK1026A06	1.000 ea

HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
FE-0000016	ZTRG FE ASSEMBLY	1.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 39149

Typical performance - not guaranteed values

Winding: 36WGS987-R001			Type: 3636M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		3	Full Load Torque		9.04 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		8.4/4.2	Breakdown Torque		34.81 LB-FT		
R.P.M.		1760	Pull-up Torque		18.62 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		21.9 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		34.1 A
Service Factor (S.F.)		1.15	No-load Current		2.25 A		
NEMA Nom. Eff.		89.5	Power Factor	76	Line-line Res. @ 25°C		3.58 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		62°C
S.F. Amps					Temp. Rise @ S.F. Load		74°C
					Locked-rotor Power Factor		41
					Rotor inertia		0.335 LB-FT ²

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	57	69	76	80	83	78
Efficiency	82	88	89.6	89.8	89.2	88.3	89.3
Speed	1790	1781	1772	1762	1751	1738	1755
Line amperes	2.45	2.86	3.46	4.17	4.95	5.83	4.65

ABB Motors and Mechanical Inc.

WINDING # 36WGS987

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1760 RPM 460 V 3636M

TORQUES (LB-FT) : PO=34.81 PU=18.62 LR=21.9 LRA=34.1



