

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3615T-E

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3646M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA NEMA PREMIUM UR
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	13.800 A @ 208.0 V 6.500 A @ 460.0 V 13.000 A @ 230.0 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
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	P
Type	AC
Mech. spec.	36R533
Base	
Status	PRD/A
Elec. spec.	36WGS953
Layout	36LYR533
Eff. date	10-06-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	07-11-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	6.5 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3646M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.89 IN
Power Factor	81
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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

NP4427AAA01													
CAT #	VFSWDM3615T-E					WT	101	LBS					
SPEC	36R533S953G1					ENCL	TEFC						
SER #						CC	010A	IP	69				
HP	5	MAG CUR				5.8/2.9							
VOLTS	230/460					NEMA NOM. EFF			89.5				
AMPS	13/6.5					PF	81						
RATING	40C AMB-CONT												
RPM	1750					MAX RPM		2700					
FRAME	184TC	HZ	60	CODE		J	CLASS		H				
SER.F.	1.15	SF AMP	14.8/7.4				PH	3	DES	B			
DE	6206		ODE		6206								
LUBRICATION	POLYREX EM												
ID LOGO	INVERTER TYPE			VPWM		CHP	60	TO	90	1.5:1			
ID LOGO	WK2	0.428	CT	15	TO	60	4:1						
ID LOGO	SL HZ	1.7	VT	6	TO	60	10:1						
						QR							
YR													

AC Induction Motor Performance Data

Record # 57384

Typical performance - not guaranteed values

Winding: 36WGS953-R006			Type: 3646M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5	Full Load Torque		15.03 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		13/6.5	Breakdown Torque		57.4 LB-FT	
R.P.M.		1750	Pull-up Torque		28.9 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		32.3 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		47.9 A	
Service Factor (S.F.)		1.15	No-load Current		2.91 A	
NEMA Nom. Eff.		89.5 Power Factor	Line-line Res. @ 25°C		2.34 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		75°C	
S.F. Amps			Temp. Rise @ S.F. Load		91°C	
			Locked-rotor Power Factor		39	
			Rotor inertia		0.428 lb-ft²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	90	83	84	86
Efficiency	86.7	90.5	90.8	89.3	88.4	86.6	88.8
Speed	1788	1776	1763	1748	1732	1714	1738
Line amperes	3.27	4.1	5.2	6.53	8.02	9.69	7.42

ABB Motors and Mechanical Inc.

WINDING # 36WGS953

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3646M

TORQUES (LB-FT) : PO=57.4 PU=28.9 LR=32.3 LRA=47.9





