

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3550-E

1.5HP, 3500RPM, 3PH, 60HZ, 56C, 3532M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	1.800 A @ 460.0 V 3.600 A @ 230.0 V 3.700 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGR929
Layout	35LYE4656
Eff. date	08-14-2023
CD Diagram	CD0005
Poles	02
Leads	9#18 15" lead length,0#0 dbl dip & bake,0#0 phase insulaY
Proprietary	False
Created date	07-10-2017

High Voltage Full Load Amps	1.8 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	@ 0 AWG 9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3532M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.67 IN
Power Factor	90
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	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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 #	VFSWDM3550-E					WT	53		LBS						
SPEC	35E4656R929G1					ENCL	TENV								
SER #						CC	010A		IP	69					
HP	1.5		MAG CUR			1.3/.65									
VOLTS	230/460					NEMA NOM. EFF					85.5				
AMPS	3.6/1.8					PF		90							
RATING	40C AMB-CONT														
RPM	3500					MAX RPM		5400							
FRAME	56C	HZ		60		CODE		M	CLASS		H				
SER.F.	1.15	SF AMP							PH	3	DES		B		
DE	6205		ODE		6205										
LUBRICATION	POLYREX EM														
ID LOGO	INVERTER TYPE				VPWM		CHP	60	TO		90	1.5:1			
ID LOGO	WK2	0.09	CT	15	TO		60	4:1							
ID LOGO	SL HZ	1.7	VT	3	TO		60	20:1							
								QR							
YR															

AC Induction Motor Performance Data

Record # 20333

Typical performance - not guaranteed values

Winding: 35WGR929-R003			Type: 3532M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		2.31 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		3.7-3.6/1.8	Breakdown Torque		10.9 LB-FT		
R.P.M.		3500	Pull-up Torque		5.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		10.2 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		20.6 A
Service Factor (S.F.)		1.15		No-load Current		0.694 A	
NEMA Nom. Eff.		85.5	Power Factor	90	Line-line Res. @ 25°C		7.64 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		78°C	
S.F. Amps				Temp. Rise @ S.F. Load		90°C	
				Locked-rotor Power Factor		46	
				Rotor inertia		0.0885 LB-FT2	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	77	86	92	93	90	93
Efficiency	73.8	82.3	85.2	86.1	85.9	85.5	86
Speed	3564	3536	3507	3476	3444	3406	3457
Line amperes	0.907	1.15	1.48	1.81	2.23	2.75	2.06

ABB Motors and Mechanical Inc.

WINDING # 35WGR929

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3500 RPM 460 V 3532M

TORQUES (LB-FT): PO=10.9 PU=5.2 LR=10.2 LRA=20.6





