

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3545-E

1HP, 3450RPM, 3PH, 60HZ, 56C, 3520M, TENV, F1, N

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	1.000 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	1.400 A @ 460.0 V 2.800 A @ 230.0 V 2.900 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
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	P
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGL314
Layout	35LYE4656
Eff. date	08-14-2023
CD Diagram	CD0005
Poles	02
Leads	9#18,0#,0#,0# Y
Proprietary	False
Created date	06-20-2017

High Voltage Full Load Amps	1.4 a
Insulation Class	H
Inverter Code	Not Inverter
KVA Code	N
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	3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.78 IN
Power Factor	82
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	3450 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 #	VFSWDM3545-E					WT	37	LBS						
SPEC	35E4656L314G1					ENCL	TENV							
SER #						CC	010A	IP	69					
HP	1	MAG CUR				1.44/.72								
VOLTS	230/460					NEMA NOM. EFF				82.5				
AMPS	2.8/1.4					PF		82						
RATING	40C AMB-CONT													
RPM	3450					MAX RPM		5400						
FRAME	56C	HZ		60	CODE		N	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	0.06	CT	15	TO		60	4:1						
ID LOGO	SL HZ	2.5	VT	3	TO		60	20:1						
							QR							
YR														

AC Induction Motor Performance Data

Record # 63641

Typical performance - not guaranteed values

Winding: 35WGL314-R002		Type: 3520M	Enclosure: TENV
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	1.52 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	2.8/1.4	Breakdown Torque	8.51 LB-FT
R.P.M.	3450	Pull-up Torque	6.16 LB-FT
Hz	60 Phase	Locked-rotor Torque	8.01 LB-FT
NEMA Design Code	B KVA Code	Starting Current	15.1 A
Service Factor (S.F.)	1.15	No-load Current	0.722 A
NEMA Nom. Eff.	82.5 Power Factor	Line-line Res. @ 25°C	10.85 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	91°C
S.F. Amps	3.2/1.6	Temp. Rise @ S.F. Load	105°C

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	64	76	82	86	88	84
Efficiency	67.8	79	82.4	83.4	83.4	82.5	83.4
Speed	3566.5	3536.9	3507.4	3477.1	3442.7	3405	3456
Line amperes	0.791	0.953	1.15	1.38	1.63	1.93	1.53

ABB Motors and Mechanical Inc.

WINDING # 35WGL314

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3520M

TORQUES (LB-FT) : PO=8.51 PU=6.16 LR=8.01 LRA=15.1





