

ABB BALDOR RELIANCE III

Customer information packet

VFSWDNM3558-E

2HP, 1760RPM, 3PH, 60HZ, 56C, 3546M, 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	2.000 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 EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE
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	5.600 A @ 208.0 V 5.300 A @ 230.0 V 2.650 A @ 460.0 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

Part Detail

Revision	E
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGZ811
Layout	35LYE4656
Eff. date	10-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	03-11-2022

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.7 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3546M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.04 IN
Power Factor	80
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
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

NP4427AAA01														
CAT #	VFSWDNM3558-E					WT	63		LBS					
SPEC	35E4656Z811G1					ENCL	TENV							
SER #						CC	010A		IP	69				
HP	2		MAG CUR			2.7/1.35								
VOLTS	230/460					NEMA NOM. EFF					86.5			
AMPS	5.3/2.65					PF		80						
RATING	40C AMB-CONT													
RPM	1760					MAX RPM		2700						
FRAME	56C	HZ		60		CODE	L	CLASS		H				
SER.F.	1.15	SF AMP		6/3		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	0.332	CT	15	TO	60	4:1							
ID LOGO	SL HZ	1.33	VT	3	TO	60	20:1							
						QR								
YR														

AC Induction Motor Performance Data

Record # 87105

Preliminary Data Sheet

Winding: 35WGZ811-R001			Type: 3546M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		6 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		5.3/2.65	Breakdown Torque		27.78 LB-FT		
R.P.M.		1760	Pull-up Torque		16.81 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		21.79 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		25.07 A
Service Factor (S.F.)		1.15	No-load Current		1.36 A		
NEMA Nom. Eff.		86.5	Power Factor	80	Line-line Res. @ 25°C		7.86 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		100°C
S.F. Amps		6/3	Temp. Rise @ S.F. Load		122°C		
			Locked-rotor Power Factor		51.7		
			Rotor inertia		0.332 lb-ft²		

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	73	80	85	87	83
Efficiency	83.3	88.6	89.2	88.7	87.5	86	88
Speed	1790	1781	1771	1760	1748	1735	1753
Line amperes	1.5	1.78	2.17	2.65	3.18	3.77	2.97

ABB Motors and Mechanical Inc.

WINDING # 35WGZ811

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 3546M

TORQUES (LB-FT) : PO=27.78 PU=16.81 LR=21.79 LRA=25.07





