

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3543-E

.75HP, 1170RPM, 3PH, 60HZ, 56C, 3530M, 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	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA 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	2.800 A @ 208.0 V 2.700 A @ 230.0 V 1.350 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	D
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGG335
Layout	35LYE4656
Eff. date	09-09-2026
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	09-09-2022

Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.4 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3530M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	13.67 IN
Power Factor	61
Product Family	WD All SD Non-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	1170 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

NP4427ALA01														
CAT #	VFSWDM3543-E					WT	45		LBS					
SPEC	35E4656G335G1					ENCL	TENV							
SER #						CC	010A		IP	69				
HP	.75			MAG CUR			1.6-1.8/.9							
VOLTS	208-230/460					NEMA NOM. EFF					82.5			
AMPS	2.8-2.7/1.35							PF	61					
RATING	40C AMB-CONT													
RPM	1170					MAX RPM			1800					
FRAME	56C	HZ		60		CODE		L	CLASS		H			
SER.F.	1.15	SF AMP		3-2.9/1.45				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	0.217	CT		15	TO		60	4:1					
ID LOGO	SL HZ	1.5	VT		3	TO		60	20:1					

AC Induction Motor Performance Data

Record # 87730

Preliminary Data Sheet

Winding: 35WGG335-R001			Type: 3530M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75	Full Load Torque		3.38 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		2.8-2.7/1.35	Breakdown Torque		13.03 LB-FT	
R.P.M.		1170	Pull-up Torque		7.09 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		8.26 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		8.66 A	
Service Factor (S.F.)		1.15	No-load Current		0.928 A	
NEMA Nom. Eff.		82.5 Power Factor	Line-line Res. @ 25°C		22.1 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		70°C	
S.F. Amps		3-2.9/1.45	Temp. Rise @ S.F. Load		80°C	
			Locked-rotor Power Factor		46.9	
			Rotor inertia		0.218 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	43	55	64	70	74	68
Efficiency	67.6	78.4	81.4	82.1	81.5	80.3	81.7
Speed	1194	1187	1181	1173	1165	1156	1168
Line amperes	0.953	1.04	1.17	1.34	1.54	1.77	1.46

ABB Motors and Mechanical Inc.

WINDING # 35WGG335

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1170 RPM 460 V 3530M

TORQUES (LB-FT) : PO=13.03 PU=7.09 LR=8.26 LRA=8.66





