



Customer information packet

VFSWDM3537-E

.5HP, 3500RPM, 3PH, 60HZ, 56C, 3516M, 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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA 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	1.500 A @ 208.0 V 1.400 A @ 230.0 V .700 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	M
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGP069
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	06-21-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	0.7 a
Insulation Class	H
Inverter Code	Inverter Ready
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	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.78 IN
Power Factor	84
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 #	VFSWDM3537-E				WT	35	LBS						
SPEC	35E4656P069G1				ENCL	TENV							
SER #					CC	010A	IP	69					
HP	.5				MAG CUR	.8/.4							
VOLTS	208-230/460					NEMA NOM. EFF						84	
AMPS	1.5-1.4/.7					PF	84						
RATING	40C AMB-CONT												
RPM	3500				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	0.036	CT	15	TO	60	4:1						
ID LOGO	SL HZ	1.7	VT	3	TO	60	20:1						

AC Induction Motor Performance Data

Record # 63631

Typical performance - not guaranteed values

Winding: 35WGP069-R009			Type: 3516M	Enclosure: TENV			
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		0.753 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		1.5-1.4/.7	Breakdown Torque		4.09 LB-FT		
R.P.M.		3500	Pull-up Torque		2.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		2.47 LB-FT	
NEMA Design Code		B	KVA Code		N	Starting Current	6.97 A
Service Factor (S.F.)		1.15	No-load Current		0.394 A		
NEMA Nom. Eff.		84	Power Factor		84	Line-line Res. @ 25°C	25.2 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	63°C	
S.F. Amps			Temp. Rise @ S.F. Load		72°C		
			Locked-rotor Power Factor		54.7		
			Rotor inertia		0.0443 LB-FT2		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	65	74	81	84	87	83
Efficiency	49.5	65	71.2	75	76.3	76.7	75.8
Speed	3568	3541	3517	3492	3464	3436	3475
Line amperes	0.453	0.545	0.65	0.774	0.904	1.05	0.852

ABB Motors and Mechanical Inc.

WINDING # 35WGP069

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 3500 RPM 460 V 3516M

TORQUES (LB-FT): PO=4.09 PU=2.2 LR=2.47 LRA=6.97





