

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3546-E-G

1HP, 1770RPM, 3PH, 60HZ, 56C, 3522M, 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	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV 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	3.300 A @ 208.0 V 3.340 A @ 230.0 V 1.670 A @ 460.0 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 Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	A
Type	AC
Mech. spec.	35E6050
Base	
Status	PRD/A
Elec. spec.	35WGG184
Layout	35LYE6050
Eff. date	01-29-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	07-06-2023

High Voltage Full Load Amps	1.7 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	N
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	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.78 IN
Power Factor	66
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 Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP4427AAA01A													
CAT #	VFSWDM3546-E-G					WGT		LBS					
SPEC	35E6050G184G1					ENCL	TENV						
SER #						CC	010A	IP	69				
HP	1	MAG CUR				2.5/1.25							
VOLTS	230/460					NEMA NOM. EFF				85.5			
AMPS	3.34/1.67					PF	66						
RATING	40C AMB-CONT												
RPM	1770					MAX RPM		2700					
FRAME	56C	HZ	60	CODE		N	CLASS		H				
SER.F.	1.15	SF AMP	3.5/1.75				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	0.159	CT	3	TO	60	20:1						
ID LOGO	SL HZ	1	VT	3	TO	60	20:1						

AC Induction Motor Performance Data

Record # 75065

Typical performance - not guaranteed values

Winding: 35WGW045-R003			Type: 3522M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		3.01 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		3/1.5	Breakdown Torque		13.4 LB-FT		
R.P.M.		1760	Pull-up Torque		7.77 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		9.5 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		13.5 A
Service Factor (S.F.)		1.15	No-load Current		1.02 A		
NEMA Nom. Eff.		85.5	Power Factor	74	Line-line Res. @ 25°C		14.4 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		78°C
S.F. Amps					Temp. Rise @ S.F. Load		91°C
					Locked-rotor Power Factor		54
					Rotor inertia		0.13 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	49	62	71	77	81	75
Efficiency	73.4	82.2	85.1	85.6	85	83.9	85.2
Speed	1790	1780	1771	1760	1749	1736	1753
Line amperes	1.06	1.19	1.35	1.55	1.79	2.07	1.69

ABB Motors and Mechanical Inc.

WINDING # 35WG045

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1760 RPM 460 V 3522M

TORQUES (LB-FT): PO=13.4 PU=7.77 LR=9.5 LRA=13.5





