



Customer information packet

VEDM3545

1HP, 3450RPM, 3PH, 60HZ, 56C, 3420M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM 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
Constant Torque Speed Range	6
Current @ Voltage	3.700 A @ 208.0 V 3.200 A @ 230.0 V 1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
Electrically Isolated Bearing	Not Electrically Isolated

Part detail

Revision	L
Type	AC
Mech. spec.	34M809
Base	
Status	PRD/A
Elec. spec.	34WG3226
Layout	34LYM809
Eff. date	03-26-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	04-25-2016

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.97 IN
Power Factor	82
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
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

NP3560										
CAT NO	VEDM3545									
SPEC.	34M809-3226G1				ENCL	TEFC				
FRAME	56C	HP	1							
VOLTS	230/460SFA 3.6/1.8									
FLA	3.2/1.6				I.P.	56				
RPM	3450	RPM MAX			5400					
HZ	60	PH	3	CLASS		F				
SER.F.	1.25	DES	B	CC	010A					
NEMA-NOM-EFF	77									
RATING	40C AMB-CONT									
DE BRG	6203	ODE BRG			6203					
GREASE	POLYREX EM									
INV.TYPE		C HP FR			60	C HP TO		90		
CT HZ FROM	6	CT HZ TO			60	VT HZ FROM		3	VT HZ TO	60
SER.NO										
	50C AT 1.0SF									

AC Induction Motor Performance Data

Record # 55785

Typical performance - not guaranteed values

Winding: 34WG3226-R063			Type: 3420M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		1	Full Load Torque		1.51 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		3.2/1.6	Breakdown Torque		7.966 LB-FT			
R.P.M.		3450	Pull-up Torque		6.2 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		8.7 LB-FT		
NEMA Design Code		B	KVA Code	L	Starting Current		14.5 A	
Service Factor (S.F.)		1.25	No-load Current		0.913 A			
NEMA Nom. Eff.		77	Power Factor		82	Line-line Res. @ 25°C		13.6 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		55°C	
S.F. Amps		3.6/1.8	Temp. Rise @ S.F. Load		74°C			

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	59	72	80	85	89	87
Efficiency	57.7	71.5	77.1	79.3	79.9	79.7	79.8
Speed	3560	3536	3506	3475	3445	3406	3422
Line amperes	0.967	1.09	1.27	1.47	1.7	1.99	1.87

ABB Motors and Mechanical Inc.

WINDING # 34WG3226

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3420M

TORQUES (LB-FT): PO=7.966 PU=6.2 LR=8.7 LRA=14.5





