



Customer information packet

VDM3541

.75HP, 3450RPM, 3PH, 60HZ, 56C, 3418M, TEFC, F1

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	.750 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 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	2.300 A @ 208.0 V 2.400 A @ 230.0 V 1.200 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.0 %
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.	34M809
Base	
Status	PRD/A
Elec. spec.	34WGR420
Layout	34LYM809
Eff. date	01-24-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	04-20-2016

Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
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	3418M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.35 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

NP3659									
CAT.NO.	VDM3541								
SPEC.	34M809R420G1				ENCL		TEFC		
FRAME	56C	H.P.		.75					
VOLTS	230/460								
AMPS	2.4/1.2				IP		56		
R.P.M.	3450								
HZ.	60	PH.	3	CLASS		F			
SER.F.	1.25	DES.	B	CC					
NEMA NOM. EFF.	72								
RATING	40C AMB-CONT								
DE	6203	ODE	6203						
GREASE	POLYREX EM								
SN									
	50C AT 1.0SF								
	SFA 2.6/1.3								

AC Induction Motor Performance Data

Record # 58278

Typical performance - not guaranteed values

Winding: 34WGR420-R001				Type: 3418M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75		Full Load Torque		1.12 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		2.4/1.2		Breakdown Torque		5.83 LB-FT	
R.P.M.		3450		Pull-up Torque		3.59 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		4.67 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		10.8 A	
Service Factor (S.F.)		1.25		No-load Current		0.677 A	
NEMA Nom. Eff.		72	Power Factor	Line-line Res. @ 25°C		18.374 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		56°C	
S.F. Amps		2.6/1.3		Temp. Rise @ S.F. Load		66°C	
				Locked-rotor Power Factor		66.1	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	65	75	82	86	88	86
Efficiency	48.6	63	70.2	73.5	74.9	75.5	74.9
Speed	3538.5	3516.3	3493.4	3458	3443.1	3417.1	3443
Line amperes	0.755	0.871	1.01	1.154	1.36	1.55	1.36

ABB Motors and Mechanical Inc.

WINDING # 34WGR420

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 3450 RPM 460 V 3418M

TORQUES (LB-FT): PO=5.83 PU=3.59 LR=4.67 LRA=10.8





