



Customer information packet

BM3542

.75HP, 1725RPM, 3PH, 60HZ, 56, 3420M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
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	1800 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.200 A @ 208.0 V 3.000 A @ 230.0 V 1.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	B
Type	AC
Mech. spec.	34-3108
Base	
Status	PRD/A
Elec. spec.	34WGR707
Layout	34LY3108
Eff. date	11-06-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-29-2021

High Voltage Full Load Amps	1.5 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
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	4
Overall Length	16.45 IN
Power Factor	64
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1725 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

NP1256L									
CAT.NO.	BM3542								
SPEC.	34-3108R707-C								
HP	.75								
VOLTS	208-230/460								
AMP	3.2-3/1.5								
RPM	1725								
FRAME	56		HZ	60		PH	3		
SER.F.	1.25	CODE	M	DES	B	CLASS	B		
NEMA-NOM-EFF	75.5	PF	64						
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	TEFC	SN							
	SFA 3.6-3.4/1.7								

AC Induction Motor Performance Data

Record # 85439

Preliminary Data Sheet

Winding: 34WGR707-R001			Type: 3420M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		0.75		Full Load Torque		2.27 LB-FT	
Volts		208-230/460		Start Configuration		direct on line	
Full Load Amps		3.2-3.0/1.5		Breakdown Torque		9.9 LB-FT	
R.P.M.		1725		Pull-up Torque		7.1 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		9.2 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		9.8 A
Service Factor (S.F.)		1.25		No-load Current		1.08 A	
NEMA Nom. Eff.		77	Power Factor	61	Line-line Res. @ 25°C		21 Ω
Rating - Duty		40C-AMB CONT		Temp. Rise @ Rated Load		69°C	
S.F. Amps		3.6-3.4/1.7		Temp. Rise @ S.F. Load		83°C	
				Locked-rotor Power Factor		59.2	
				Rotor inertia		0.0476 LB-FT2	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	44	56	66	73	79	73
Efficiency	54.7	68.4	73.5	75.2	75.8	74.9	76.5
Speed	1780	1763	1745	1726	1723	1700	1723
Line amperes	1.09	1.15	1.26	1.4	1.58	1.79	1.58

ABB Motors and Mechanical Inc.

WINDING # 34WGR707

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

TORQUES (LB-FT) : PO=9.9 PU=7.1 LR=9.2 LRA=9.8





