



Customer information packet

VRBM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, BRAKE, 3420M

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Aluminum
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	1800 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
Brake Torque	3.0 lb-ft
Current @ Voltage	1.900 A @ 208.0 V 1.800 A @ 230.0 V .900 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 Face Code	Brake Mounting

Part detail

Revision	N
Type	AC
Mech. spec.	34K208
Base	
Status	PRD/A
Elec. spec.	34WG0097
Layout	34LYK208
Eff. date	10-28-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-01-0001

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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	4
Overall Length	13.62 IN
Power Factor	69
Product Family	General Purpose
Pulley End Bearing Type	Ball
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	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

NP1893							
CAT.NO.	VRBM3538						
SPEC.	34K208-0097G1						
HP	.5						
VOLTS	208-230/460						
AMPS	1.9-1.8/.9						
RPM	1725						
FRAME	56C		HZ	60		PH	3
SER.F.	1.15		CODE	K		DES	B
						CL	F
FL EFF	75.5		PF	69			
RATING	40C AMB-CONT						
CC			USABLE AT 208V				N/A
DE	6203		ODE	6203			
ENCL	TENV		SER.				

AC Induction Motor Performance Data

Record # 20814

Typical performance - not guaranteed values

Winding: 34WG0097-R005			Type: 3420M		Enclosure: TENV			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		.5	Full Load Torque		1.5 LB-FT			
Volts		208-230/460	Start Configuration		direct on line			
Full Load Amps		1.9-1.8/.9	Breakdown Torque		6.8 LB-FT			
R.P.M.		1725	Pull-up Torque		4.6 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		5.8 LB-FT		
NEMA Design Code		B	KVA Code	K	Starting Current		7 A	
Service Factor (S.F.)		1.15	No-load Current		0.54 A			
NEMA Nom. Eff.		75.5	Power Factor		69	Line-line Res. @ 25°C		27.56 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		57°C	
S.F. Amps			Temp. Rise @ S.F. Load		74°C			
			Locked-rotor Power Factor		56			

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	53	65	71	75	81	75
Efficiency	55	69	74	78	75.5	74.4	75.5
Speed	1787	1774	1760	1749	1728	1717	1728
Line amperes	0.6	0.65	0.74	0.84	1	1.1	1

ABB Motors and Mechanical Inc.

WINDING # 34WG0097

Typical performance - not guaranteed values.

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

TORQUES (LB-FT): PO=6.8 PU=4.6 LR=5.8 LRA=7





