



Customer information packet

VRBM3546T

1HP, 1700RPM, 3PH, 60HZ, 143TC, 3436M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	143TC
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	1.600 A @ 460.0 V 3.200 A @ 230.0 V
Design Code	D
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a

Part detail

Revision	G
Type	AC
Mech. spec.	34K991
Base	
Status	PRD/A
Elec. spec.	34WGR297
Layout	34LYK991
Eff. date	10-28-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	04-30-2015

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
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	3436M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.57 IN
Power Factor	81
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	1.00
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1680 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.	VRBM3546T								
SPEC.	34K991R297G1								
HP	1								
VOLTS	230/460								
AMPS	3.2/1.6								
RPM	1680								
FRAME	143TC		HZ		60		PH	3	
SER.F.	1.00	CODE	L	DES	D	CL	F		
FL EFF	74	PF	81						
RATING	40C AMB-CONT								
CC						USABLE AT 208V			N/A
DE	6205		ODE		6203				
ENCL	TENV	SER.							

AC Induction Motor Performance Data

Record # 55596

Typical performance - not guaranteed values

Winding: 34WGR297-R001			Type: 3436M		Enclosure: TENV			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1		Full Load Torque		3.15 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		3.2/1.6		Breakdown Torque		10.6 LB-FT		
R.P.M.		1680		Pull-up Torque		9.08 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		12.7 LB-FT		
NEMA Design Code		D	KVA Code	L	Starting Current		11.4 A	
Service Factor (S.F.)		1		No-load Current		0.902 A		
NEMA Nom. Eff.		74	Power Factor	81	Line-line Res. @ 25°C		14.869 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		100°C

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	61	73	81	85	88
Efficiency	58.6	70.8	74	74.1	72.1	68.6
Speed	1771.5	1744.6	1715.7	1681.5	1642	1590.6
Line amperes	0.946	1.1	1.3	1.56	1.9	2.33

ABB Motors and Mechanical Inc.

WINDING # 34WGR297

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1680 RPM 460 V 3436M

TORQUES (LB-FT): PO=10.6 PU=9.08 LR=12.7 LRA=11.4





