

BALDOR • RELIANCE

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
Auxillary Box	No Auxillary Box
Auxillary 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.					

Parts list

Part number	Description	Quantity
SA299930	SA 34K991R297G1	1.000 ea
RA286970	RA 34K991R297G1	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
34GS1029A01	GASKET, CONDUIT BOX	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
34EP3900T59	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3903T09	PU ENDPLATE, MACH	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
84XN2520J44	1/4-20 X 2 3/4 SOC HD CAP SCREW	4.000 ea
HW2501D01	KEY, 3/16 SQ X 0.438	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
MG1500Y02	WILKOPON PRIMER YELLOW	0.014 ga
HA3100A64	THRUBOLT 10-32 X 9.875	4.000 ea
33BK0043	STEARNS 3-21-85AF0-OB-WG, .625 BORE, 72L	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005F02	3PH,DV,REV,9 LEAD MTR W/STEARNS 320 BRK	1.000 ea
NP1893	NP W/O THRM, UL, CSA, CC, SELF-ADHESIVE	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea

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

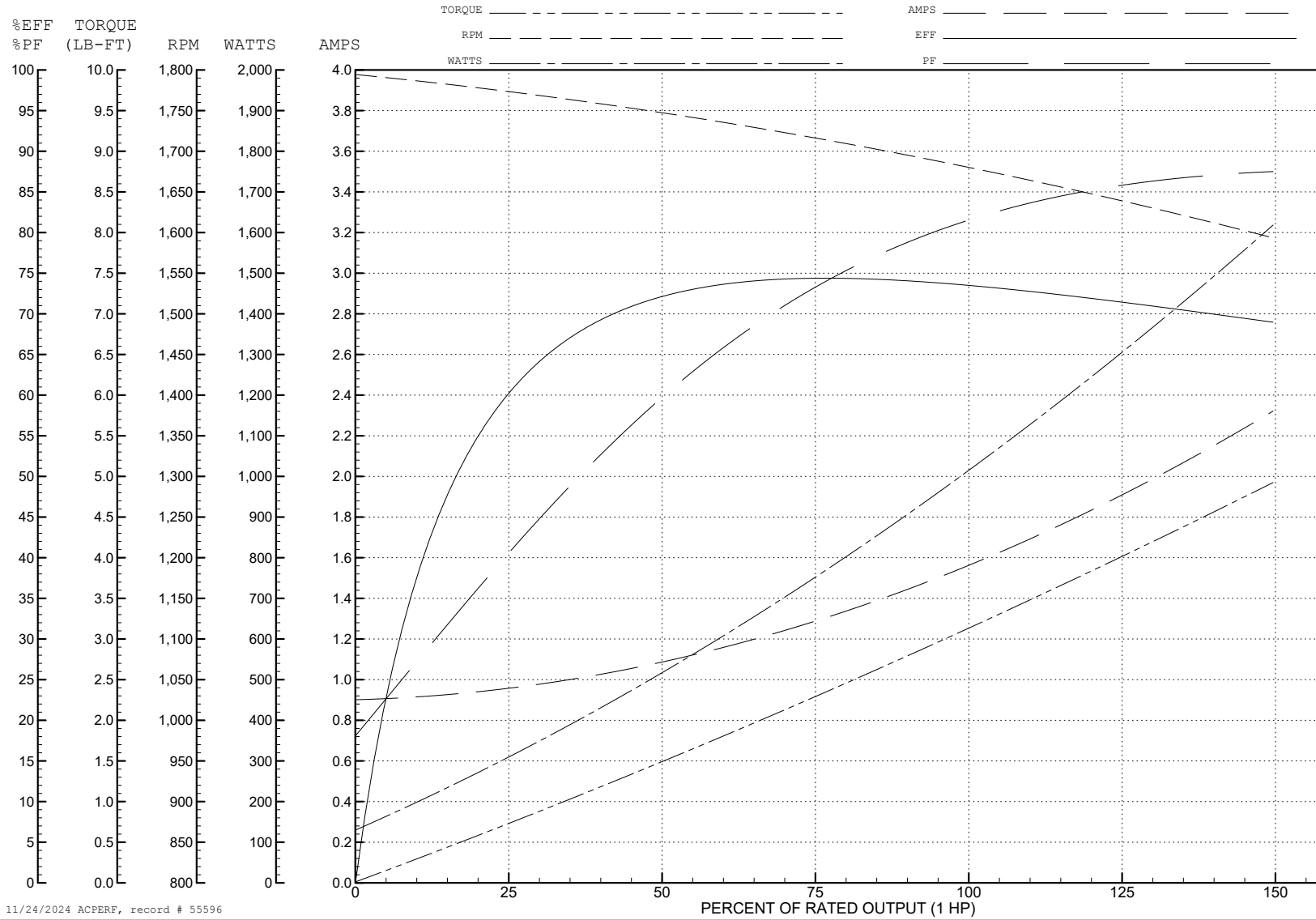
ABB Motors and Mechanical Inc.

WINDING # 34WGR297

Typical performance - not guaranteed values.

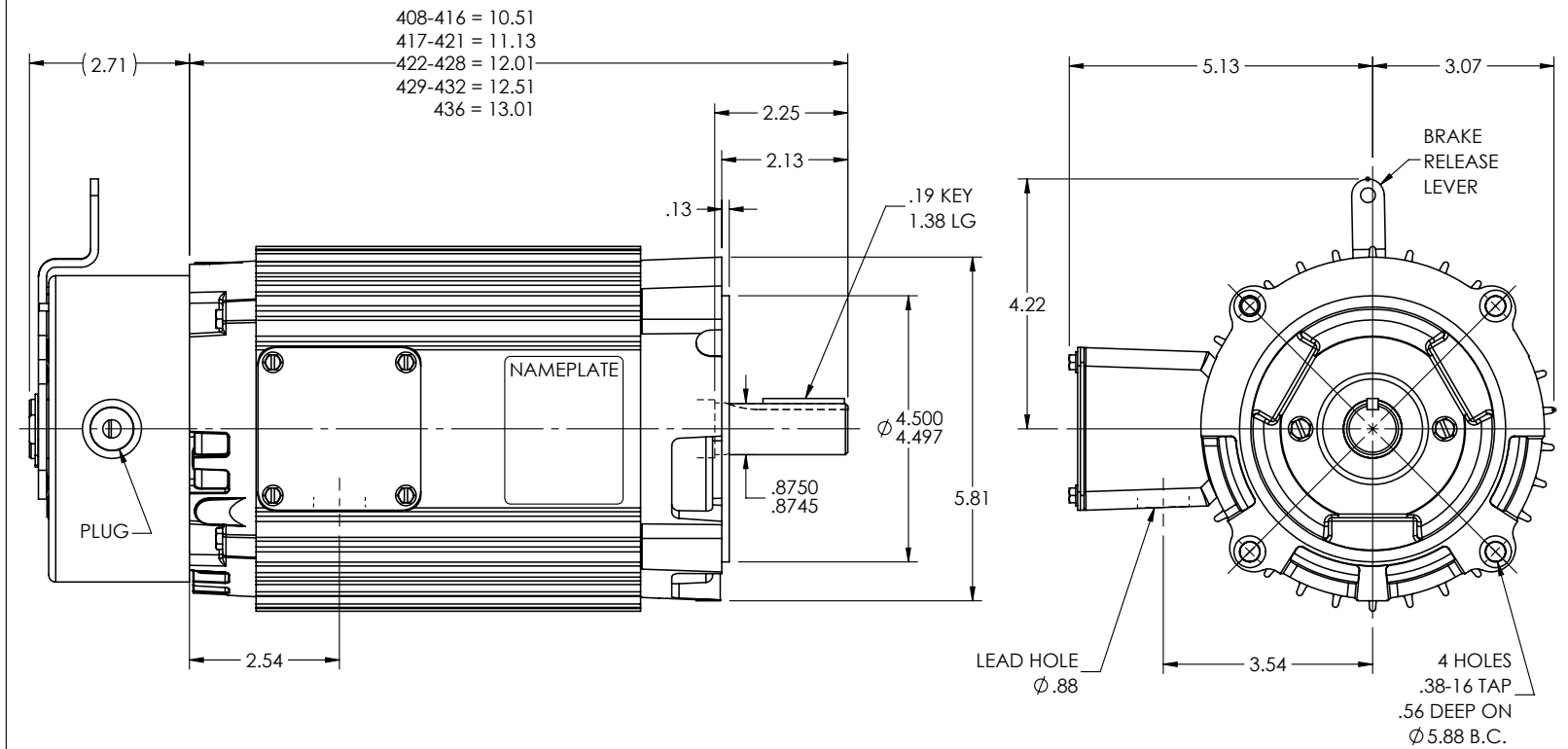
1 HP 3 PH 60 HZ 1680 RPM 460 V 3436M

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



11/24/2024 ACPERF, record # 55596

34LYK991



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: UPDATE SHAFT DIA. TO .8750/.8745			
REV: C	VERSION: 03	REVISED: 08:42:49 10/02/2024	TDR: 000001241646
MODEL NO. 34LYK991		REF: -	
BY: ENJEFD0			

BALDOR - RELIANCE®

VERT 34M NEMA 143TC TENV W/EXTRUDED FRAME & 321 BRAKE

34LYK991

CD0005

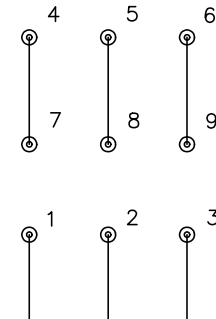


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS