

BALDOR • RELIANCE

Customer information packet

VFDM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, 3416M, TEFC, F1

Class - None

Division - Not Applicable

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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	.500 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	1.000 A @ 460.0 V 1.900 A @ 208.0 V 2.000 A @ 230.0 V
Design Code	B
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	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	C
Type	AC
Mech. spec.	34N103
Base	
Status	PRD/A
Elec. spec.	34WG3649
Layout	34LYN103
Eff. date	05-26-2021
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	08-11-2017

High Voltage Full Load Amps	1.0 a
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	3416M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.35 IN
Power Factor	63
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	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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

NP1279L							
CAT.NO.	VFDM3538						
SPEC.	34N103-3649G1						
HP	.5						
VOLTS	230/460						
AMP	2/1						
RPM	1725						
FRAME	56C	HZ	60	PH	3		
SER.F.	1.00	CODE	L	DES	B	CL	F
NEMA-NOM-EFF	74	PF	63				
RATING	40C AMB-CONT						
CC						USABLE AT 208V	N/A
DE	6203	ODE	6203				
ENCL	TEFC	SN					

Parts list

Part number	Description	Quantity
SA343220	SA 34N103-3649G1	1.000 ea
RA331667	RA 34N103-3649G1	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
34EP3102A01SP	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01SP	IEC FH NO GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34EP3300A55	PU ENDPLATE, MACH W/SEAL	1.000 ea
HW4600A54	SEAL 0.668 X 1.064 X 0.250 DOUBLE SHIELD	1.000 ea
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	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
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MG1025C02	WILKOFASG SG, 787.105, TAN	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1279L	ALUM FARM DUTY UL CSA CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	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 # 66302

Typical performance - not guaranteed values

Winding: 34WG3649-R035		Type: 3416M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	.5	Full Load Torque	1.5 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	2/1	Breakdown Torque	7 LB-FT		
R.P.M.	1725	Pull-up Torque	4.5 LB-FT		
Hz	60	Locked-rotor Torque	5.3 LB-FT		
NEMA Design Code	B	Starting Current	6.5 A		
Service Factor (S.F.)	1	No-load Current	0.8 A		
NEMA Nom. Eff.	74	Line-line Res. @ 25°C	33.3 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	65°C		
		Locked-rotor Power Factor	66.1		
		Rotor inertia	0.0381 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	28	42	53	61	67	73
Efficiency	53.3	66.3	72.7	74.5	75.4	75.1
Speed	1782	1769	1754	1739	1724	1706
Line amperes	0.8	0.85	0.92	1.03	1.15	1.25

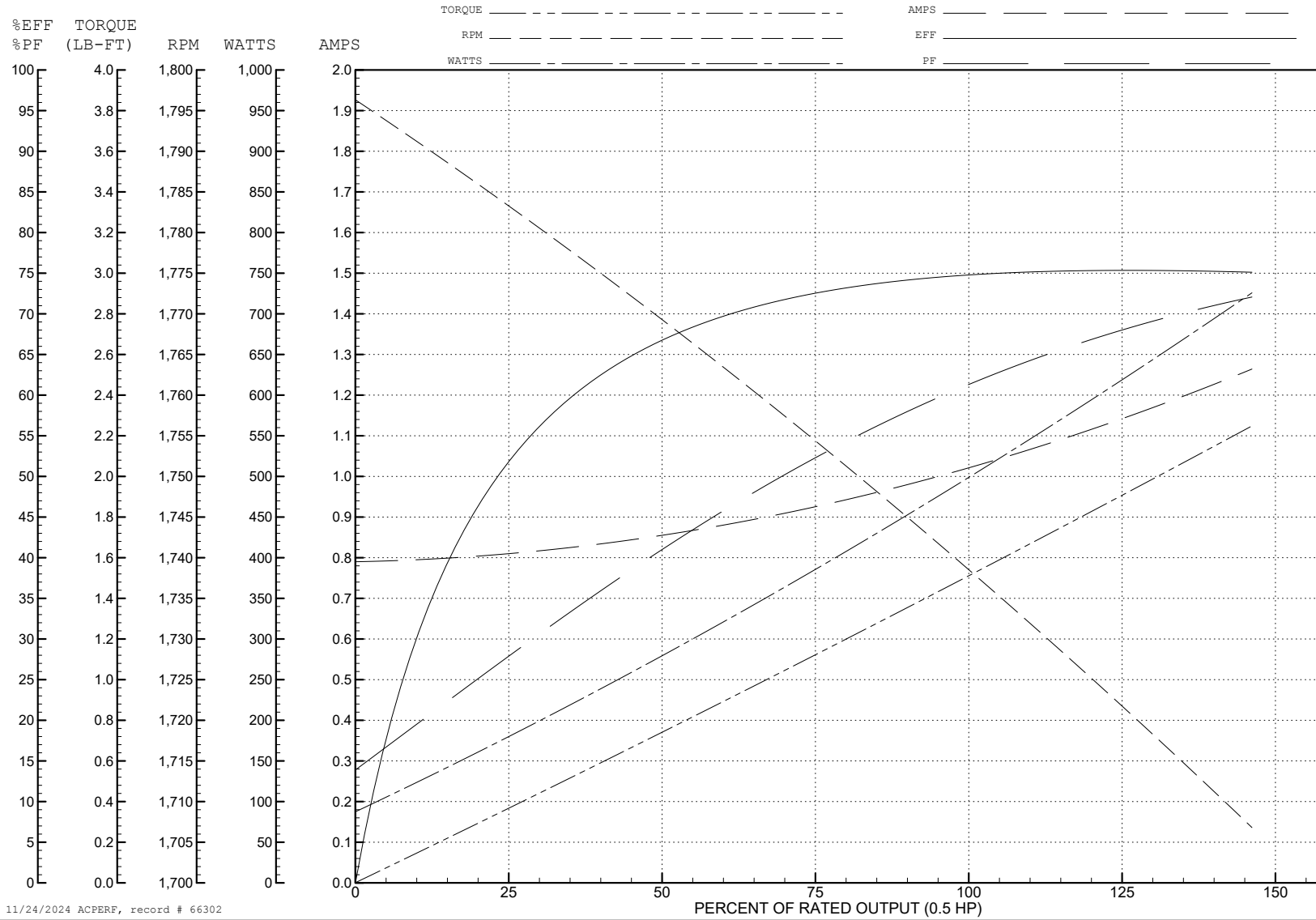
ABB Motors and Mechanical Inc.

WINDING # 34WG3649

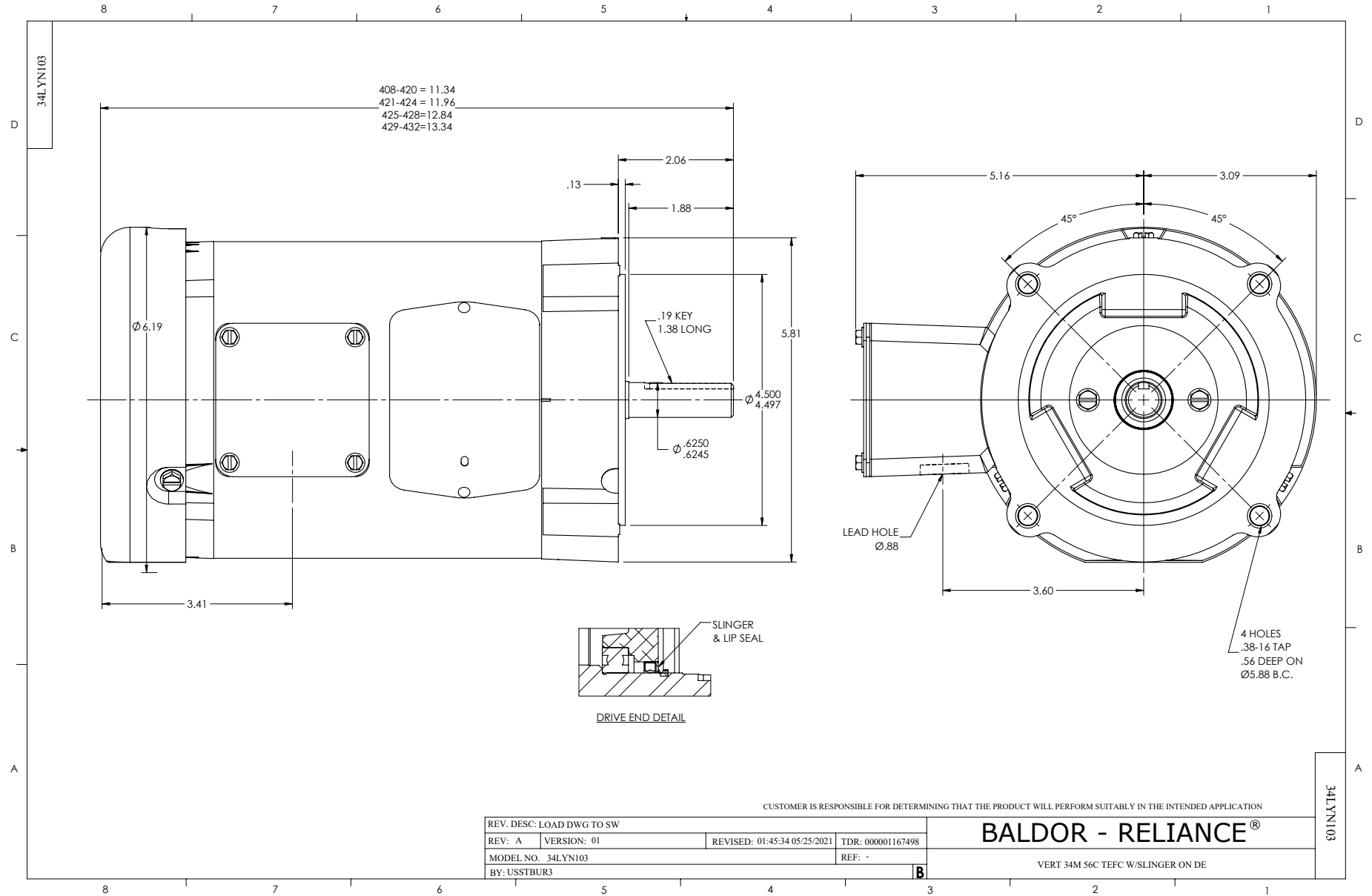
0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3416M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=7 PU=4.5 LR=5.3 LRA=6.5



11/24/2024 ACPERF, record # 66302



CD0005

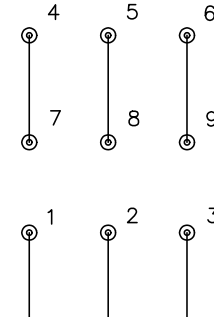


LOW VOLTAGE
(2Y)



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