

**BALDOR • RELIANCE**

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# Customer information packet

## VEWDM3651T

3HP, 1760RPM, 3PH, 60HZ, 145TC, 3646M, TENV, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TENV
Frame	145TC
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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	8.200 A @ 230.0 V 8.600 A @ 208.0 V 4.100 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

## Part detail

Revision	K
Type	AC
Mech. spec.	36Q446
Base	
Status	PRD/A
Elec. spec.	36WGR412
Layout	36LYQ446
Eff. date	07-31-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-27-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	4.1 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3646M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.63 IN
Power Factor	75
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 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**

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**Nameplate**

<b>NP1669L</b>									
<b>CAT.NO.</b>	VEWDM3651T								
<b>SPEC.</b>	36Q446R412G1								
<b>HP</b>	3								
<b>VOLTS</b>	230/460								
<b>AMP</b>	8.2/4.1								
<b>RPM</b>	1760								
<b>FRAME</b>	145TC		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	L	<b>DES</b>	B	<b>CLASS</b>	F		
<b>NEMA-NOM-EFF</b>	89.5	<b>PF</b>	75						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6206		<b>ODE</b>	6205					
<b>ENCL</b>	TENV	<b>SN</b>							
<b>BLANK</b>									

## Parts list

Part number	Description	Quantity
SA294513	SA 36Q446R412G1	1.000 ea
RA280592	RA 36Q446R412G1	1.000 ea
36CB3005A03W	36 CB .75 NPT @ 6 W/WHITE EPOXY	1.000 ea
35GS1040	35 MOLDED GASKET W/LIP, LEAD SEAL,	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP3101A55MW	FR ENDPLATE-ENCL.WASH DOWN DUTY (WHITE E	1.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3303A11MW	PU EP-ENCL-206 BRG, NO GRS,"O" DRAINS (W	1.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HW4600B50	SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB	1.000 ea
10XN2520S24	1/4-20X 1 1/2 HEX HD SS	4.000 ea
36CB4518	36 LIPPED CB LID PRIMED	1.000 ea
37GS3010SP	1/16"WHITE LID GASKET	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.690 X .24 VITON	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025Z02	ACTIVATOR WILKOFAS 060.02HF	0.010 ga
MG1025W01	WILKOFAS 781.01, SIGNAL WHITE #9003	0.022 ga
HA3101S28	THRUBOLT- 1/4-20 X 12.50 SS	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1669L	SS WD SUPER-E UL PREM REV MTG	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea

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HA5027A01	HA4066A01 T-DRAIN X2 BAGGED	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

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**AC Induction Motor Performance Data**

Record # 57338

Typical performance - not guaranteed values

Winding: 36WGR412-R003		Type: 3646M	Enclosure: TENV	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	3	Full Load Torque	9.02 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	8.2/4.1	Breakdown Torque	37.7 LB-FT	
R.P.M.	1760	Pull-up Torque	19.8 LB-FT	
Hz	60 Phase	Locked-rotor Torque	23.3 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	36.3 A	
Service Factor (S.F.)	1.15	No-load Current	2.28 A	
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	2.97 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	57°C	
S.F. Amps		Temp. Rise @ S.F. Load	67°C	
		Locked-rotor Power Factor	38.8	
		Rotor inertia	0.428 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 3 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	56	68	75	80	82	78
Efficiency	82.3	88.4	90.2	90.5	90.1	89.4	90.3
Speed	1791	1783	1774	1765	1755	1743	1759
Line amperes	2.48	2.88	3.46	4.16	4.93	5.78	4.62



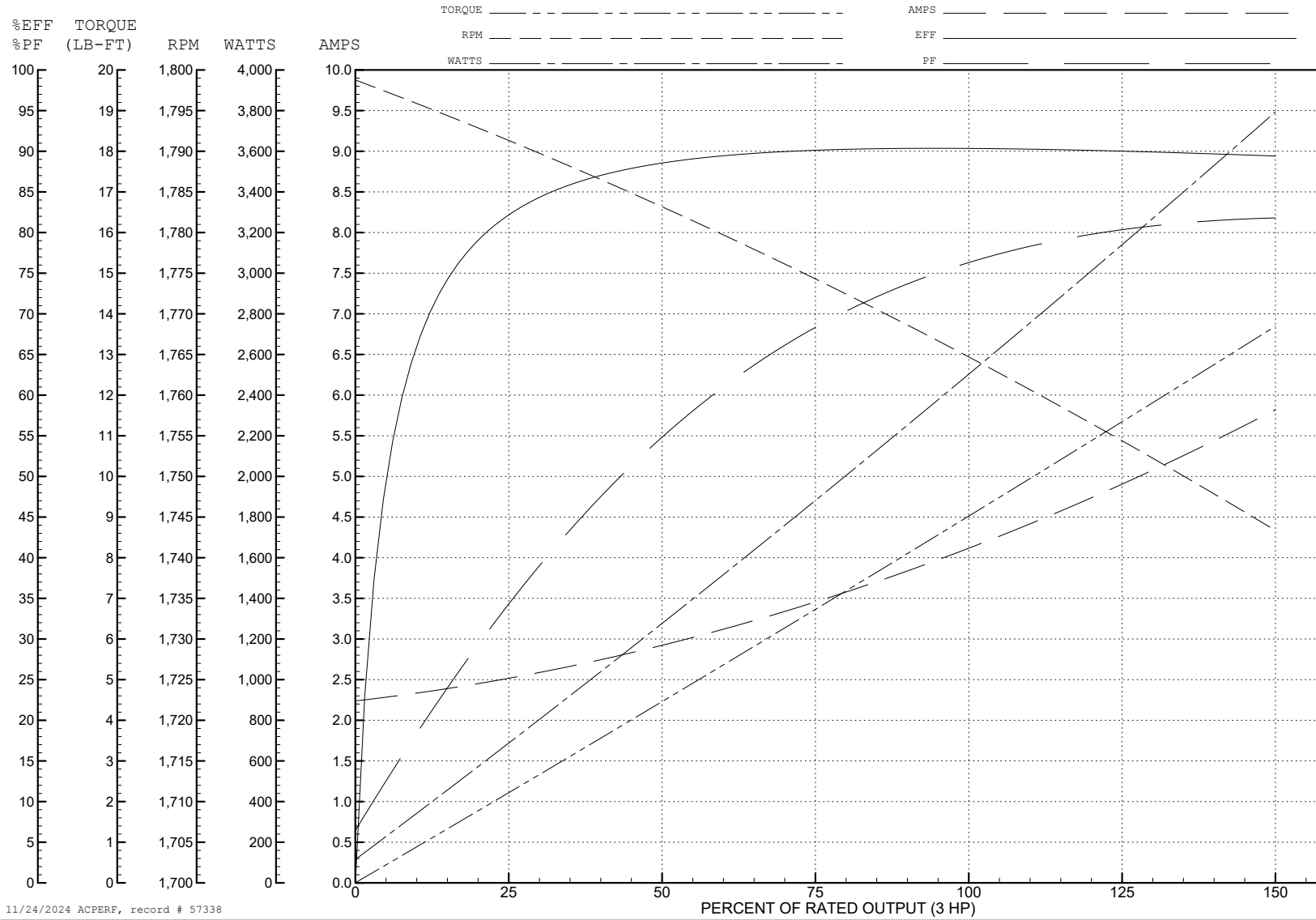
ABB Motors and Mechanical Inc.

WINDING # 36WGR412

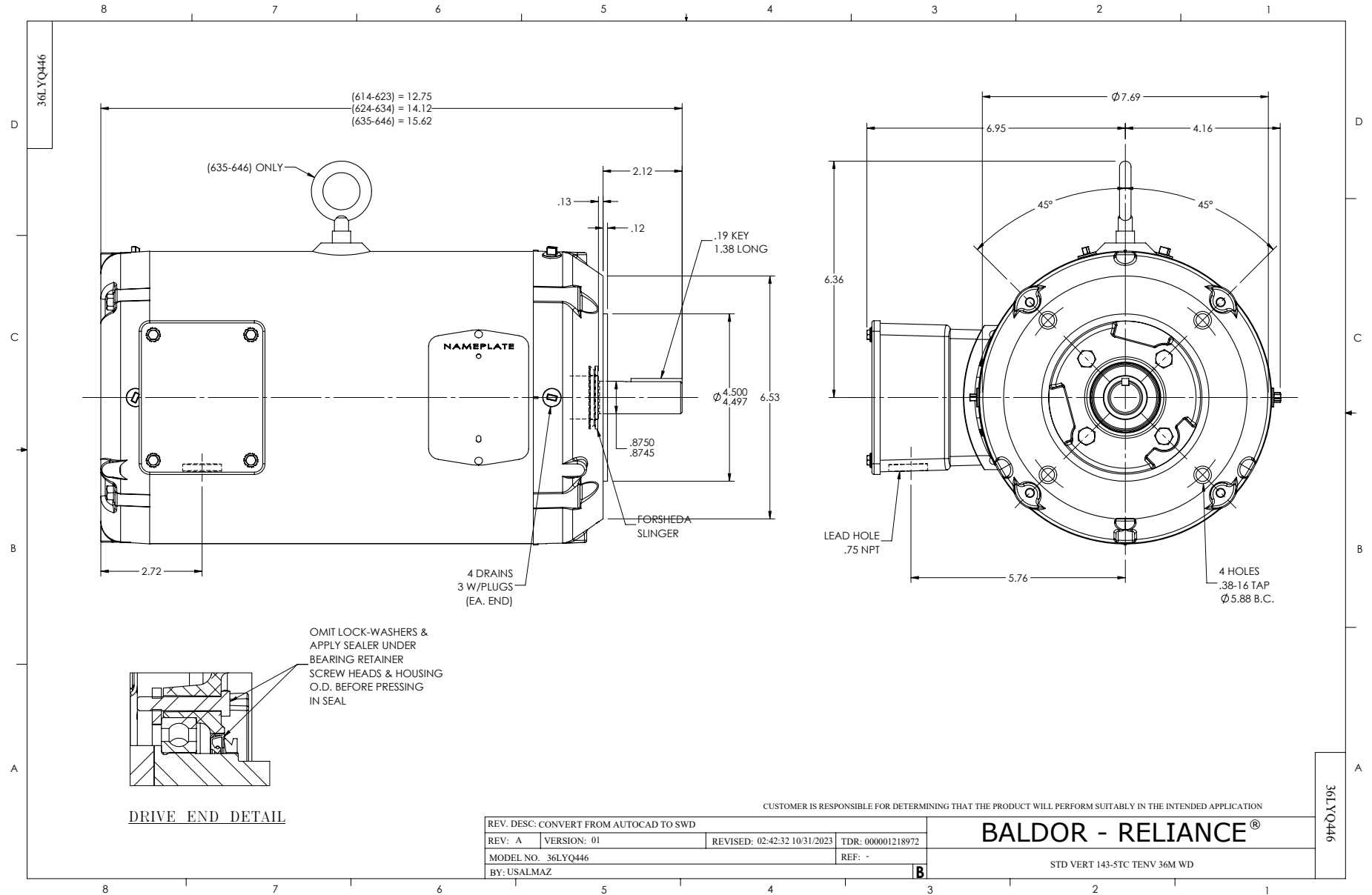
3 HP 3 PH 60 HZ 1760 RPM 460 V 3646M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=37.7 PU=19.8 LR=23.3 LRA=36.3



11/24/2024 ACPERF, record # 57338



CD0005

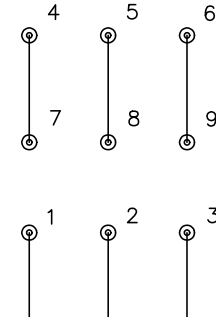


LOW VOLTAGE  
(2Y)



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