

**BALDOR • RELIANCE**

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# Customer information packet

## VEM3615

5HP, 1750RPM, 3PH, 60HZ, 184C, 3642M, TEFC, F1

Class - None

Division - Not Applicable

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## Specifications

Enclosure	TEFC
Frame	184C
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	5.000 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	CURUSEEV NEMA PREMIUM
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	6.700 A @ 460.0 V 13.900 A @ 208.0 V 13.400 A @ 230.0 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
Heater Indicator	No Heater

## Part detail

Revision	H
Type	AC
Mech. spec.	36A013
Base	
Status	PRD/A
Elec. spec.	36WGS268
Layout	36LYA013
Eff. date	05-21-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-27-2015

High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	No 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	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.17 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
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	1750 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**

<b>NP1259L</b>									
<b>CAT.NO.</b>	VEM3615								
<b>SPEC.</b>	36A013S268G2								
<b>HP</b>	5								
<b>VOLTS</b>	230/460								
<b>AMP</b>	13.4/6.7								
<b>RPM</b>	1750								
<b>FRAME</b>	184C		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	J	<b>DES</b>	B	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	89.5	<b>PF</b>	78						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6206		<b>ODE</b>	6205					
<b>ENCL</b>	TEFC	<b>SN</b>							
	SFA 14.8/7.4								

**AC Induction Motor Performance Data**

Record # 35063

Typical performance - not guaranteed values

Winding: 36WGS268-R016		Type: 3642M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	5	Full Load Torque	14.9 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	13.4/6.7	Breakdown Torque	52.2 LB-FT	
R.P.M.	1750	Pull-up Torque	31.5 LB-FT	
Hz	60 Phase	Locked-rotor Torque	34.9 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	49.1 A	
Service Factor (S.F.)	1.15	No-load Current	3.24 A	
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	2.27 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	71°C	
S.F. Amps		Temp. Rise @ S.F. Load	87°C	
		Locked-rotor Power Factor	39.8	
		Rotor inertia	0.391 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	60	72	78	83	83	81
Efficiency	85	89.7	90.6	89.6	88.6	87	89
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	3.55	4.31	5.43	6.65	7.94	9.64	7.42

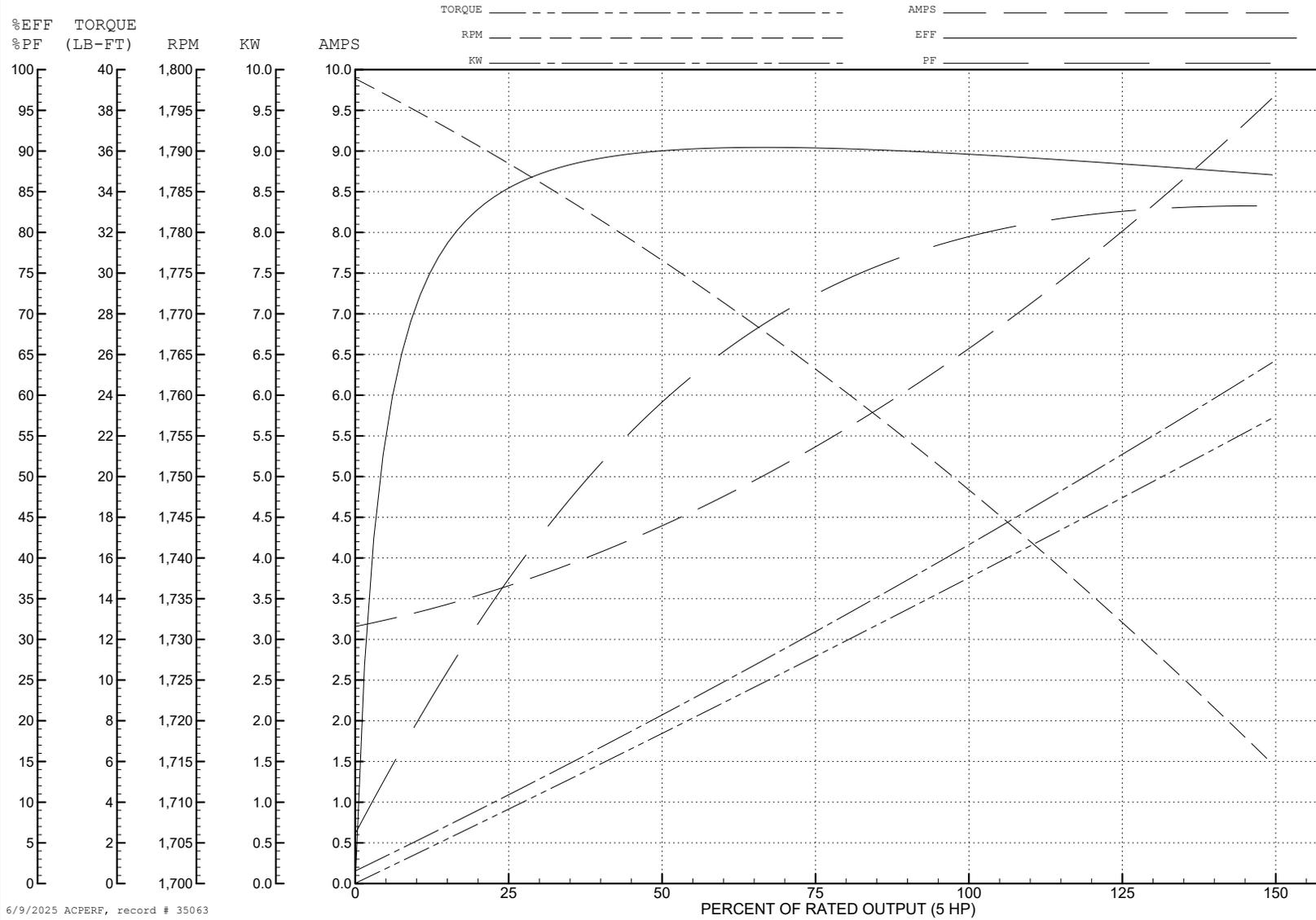
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WINDING # 36WGS268

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3642M

TORQUES (LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=49.1



6/9/2025 ACPERF, record # 35063

## AC Induction Motor Performance Data

Record # 93277

Typical performance - not guaranteed values

Winding: 36WGS268-R016		Type: 3642M		Enclosure: TEFC	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
Rated Output (HP)	5	Full Load Torque	14.9 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	13.4/6.7	Breakdown Torque	52.2 LB-FT		
R.P.M.	1750	Pull-up Torque	31.5 LB-FT		
Hz	60 Phase	Locked-rotor Torque	34.9 LB-FT		
NEMA Design Code	B KVA Code	Starting Current	98.2 A		
Service Factor (S.F.)	1.15	No-load Current	6.48 A		
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	0.567 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	71°C		
S.F. Amps		Temp. Rise @ S.F. Load	86°C		
		Locked-rotor Power Factor	39.8		
		Rotor inertia	0.391 lb-ft <sup>2</sup>		

## Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	78	83	83	81
Efficiency	84.9	89.6	90.5	89.6	88.5	87	88.9
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	7.1	8.62	10.86	13.3	15.88	19.28	14.8

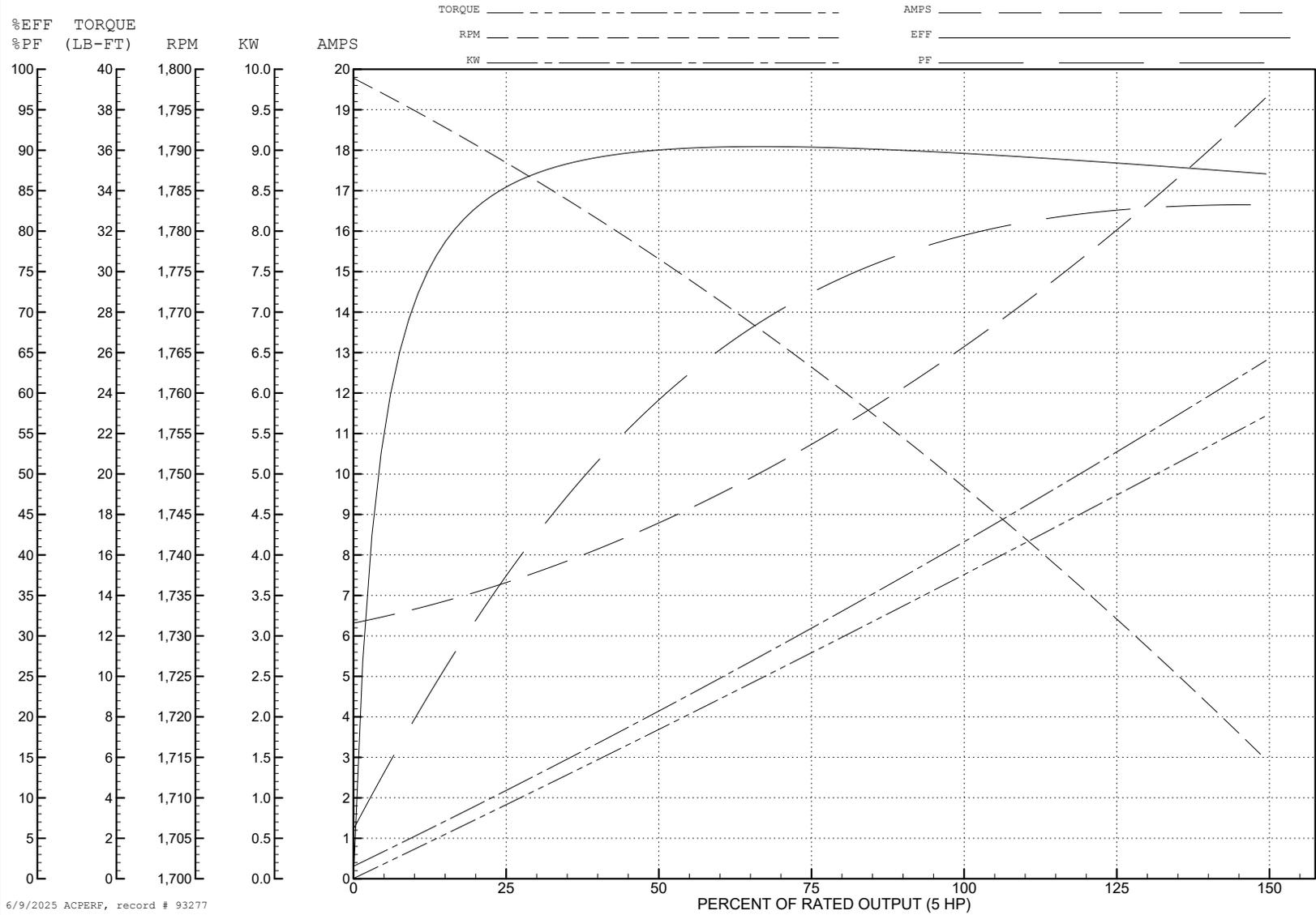
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WINDING # 36WGS268

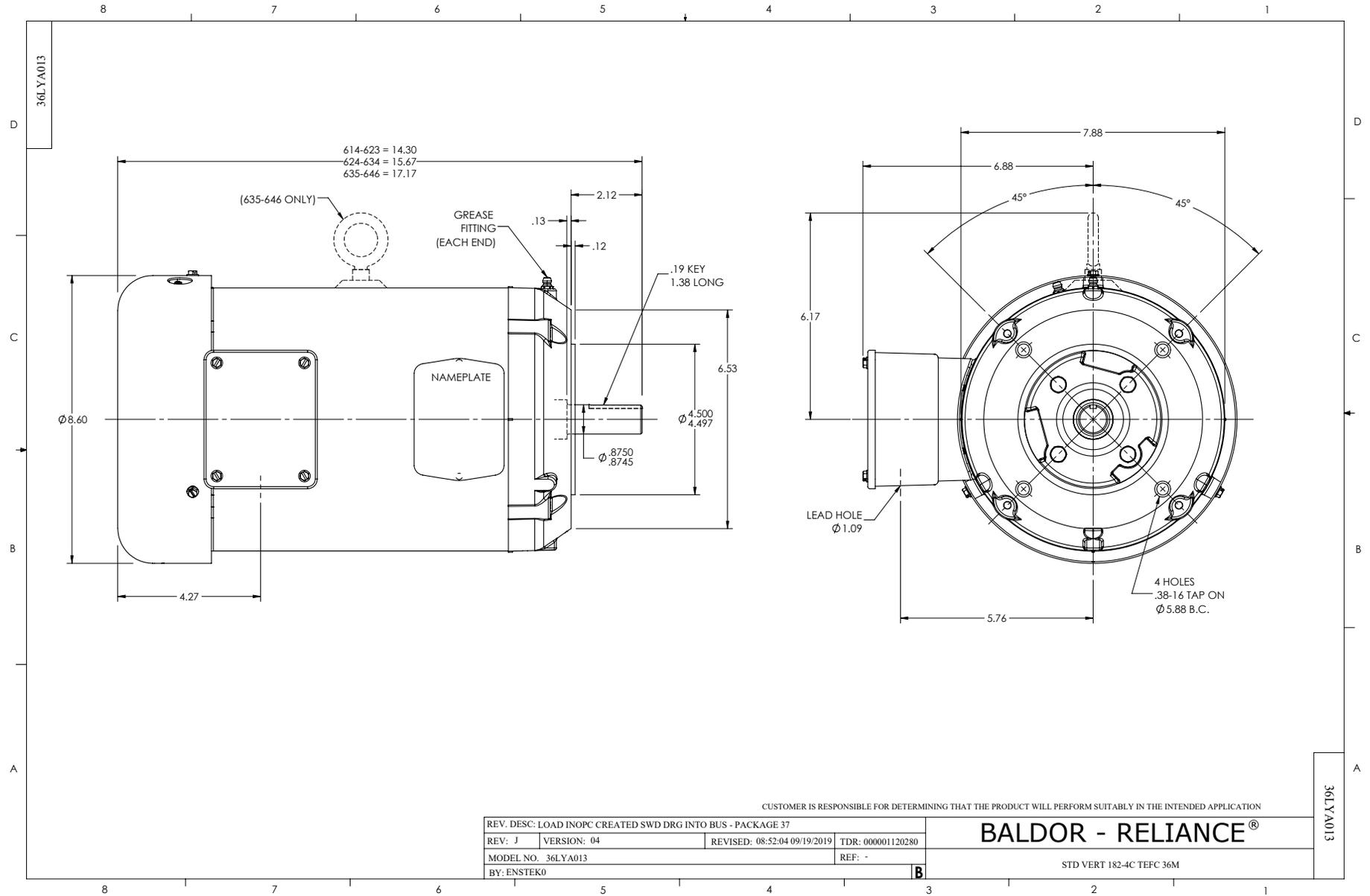
5 HP 3 PH 60 HZ 1750 RPM 230 V 3642M

Typical performance - not guaranteed values.

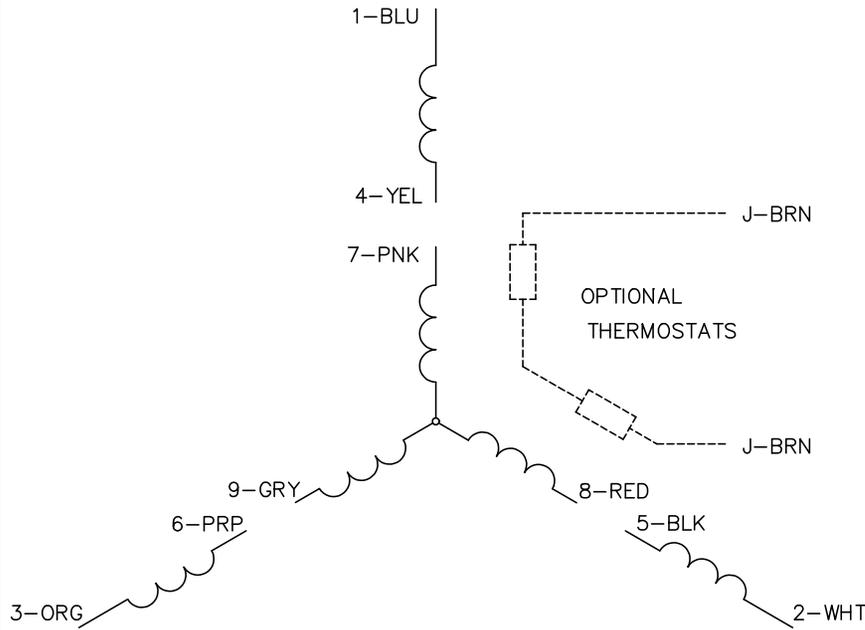
TORQUES (LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=98.2



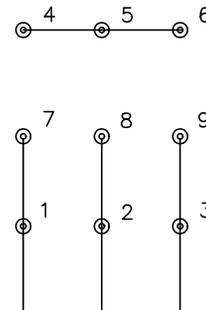
6/9/2025 ACPERF, record # 93277



CD0005

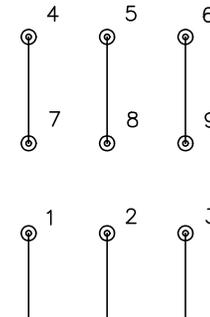


LOW VOLTAGE  
(2Y)



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