

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM3561T**

**3HP,1760RPM,3PH,60HZ,145TC,3632M,TEFC,F1**

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	36WGS266	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	36J231	Layout:	36LYJ231	Poles:	04	Created Date:	04-30-2015
Base:	N	Eff. Date:	05-14-2021	Leads:	9#16		

Specs			
Catalog Number:	VEM3561T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	145TC	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	K
Output @ Frequency:	3.000 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 16 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3632M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	75
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	No Mounting	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	4.200 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	8.400 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	9.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3441LUA</b>									
<b>CAT.NO.</b>	VEM3561T								
<b>SPEC</b>	36J231S266G1								
<b>HP</b>	3								
<b>VOLTS</b>	230/460								
<b>AMPS</b>	8.4/4.2								
<b>RPM</b>	1760								
<b>FRAME</b>	145TC		<b>HZ</b>	60		<b>PH</b>	3		
<b>SF</b>	1.15		<b>CODE</b>	K		<b>DES</b>	B		<b>CLASS</b>
<b>NEMA NOM. EFF</b>	89.5		<b>PF</b>	75					
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A					<b>USABLE AT 208V</b>	9		
<b>ENCL</b>	TEFC		<b>SER</b>						
<b>DE</b>	6206		<b>ODE</b>	6205					
<b>VPWM INVERTER READY</b>									
<b>CT6-60H(10:1)VT3-60H(20:1)</b>									
	50Hz 3HP 190/380V 9.6/4.8A								
									SF1.0

Parts List		
Part Number	Description	Quantity
SA300199	SA 36J231S266G1	1.000 EA
RA287249	RA 36J231S266G1	1.000 EA
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 EA
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
36EP3104A01	FREP MACH ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
36EP3303A03	STD PU ENDPLATE -ENCL- 206 BRG W/OUT T-S	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A24	1/4-20X 1 1/2 HEX HD X	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
36FH4009A102	IEC FH GREASER PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 EA
37GS1001	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
HA3101A25	THRUBOLT 1/4-20 X 11.000 OHIO ROD	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
36PA1001	PKG GRP, PRINT PK1017A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 EA

**AC Induction Motor Performance Data**

Record # 53364

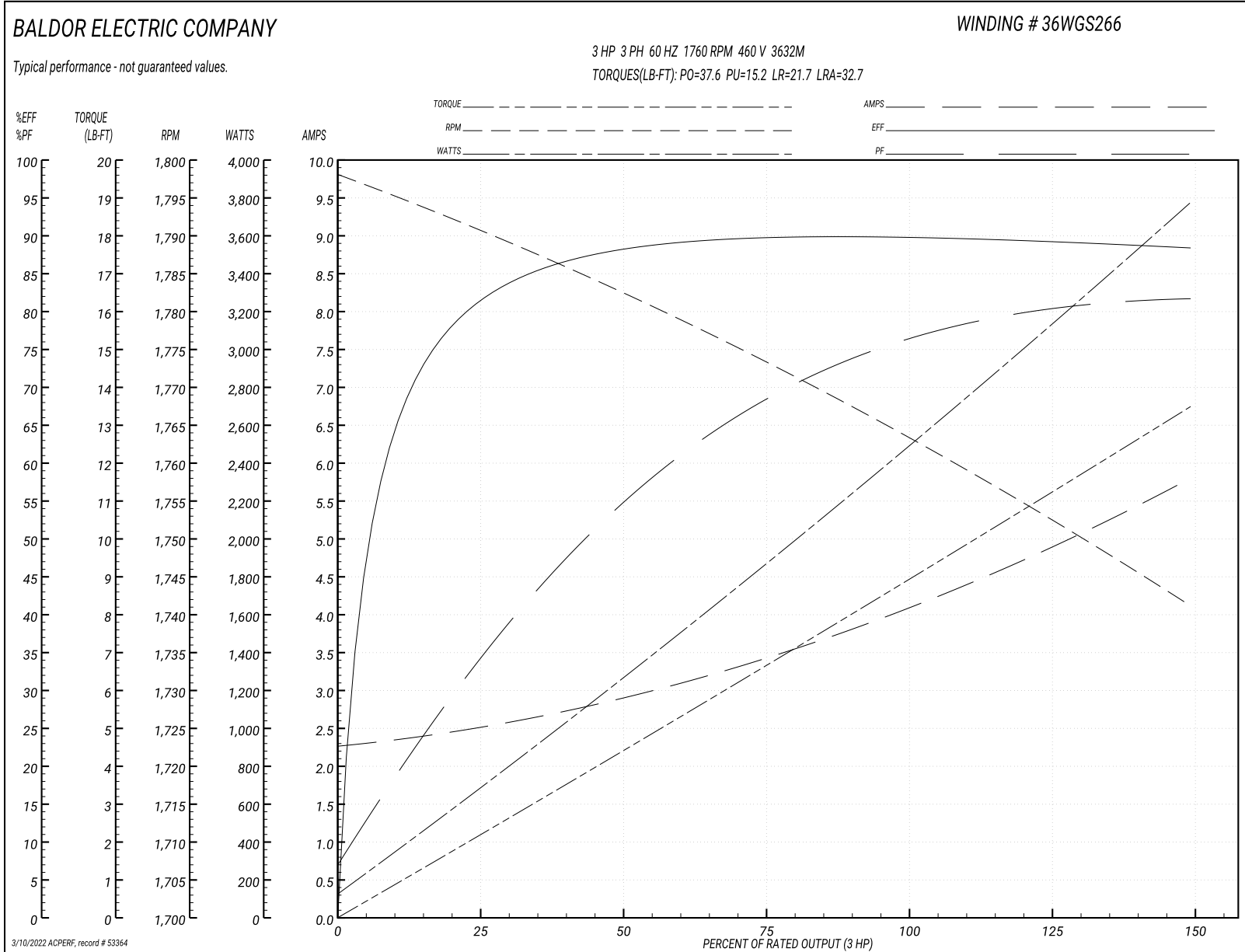
Typical performance - not guaranteed values

<b>Winding: 36WGS266-R006</b>		<b>Type: 3632M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	3	<b>Full Load Torque</b>	8.8 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	8.4/4.2	<b>Breakdown Torque</b>	37.6 LB-FT		
<b>R.P.M.</b>	1760	<b>Pull-up Torque</b>	15.2 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	21.7 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	K	<b>Starting Current</b>	32.7 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	2.3 A		
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	75	<b>Line-line Res. @ 25°C</b>	3.81 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	44°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	52°C	
			<b>Locked-rotor Power Factor</b>	42.2	
			<b>Rotor inertia</b>	0.298 LB-FT <sup>2</sup>	

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

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	35	55	68	75	80	82	77
<b>Efficiency</b>	81.1	87.8	89.6	89.8	89.7	88.2	89.2
<b>Speed</b>	1791	1783	1773	1764	1753	1741	1754
<b>Line amperes</b>	2.47	2.85	3.43	4.09	4.89	5.78	4.63

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 57957

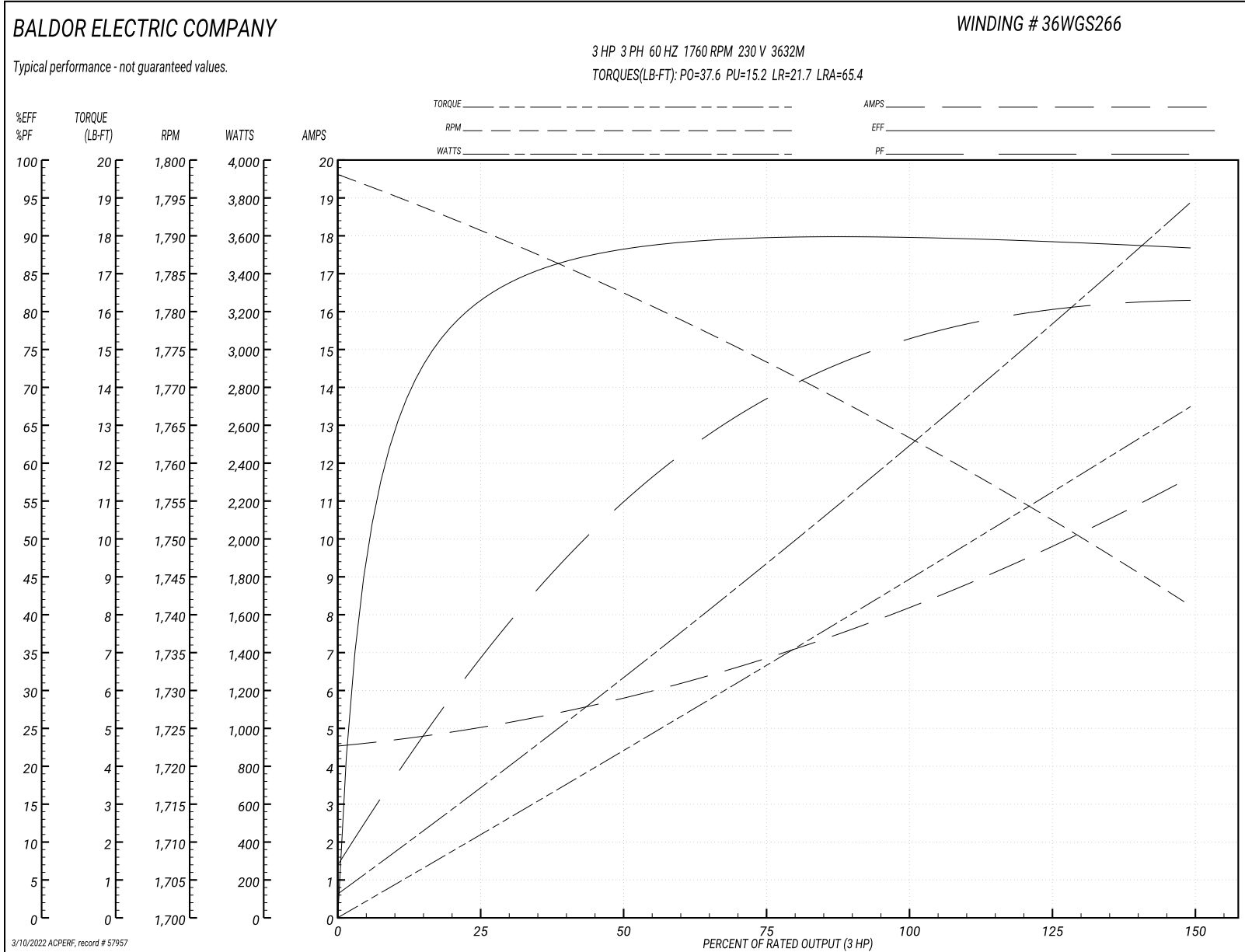
Typical performance - not guaranteed values

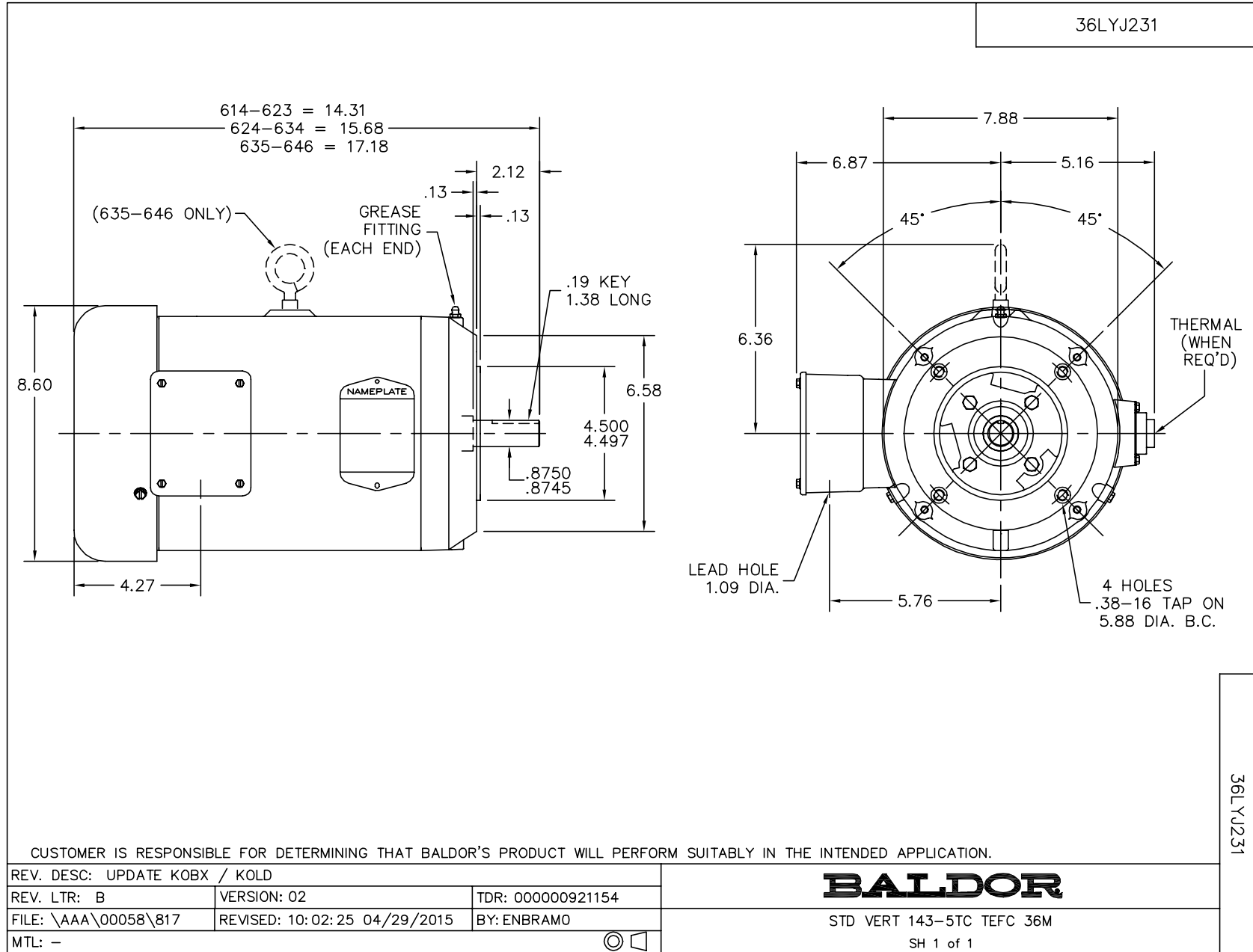
<b>Winding: 36WGS266-R006</b>		<b>Type: 3632M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	3	<b>Full Load Torque</b>	8.8 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	8.4/4.2	<b>Breakdown Torque</b>	37.6 LB-FT		
<b>R.P.M.</b>	1760	<b>Pull-up Torque</b>	15.2 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	21.7 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	K	<b>Starting Current</b>	65.4 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	4.6 A		
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	75	<b>Line-line Res. @ 25°C</b>	0.953 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	44°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	52°C	
			<b>Locked-rotor Power Factor</b>	42.2	
			<b>Rotor inertia</b>	0.298 LB-FT <sup>2</sup>	

**Load Characteristics 230 V, 60 Hz, 3 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	35	55	68	75	80	82	78
<b>Efficiency</b>	81.1	87.8	89.6	89.8	89.7	88.2	89.7
<b>Speed</b>	1791	1783	1773	1764	1753	1741	1757
<b>Line amperes</b>	4.94	5.7	6.86	8.18	9.78	11.6	9.14

Performance Graph at 230V, 60Hz, 3.0HP Typical performance - Not guaranteed values

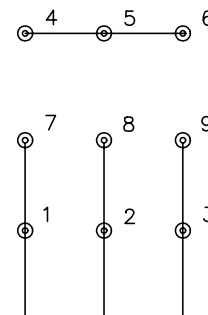




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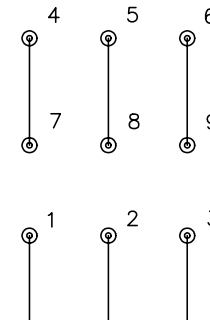


LOW VOLTAGE  
(2Y)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005