

BALDOR® • RELIANCE 

Product Information Packet

VEM3309T

5HP,1160RPM,3PH,60HZ,215TC,3744M,ODP,F1

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGS521	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37K446	Layout:	37LYK446	Poles:	06	Created Date:	04-29-2015
Base:	N	Eff. Date:	09-23-2019	Leads:	9#14		

Specs			
Catalog Number:	VEM3309T	Heater Indicator:	No Heater
Enclosure:	ODP	Insulation Class:	F
Frame:	215TC	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	K
Output @ Frequency:	5.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1200 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 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:	3744M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	71
	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

Current @ Voltage:	14.800 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding
	15.200 A @ 208.0 V	Shaft Rotation:	Reversible
	7.400 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	A	Speed Code:	Single Speed
Drip Cover:	Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP1259LUA										
CAT.NO.	VEM3309T									
SPEC.	37K446S521G1									
HP	5									
VOLTS	230/460									
AMPS	14.8/7.4									
R.P.M.	1160									
FRAME	215TC				HZ	60			PH	3
SER.F.	1.15		CODE	K	DES	A		CLASS	F	
NEMA NOM. EFF.	89.5			P.F.	71					
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V			15.2		
DE	6307				ODE	6206				
ENCL	ODP		SN							
USABLE AT	50HZ 5HP 190/380V 17.2/8.6A									
									SF1.0	

Parts List		
Part Number	Description	Quantity
SA300123	SA 37K446S521G1	1.000 EA
RA287169	RA 37K446S521G1	1.000 EA
HW3200A01	3/8-16X3/4 I-BLT WELDED F/S	1.000 EA
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
37EP3203A01	A00 W/FH MTG	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37EP3400A02	FACE MT EP-OPEN-307 BRG-213-215TC W/BAFF	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
37AD2000A01	BAFFLE PLATE, STAMPED PLATED	1.000 EA
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
37FH4000A05SP	DRIP COVER, W/ PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP1259LUA	ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM	1.000 EA
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 53393

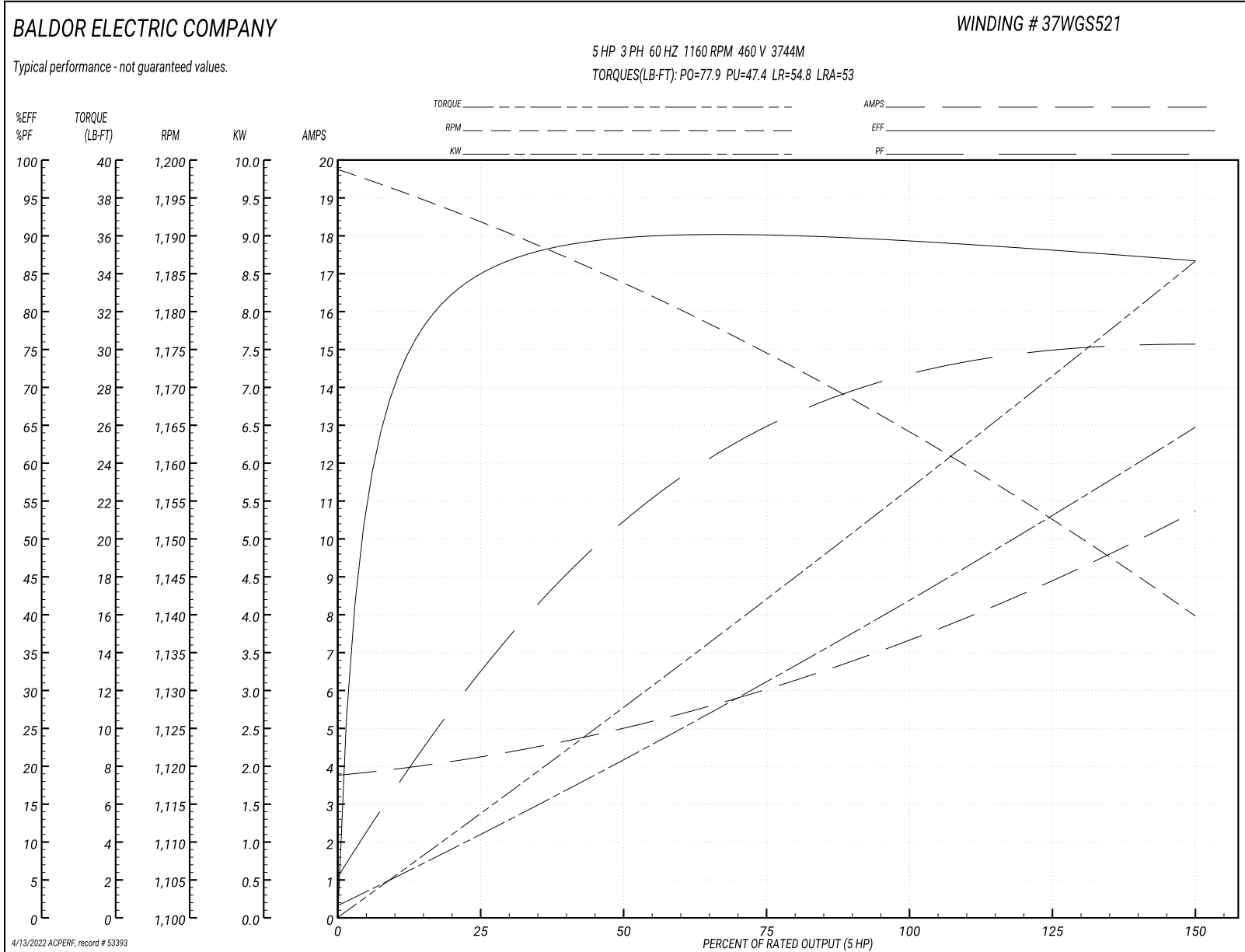
Typical performance - not guaranteed values

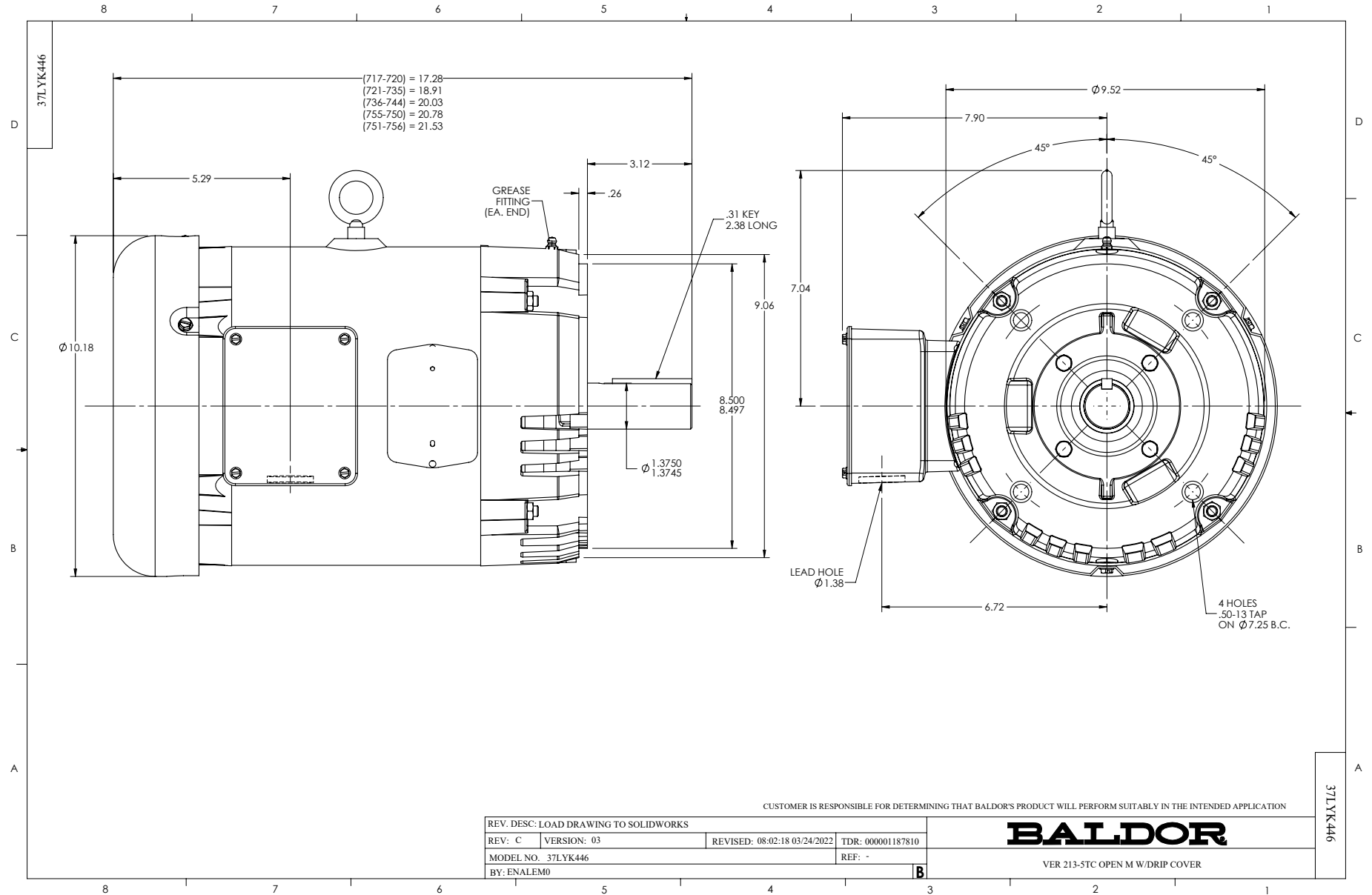
Winding: 37WGS521-R008		Type: 3744M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	5	Full Load Torque	22.5 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	14.8/7.4	Breakdown Torque	77.9 LB-FT		
R.P.M.	1160	Pull-up Torque	47.4 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	54.8 LB-FT	
NEMA Design Code	A KVA Code	K	Starting Current	53 A	
Service Factor (S.F.)	1.15	No-load Current	3.84 A		
NEMA Nom. Eff.	89.5 Power Factor	71	Line-line Res. @ 25°C	1.7514 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	33°C		
S.F. Amps		Temp. Rise @ S.F. Load	41°C		
		Locked-rotor Power Factor	23		
		Rotor inertia	1.09 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	65	71	74	76	73
Efficiency	84.5	89.4	90.1	89.5	88.3	86.5	88.8
Speed	1191.9	1183.8	1173.7	1164.6	1153.5	1139.2	1158
Line amperes	4.14	4.95	6.08	7.36	8.92	10.7	8.3

Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values





CD0005

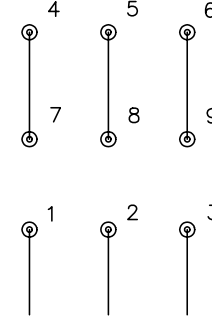


LOW VOLTAGE
(2Y)



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.

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

3PH, DV, 9 LEADS

CD0005