

ABB BALDOR RELIANCE III

Customer information packet

VEM3309T

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

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	215TC
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	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	15.200 A @ 208.0 V 7.400 A @ 460.0 V 14.800 A @ 230.0 V
Design Code	A
Drip Cover	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	P
Type	AC
Mech. spec.	37K446
Base	
Status	PRD/A
Elec. spec.	37WGS521
Layout	37LYK446
Eff. date	05-11-2026
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	04-29-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	7.4 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3744M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	20.03 IN
Power Factor	71
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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1160 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

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								
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 EYEBOLT 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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1259LUA	ALUM SUPER-E UL CC NEMA PREMIUM "USABLE	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	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-FT2			

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

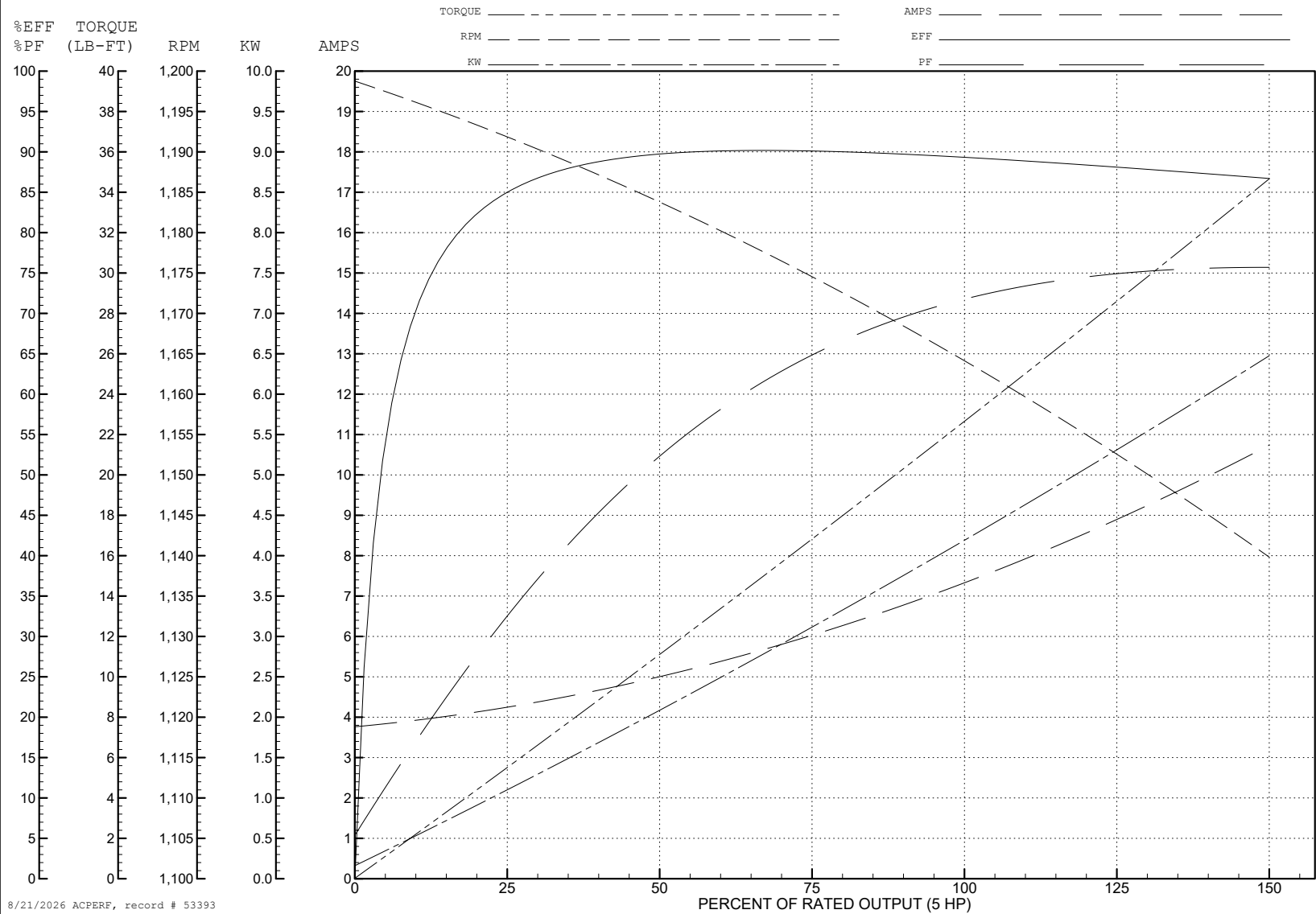
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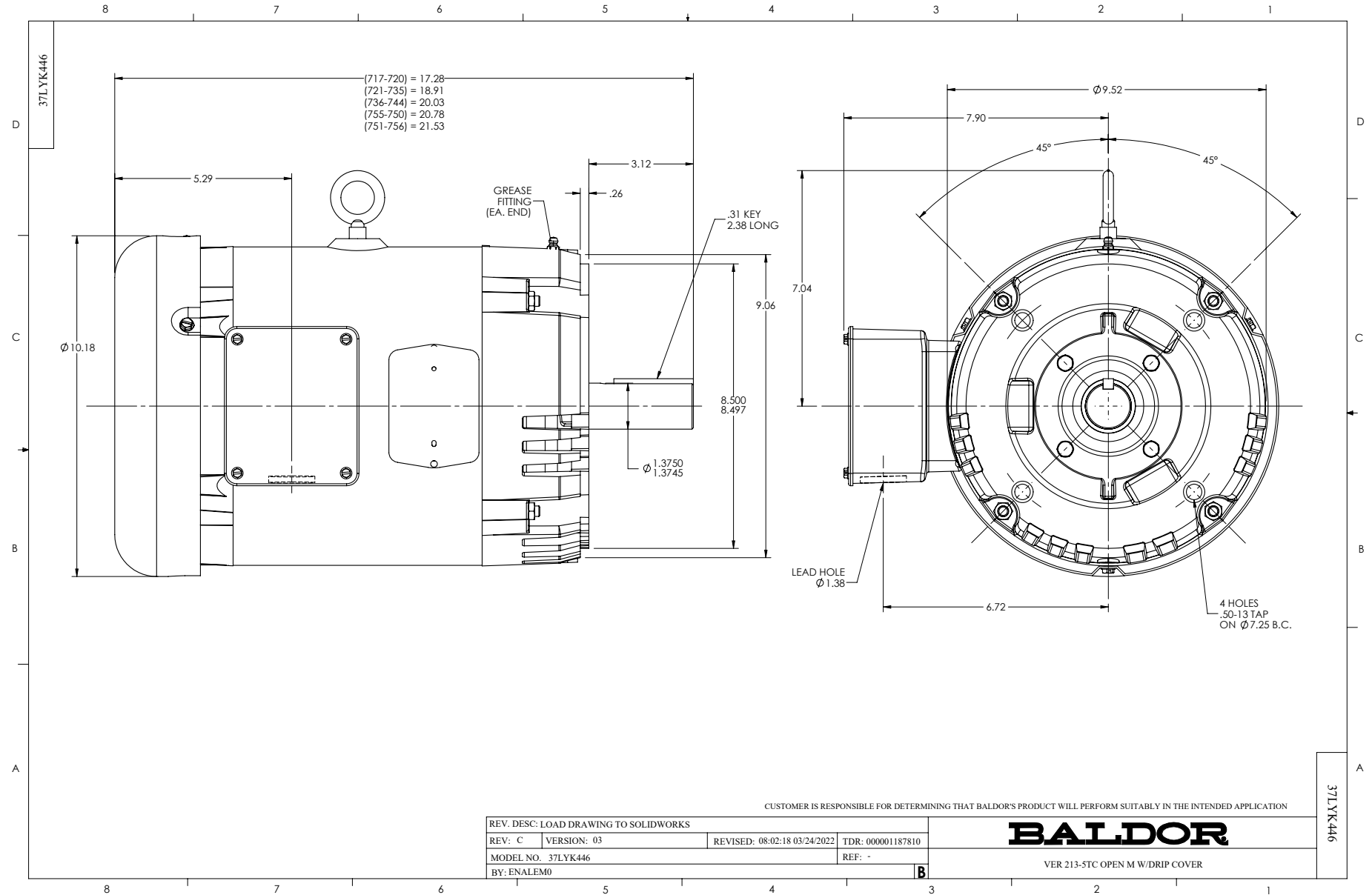
WINDING # 37WGS521

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1160 RPM 460 V 3744M

TORQUES (LB-FT): PO=77.9 PU=47.4 LR=54.8 LRA=53







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