



Customer information packet

EM3309T

5HP, 1160RPM, 3PH, 60HZ, 215T, 3744M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	215T
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
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	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	W
Type	AC
Mech. spec.	37F614
Base	
Status	PRD/A
Elec. spec.	37WGS521
Layout	37LYF614
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	04-11-2008

Front Face Code	Standard
Front Shaft Indicator	None
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	No 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	17.45 IN
Power Factor	71
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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.	EM3309T								
SPEC.	37F614S521G1								
HP	5								
VOLTS	230/460								
AMPS	14.8/7.4								
R.P.M.	1160								
FRAME	215T		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	OPSB	SN							
USABLE AT	50HZ 5HP 190/380V 17.2/8.6A								SF1.0

Accessories

Part number	Description	Multiplier
37-1404	C FACE KIT	A8

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	Locked-rotor Torque	54.8 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	53 A	
Service Factor (S.F.)	1.15	No-load Current	3.84 A	
NEMA Nom. Eff.	89.5 Power Factor	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

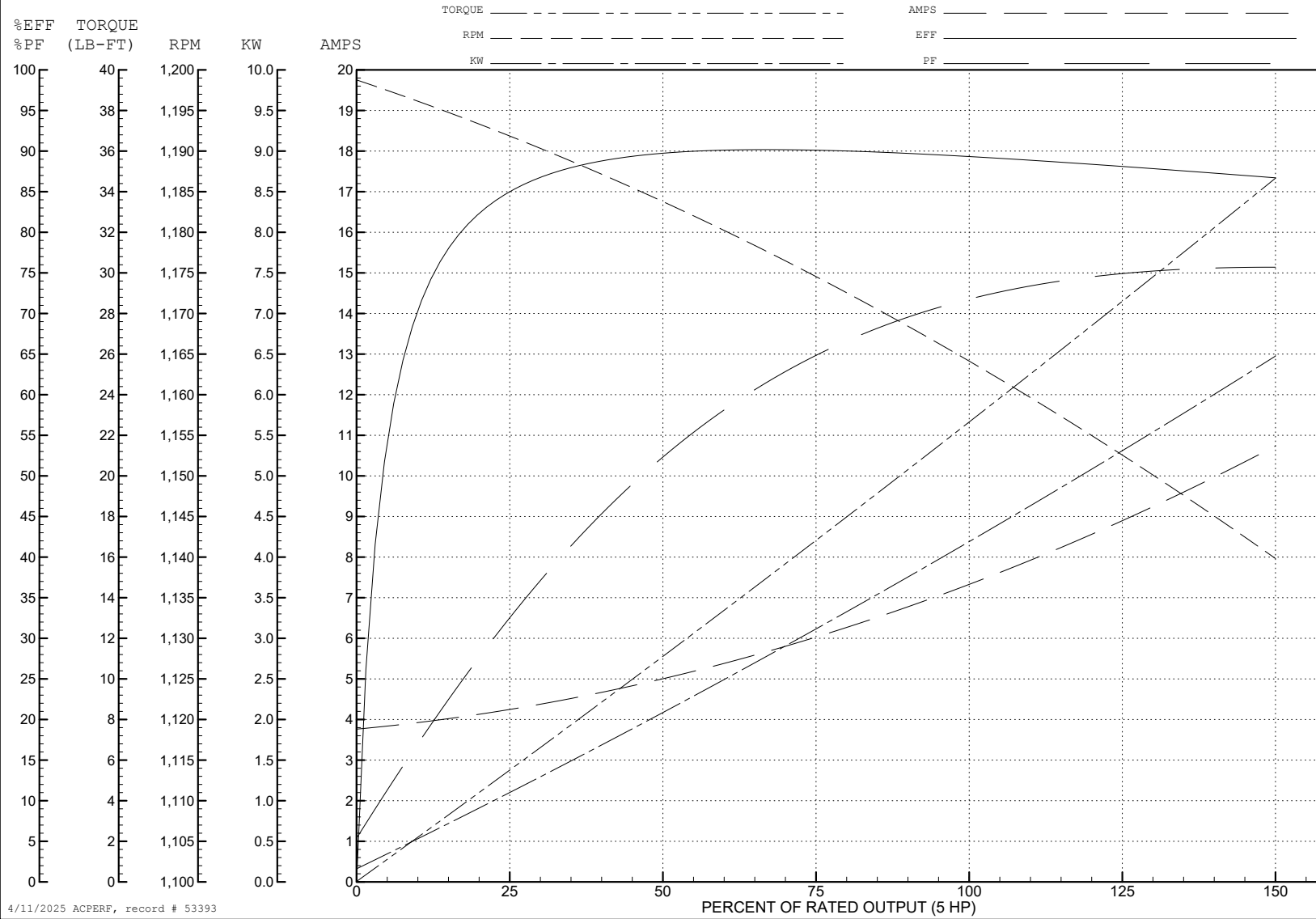
ABB Motors and Mechanical Inc.

WINDING # 37WGS521

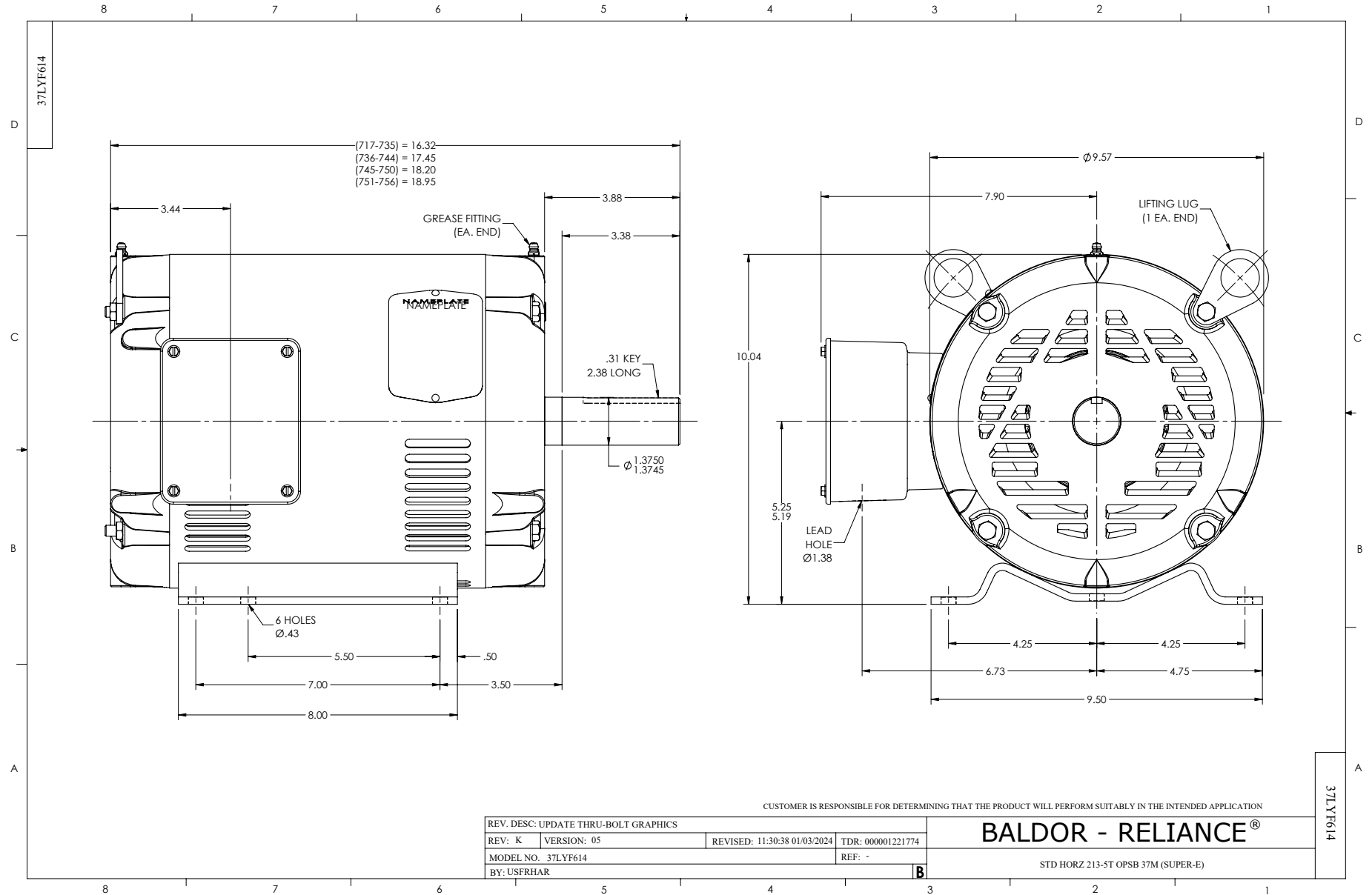
Typical performance - not guaranteed values.

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

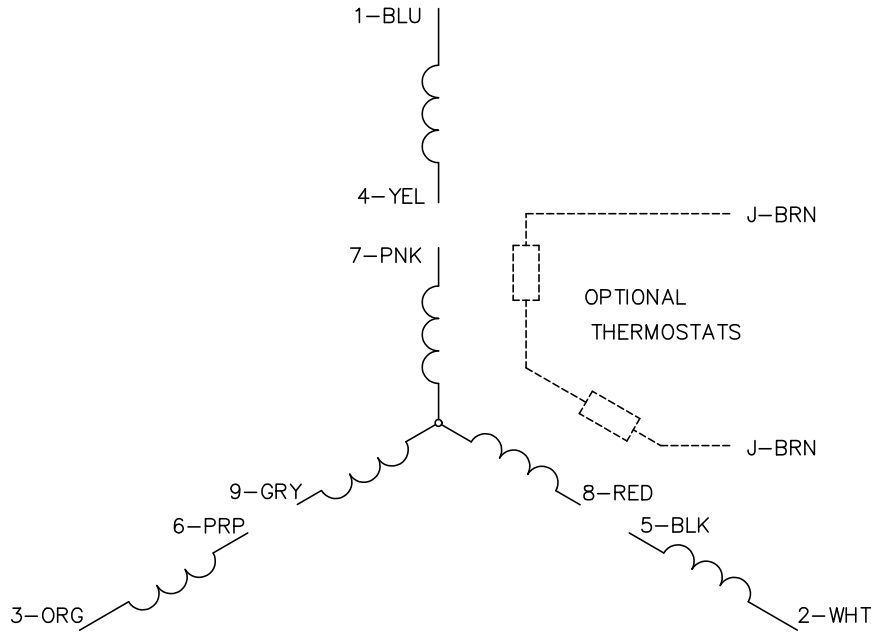
TORQUES (LB-FT): PO=77.9 PU=47.4 LR=54.8 LRA=53



4/11/2025 ACPERF, record # 53393



CD0005

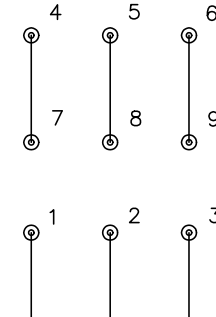


LOW VOLTAGE
(2Y)



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