

BALDOR® • RELIANCE 

Product Information Packet

M1509T

7.5/3.8HP, 1740/860RPM, 3PH, 60HZ, 215T, 3754

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGS296	CD Diagram:	CD0011	Mfg Plant:	
Mech. Spec:	37A001	Layout:	37LYA001	Poles:	04/08	Created Date:	02-06-2007
Base:	RG	Eff. Date:	08-27-2019	Leads:	6#14		

Specs			
Catalog Number:	M1509T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	215T	KVA Code:	K
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
	3.800 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 14 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3754M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	18.900 A @ 230.0 V	Shaft Rotation:	Reversible

Design Code:	B	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	2S-1W-CT
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP1256L										
CAT.NO.	M1509T									
SPEC.	37A001S296									
HP	7.5/3.8									
VOLTS	230									
AMP	18.9/16.6									
RPM	1740/860									
FRAME	215T				HZ	60			PH	3
SER.F.	1.15		CODE	K	DES	B		CLASS	F	
NEMA-NOM-EFF			PF							
RATING	40C AMB-CONT									
CC									USABLE AT 208V	
DE	6307				ODE	6206				
ENCL	TEFC		SN							

Parts List		
Part Number	Description	Quantity
SA153309	SA 37A001S296	1.000 EA
RA142024	RA 37A001S296	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
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	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
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37PE3100A01	PUEP ASSEMBLY - ROUTING PUPROSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
07FH4007SP	PRIMED	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
37GS1008	37 GS FOR CB LID - LEXIDE	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
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB

Parts List (continued)		
Part Number	Description	Quantity
37FN3002A01SP	EXFN, PLASTIC, 9.00 OD, 1.155 ID	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.028 GA
HA3104A25	THRUBOLT .31-18 X 14.75	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0032	CONNECTION LABEL	1.000 EA
NP1256L	ALUM UL CSA CC INDUSTRIAL MOTOR A60	1.000 EA
37PA1039	PALLET PACK GRP, PRINT PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

Accessories		
Part Number	Description	Multiplier
37-3301	C FACE KIT	P1

AC Induction Motor Performance Data

Record # 23678 - Typical performance - not guaranteed values

Winding: 37WGS296-R001	Type: 3754M	Enclosure: TEFC
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Nameplate Data				230 V, 60 Hz: High Speed Connection	
Rated Output (HP)	7.5/3.8			Full Load Torque	22.4 LB-FT
Volts	230			Start Configuration	direct on line
Full Load Amps	18.9/16.6			Breakdown Torque	114 LB-FT
R.P.M.	1740/860			Pull-up Torque	29.3 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	67 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	163 A
Service Factor (S.F.)	1.15			No-load Current	8.18 A
NEMA Nom. Eff.	0	Power Factor	0	Line-line Res. @ 25°C	0.489 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	75°C
S.F. Amps				Temp. Rise @ S.F. Load	94°C

Load Characteristics 230 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	69	80	85	88	89	87
Efficiency	83.9	88.4	88.6	87.4	85.7	83.5	86.4
Speed	1788	1775	1761	1746	1730	1710	1736
Line amperes	9.11	11.6	15	18.9	23.3	28.3	21.5

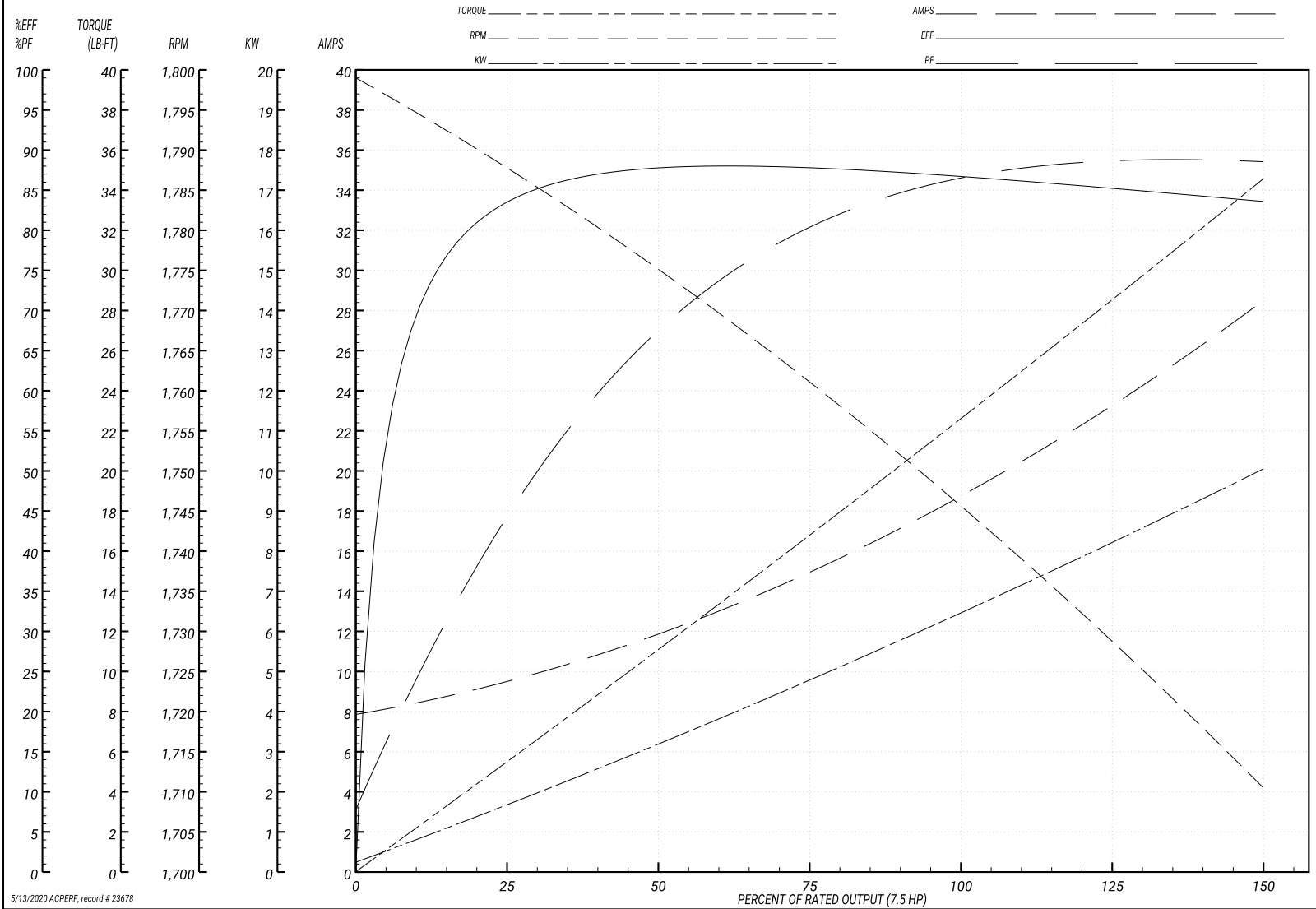
Performance Graph at 230V, 60Hz, 7.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 37WGS296

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1746 RPM 230 V 3754M
 TORQUES(LB-FT): PO=114 PU=29.3 LR=67 LRA=163



5/13/2020 ACPERF, record # 23678

AC Induction Motor Performance Data

Record # 23679 - Typical performance - not guaranteed values

Winding: 37WGS296-R001	Type: 3754M	Enclosure: TEFC
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Nameplate Data				230 V, 60 Hz: Low Speed Connection	
Rated Output (HP)	7.5/3.8			Full Load Torque	23.1 LB-FT
Volts	230			Start Configuration	direct on line
Full Load Amps	18.9/16.6			Breakdown Torque	95.2 LB-FT
R.P.M.	1740/860			Pull-up Torque	38 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	58.3 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	85.8 A
Service Factor (S.F.)	1.15			No-load Current	13.3 A
NEMA Nom. Eff.	0	Power Factor	0	Line-line Res. @ 25°C	0.645 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	84°C
S.F. Amps				Temp. Rise @ S.F. Load	98°C

Load Characteristics 230 V, 60 Hz, 3.8 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	20	33	44	52	59	64	56
Efficiency	65.8	77.3	80.9	81.8	81.3	80.1	81.5
Speed	892	884	876	867	857	845	861
Line amperes	13.4	14.1	15.1	16.6	18.4	20.7	17.7

Performance Graph at 230V, 60Hz, 3.8HP Typical performance - Not guaranteed values

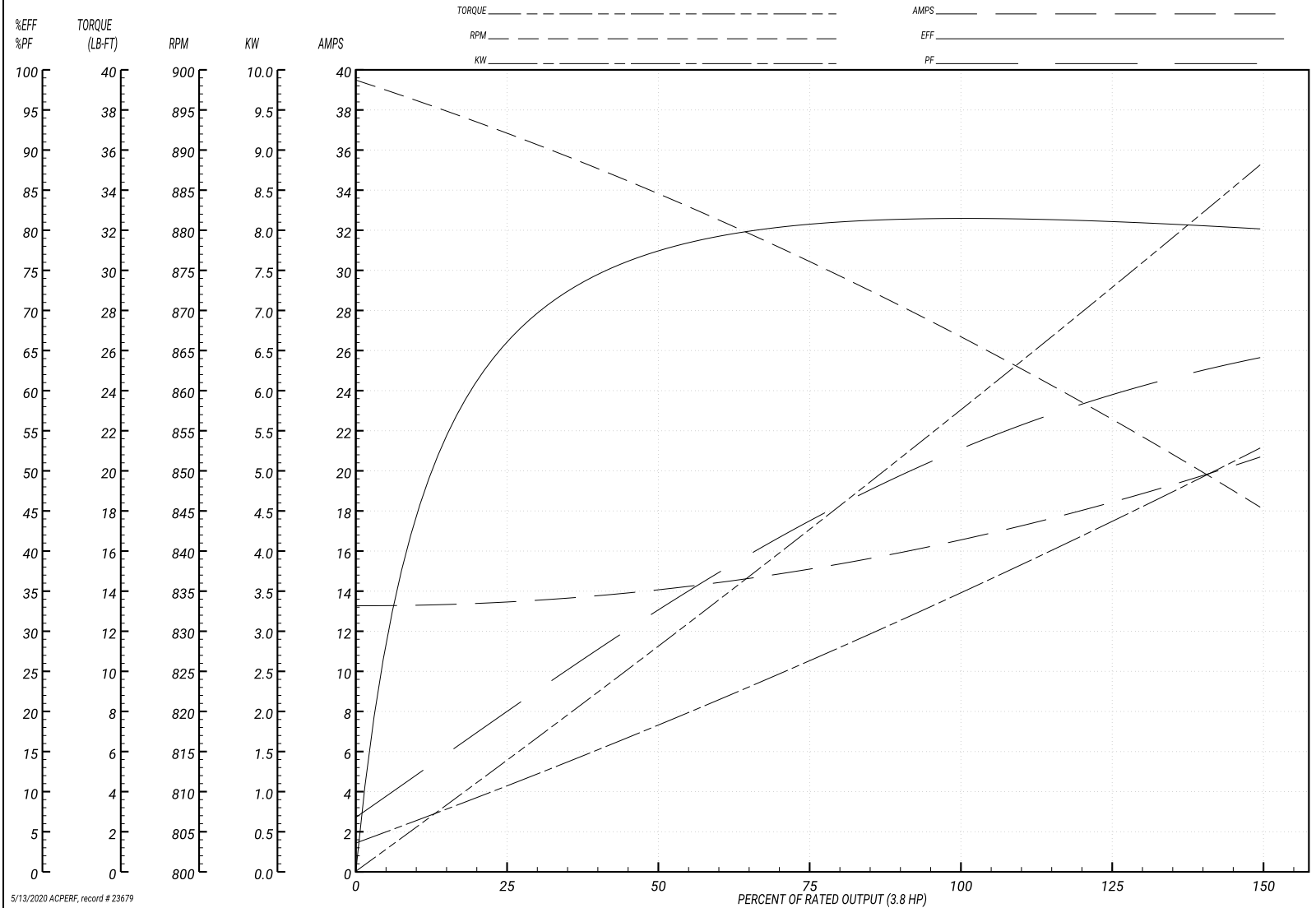
ABB Motors and Mechanical Inc.

WINDING # 37WGS296

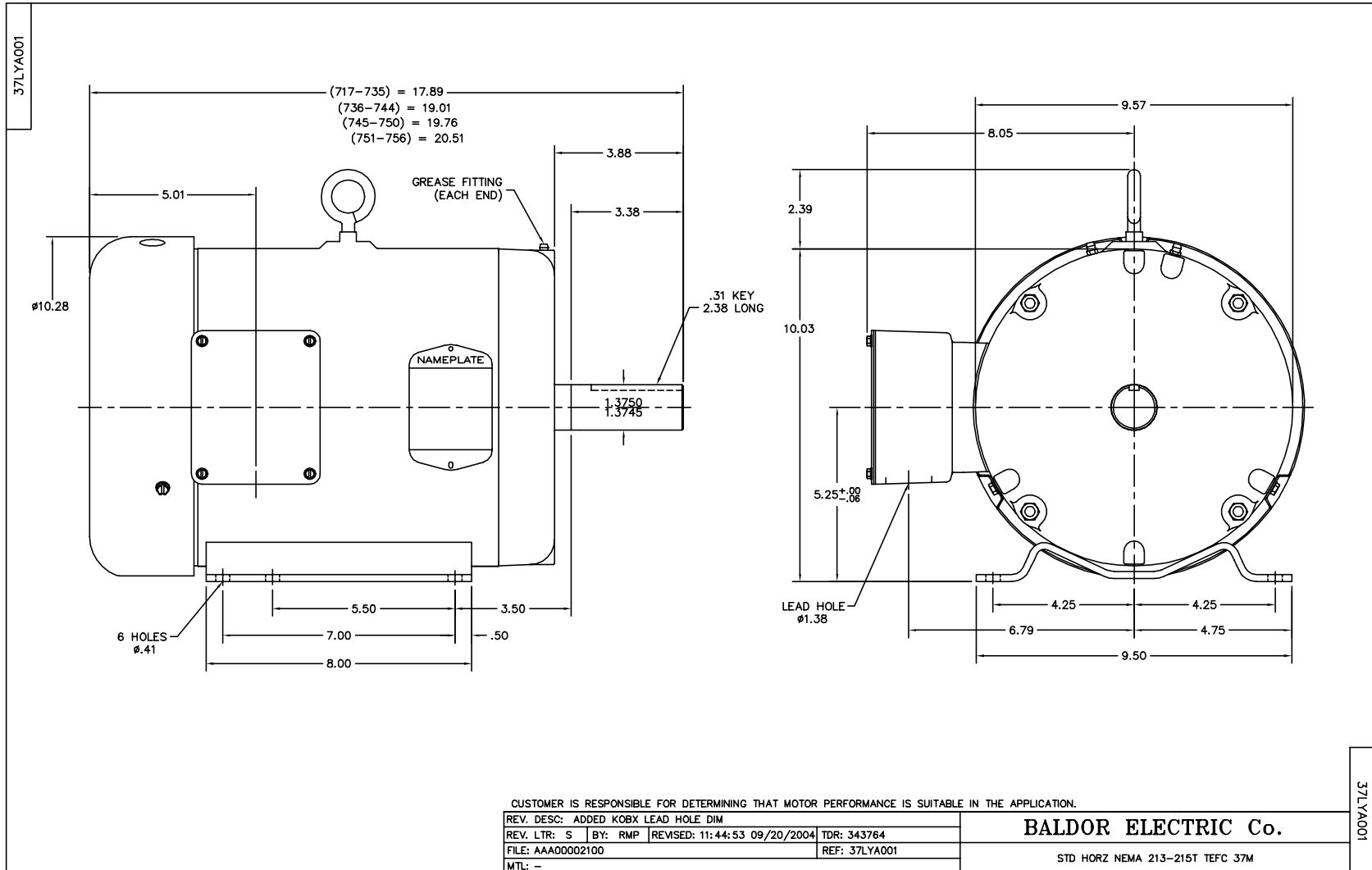
Typical performance - not guaranteed values.

3.8 HP 3 PH 60 HZ 867 RPM 230 V 3754M

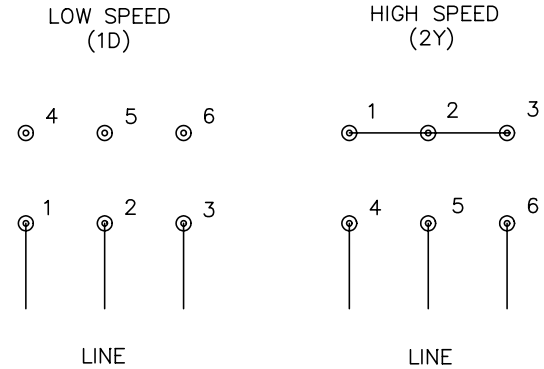
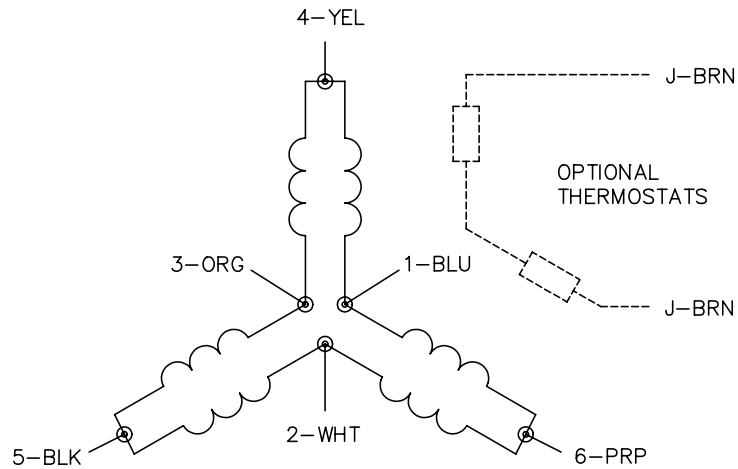
TORQUES(LB-FT): PO=95.2 PU=38 LR=58.3 LRA=85.8



5/13/2020 ACPERF, record # 23679



CD0011



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: F	BY: JLP	REVISED: 01/21/99 5:04	TDR: 0171435
110000		FILE: DWG\142.wg	MDL: -
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BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 1-WINDING CONSTANT TORQUE

CD0011