

BALDOR® • RELIANCE 

Product Information Packet

EM3709T-BG

7.5HP,3520RPM,3PH,60HZ,213T,3728M,TEFC,F

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR224	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37N339	Layout:	37LYN339	Poles:	02	Created Date:	10-04-2013
Base:	RG	Eff. Date:	09-06-2019	Leads:	9#14		

Specs			
Catalog Number:	EM3709T-BG	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	H
Frame:	213T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	J
Output @ Frequency:	7.500 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 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:	3728M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	84
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	18.000 A @ 230.0 V	Shaft Ground Indicator:	Shaft Grounding
	19.400 A @ 208.0 V	Shaft Rotation:	Reversible
	9.000 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	A	Speed Code:	Single Speed
Drip Cover:	No 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 NP3441L										
CAT.NO.	EM3709T-BG									
SPEC.	37N339R224G1									
HP	7.5									
VOLTS	230/460									
AMP	18/9									
RPM	3520									
FRAME	213T					HZ	60		PH	3
SER.F.	1.15			CODE	J	DES	A		CL	H
NEMA-NOM-EFF	89.5			PF	84					
RATING	40C AMB-CONT									
CC	010A					USABLE AT 208V	19.4			
DE	6307				ODE	6206				
ENCL	TEFC			SN						
VPWM INVERTER READY CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA270529	SA 37N339R224G1	1.000 EA
RA257163	RA 37N339R224G1	1.000 EA
36FN3000B02	EXFN, PLASTIC, 6.00 OD, 1.175 ID	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
37EP3100B06	PU EP 307 LOCK BRG,GRSR,DRAIN,2 RET HLS	1.000 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
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

Parts List (continued)		
Part Number	Description	Quantity
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A14	THRUBOLT- 5/16-18 X12.125(OHIO)	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	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

AC Induction Motor Performance Data

Record # 53379 - Typical performance - not guaranteed values

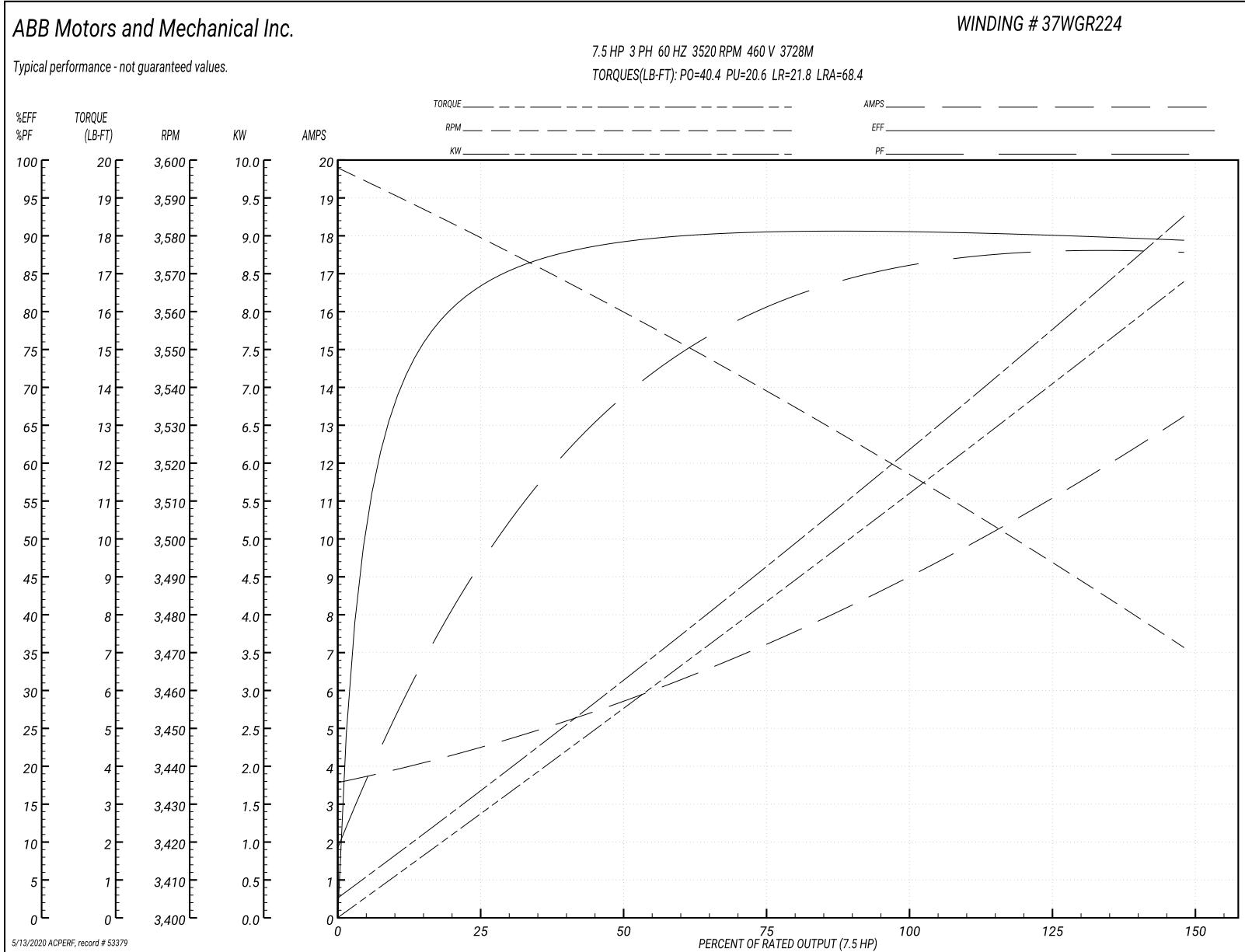
Winding: 37WGR224-R034	Type: 3728M	Enclosure: TEFC
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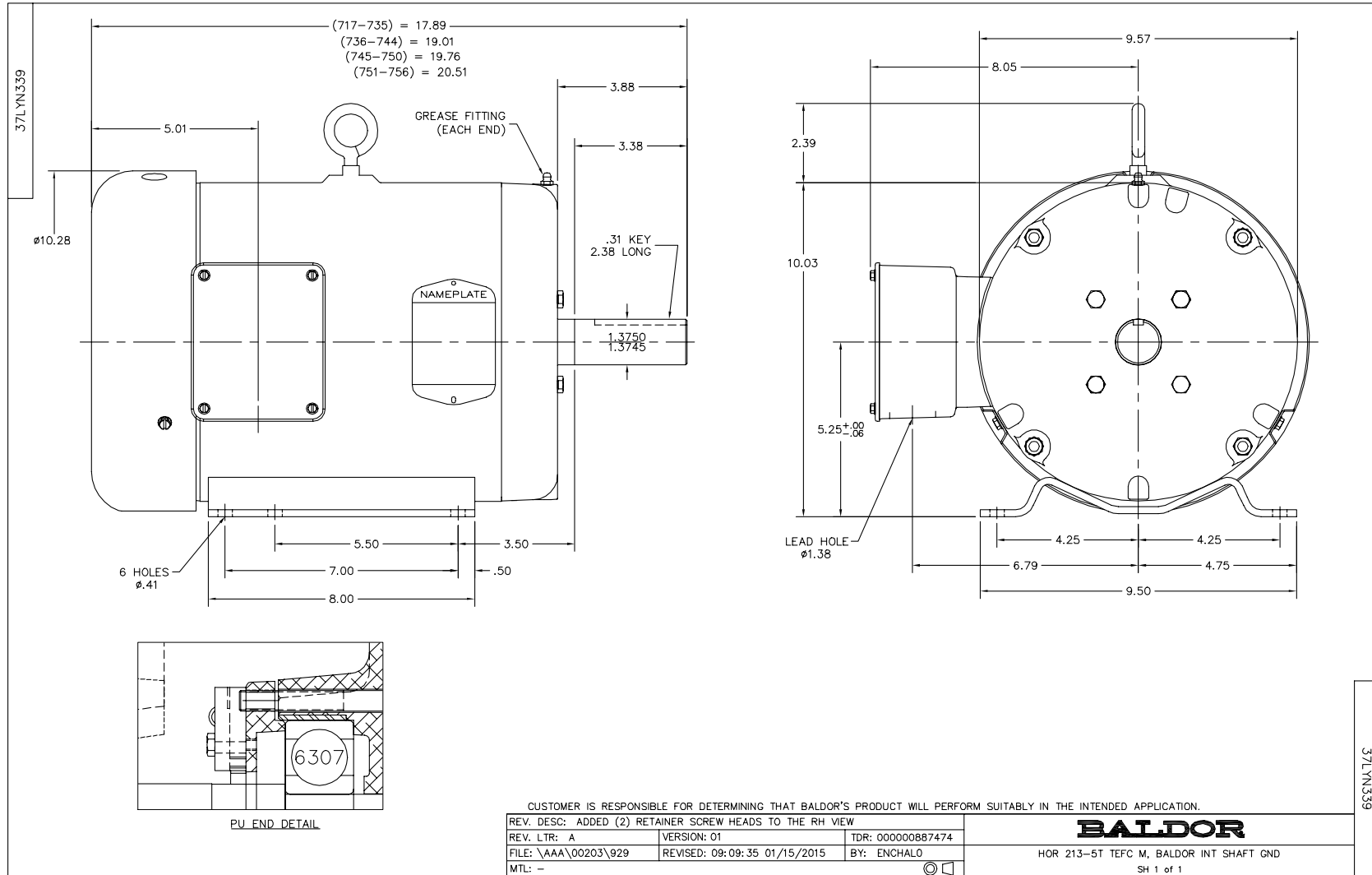
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5			Full Load Torque	10.9 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	18/9			Breakdown Torque	40.4 LB-FT
R.P.M.	3520			Pull-up Torque	20.6 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	21.8 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	68.4 A
Service Factor (S.F.)	1.15			No-load Current	3.73 A
NEMA Nom. Eff.	89.5	Power Factor	84	Line-line Res. @ 25°C	1.1531 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	45°C
S.F. Amps				Temp. Rise @ S.F. Load	54°C
				Locked-rotor Power Factor	33
				Rotor inertia	0.255 LB-FT ²

Load Characteristics 460 V, 60 Hz, 7.5 HP

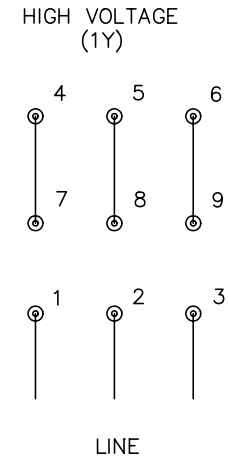
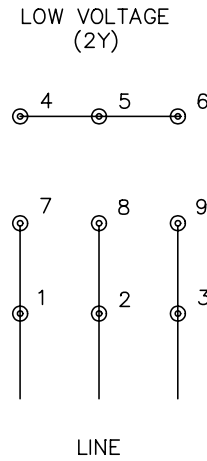
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	69	79	84	87	89	86
Efficiency	81.5	88.8	90.5	90.6	90.1	89.2	90.3
Speed	3580.5	3562.7	3541.6	3520.3	3496.3	3470.9	3506
Line amperes	4.22	5.36	7.03	8.94	11	13.1	10.2

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values





CD0005



- 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