

BALDOR® • RELIANCE 

Product Information Packet

EM3709T-5

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

Part Detail							
Revision:	G	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR289	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	37H244	Layout:	37LYH244	Poles:	02	Created Date:	05-10-2012
Base:	RG	Eff. Date:	11-02-2015	Leads:	3#14		

Specs			
Catalog Number:	EM3709T-5	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	H
Frame:	213T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	7.500 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 14 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3728M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	86
	CSA EEV	Product Family:	General Purpose
	UR	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:	7.000 A @ 575.0 V	Shaft Rotation:	Reversible

Design Code:	B	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
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
Insulation Class:	F	Winding Thermal 2:	None

Nameplate NP3441L										
CAT.NO.	EM3709T-5									
SPEC.	37H244R289G1									
HP	7.5									
VOLTS	575									
AMP	7									
RPM	3520									
FRAME	213T				HZ	60			PH	3
SER.F.	1.15		CODE	H	DES	B		CL	F	
NEMA-NOM-EFF	89.5		PF	86						
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V					
DE	6307				ODE	6206				
ENCL	TEFC		SN							
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA244920	SA 37H244R289G1	1.000 EA
RA231807	RA 37H244R289G1	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
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
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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB

Parts List (continued)		
Part Number	Description	Quantity
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A14	THRUBOLT- 5/16-18 X12.125(OHIO)	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
36PA1001	PKG GRP, PRINT PK1017A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 38326 - Typical performance - not guaranteed values

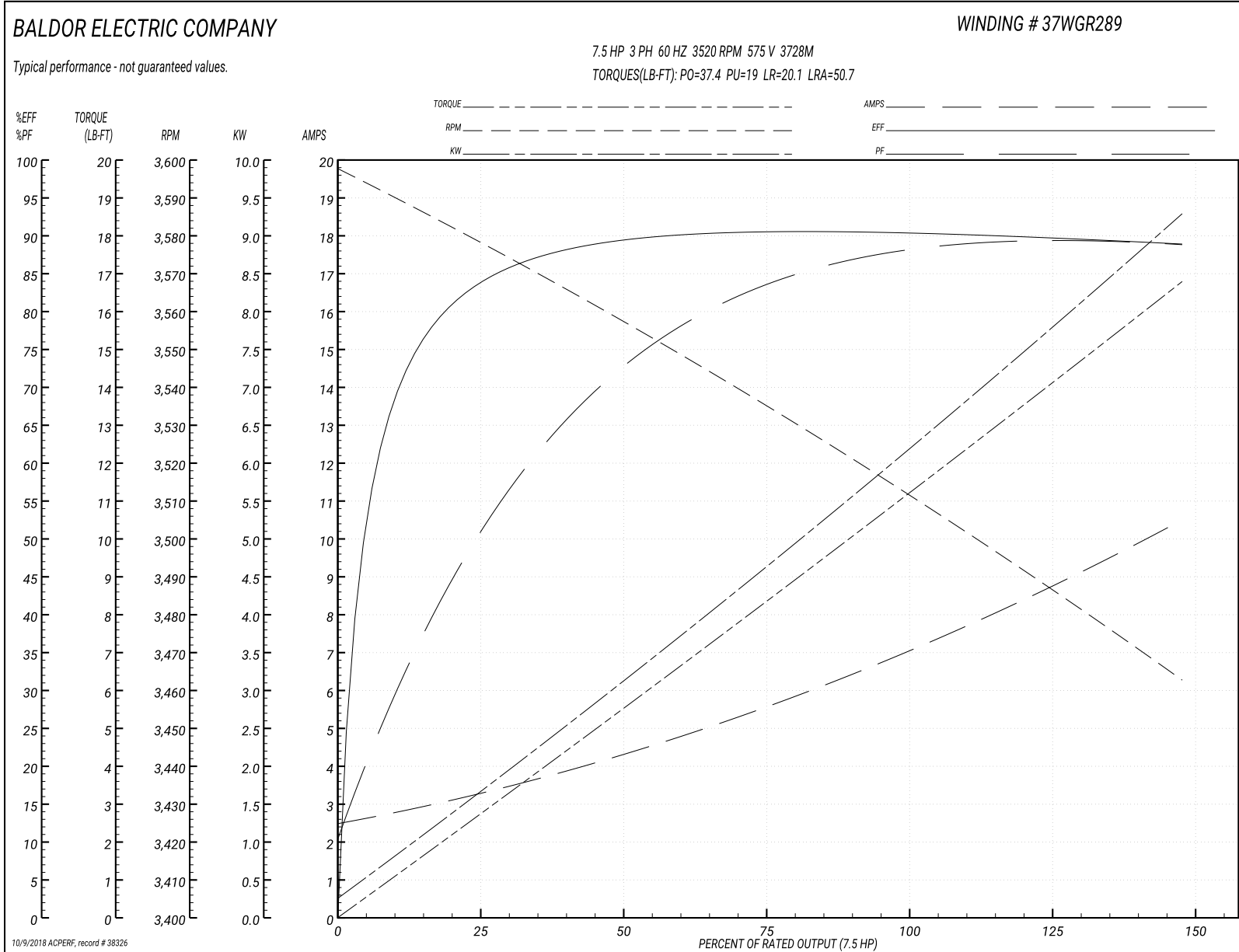
Winding: 37WGR289-R001	Type: 3728M	Enclosure: TEFC
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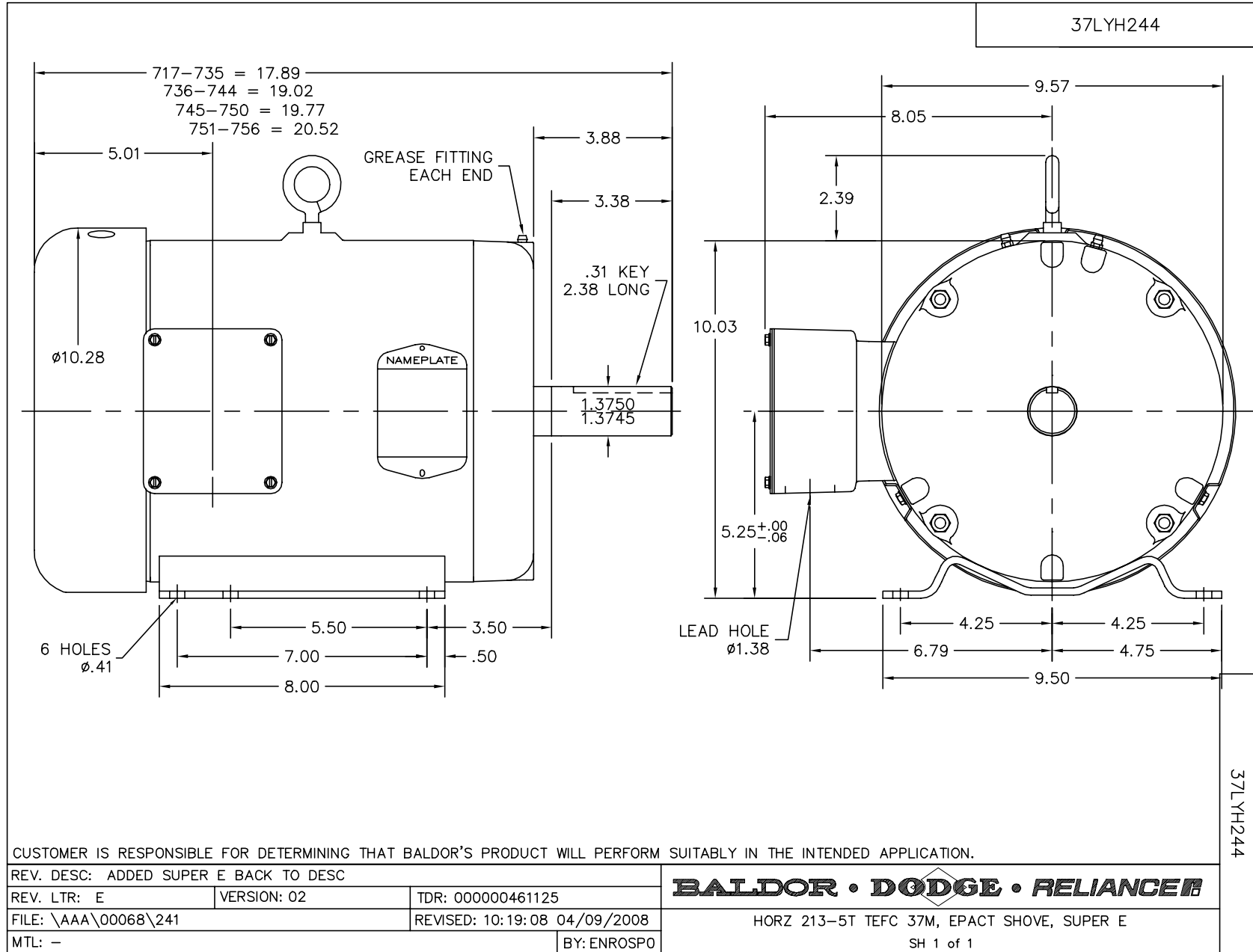
Nameplate Data				575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5			Full Load Torque	10.9 LB-FT
Volts	575			Start Configuration	direct on line
Full Load Amps	7			Breakdown Torque	37.4 LB-FT
R.P.M.	3520			Pull-up Torque	19 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	20.1 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	50.7 A
Service Factor (S.F.)	1.15			No-load Current	2.61 A
NEMA Nom. Eff.	89.5	Power Factor	87	Line-line Res. @ 25°C	1.9 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	46°C
S.F. Amps				Temp. Rise @ S.F. Load	56°C
				Locked-rotor Power Factor	33
				Rotor inertia	0.255 LB-FT ²

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	73	82	86	88	90	87
Efficiency	82	89	90.1	90.2	89.6	88.2	90.1
Speed	3579	3560	3538	3515	3490	3462	3500
Line amperes	3.06	4.03	5.42	6.98	8.66	10.4	7.99

Performance Graph at 575V, 60Hz, 7.5HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000D		FILE: AAA00005141	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006