

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3705T**

**3HP,865RPM,3PH,60HZ,215T,3744M,TEFC,F1,N**

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGT944	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37G813	Layout:	37LYG813	Poles:	08	Created Date:	04-07-2015
Base:	RG	Eff. Date:	07-18-2019	Leads:	9#14		

Specs			
Catalog Number:	EM3705T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	215T	KVA Code:	H
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	3.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	900 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3744M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	62
	UR	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:	10.400 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding

	10.600 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	5.200 A @ 460.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP2116L</b>										
<b>CAT.NO.</b>	EM3705T									
<b>SPEC.</b>	37G813T944G1									
<b>HP</b>	3									
<b>VOLTS</b>	230/460									
<b>AMP</b>	10.4/5.2									
<b>RPM</b>	865									
<b>FRAME</b>	215T				<b>HZ</b>	60			<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	H	<b>DES</b>	B		<b>CL</b>	F	
<b>NEMA-NOM-EFF</b>	86.5		<b>PF</b>	62						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>	10.6				
<b>DE</b>	6307			<b>ODE</b>	6206					
<b>ENCL</b>	TEFC		<b>SN</b>							

Parts List		
Part Number	Description	Quantity
SA296338	SA 37G813T944G1	1.000 EA
RA282380	RA 37G813T944G1	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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 ID	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP2116L	ALUM SUPER-E UL CSA CC	1.000 EA
G0PA1000	PKG 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 # 49977 - Typical performance - not guaranteed values

<b>Winding:</b> 37WGT944-R007	<b>Type:</b> 3744M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	3			Full Load Torque	18.3 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	10.4/5.2			Breakdown Torque	49 LB-FT
R.P.M.	865			Pull-up Torque	27.6 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	30.6 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	25.6 A
Service Factor (S.F.)	1.15			No-load Current	3.21 A
NEMA Nom. Eff.	86.5	Power Factor	62	Line-line Res. @ 25°C	3.5 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	41°C
				Locked-rotor Power Factor	33.3
				Rotor inertia	1.09 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	55	62	66	69	64
Efficiency	78.9	85.6	87	86.8	85.6	83	86.1
Speed	891	884	875	865	853	840	858
Line amperes	3.39	3.82	4.45	5.25	6.18	7.3	5.81

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values

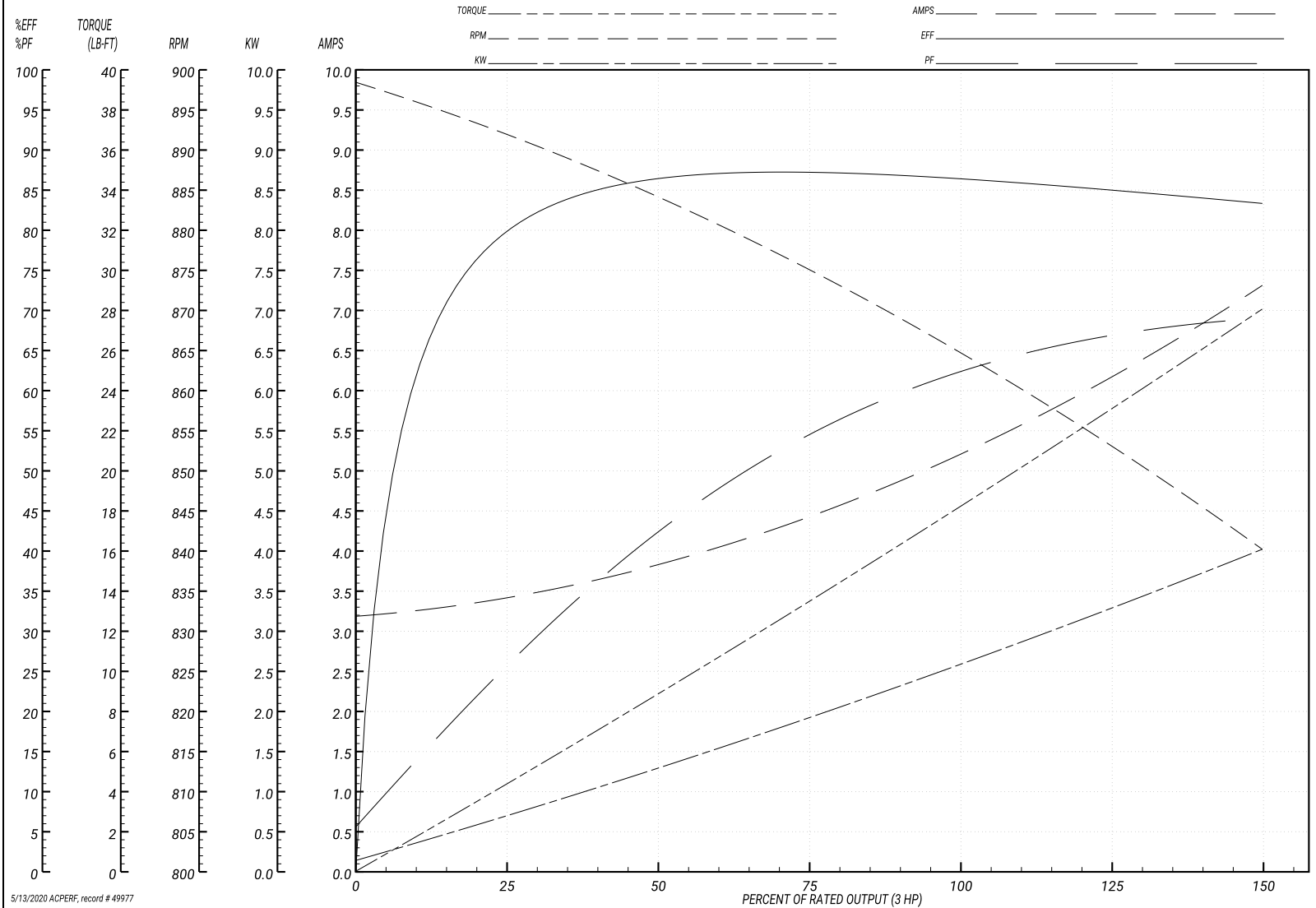
ABB Motors and Mechanical Inc.

WINDING # 37WGT944

Typical performance - not guaranteed values.

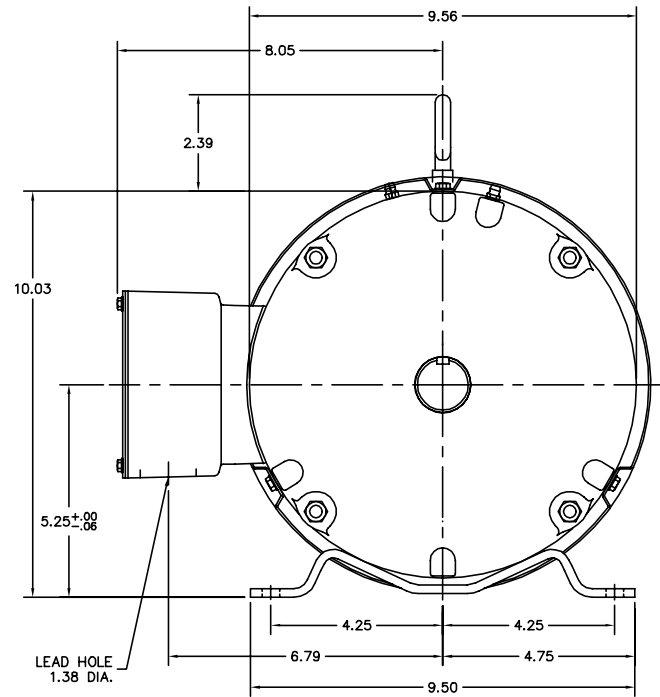
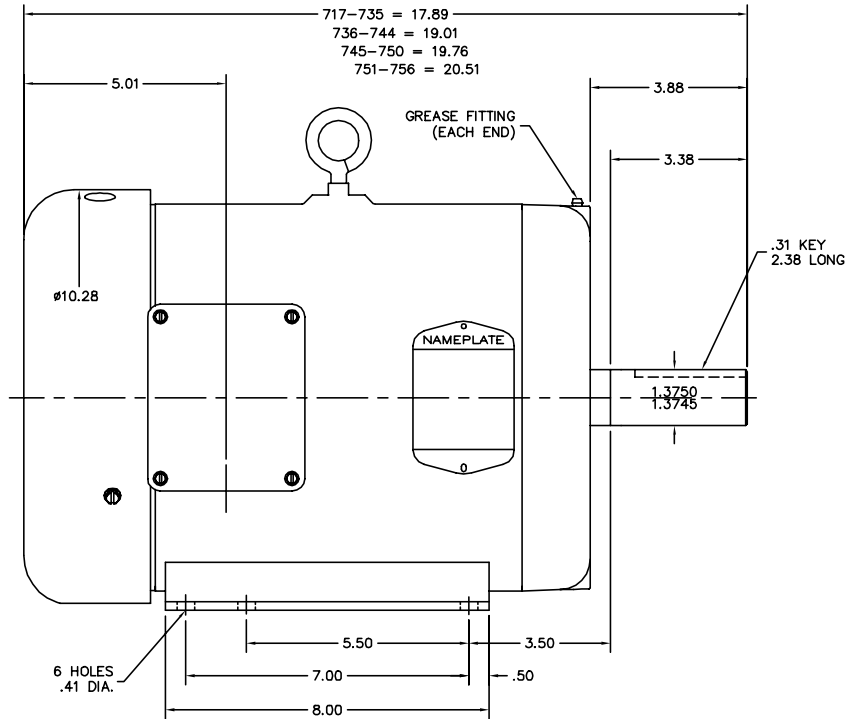
3 HP 3 PH 60 HZ 865 RPM 460 V 3744M

TORQUES(LB-FT): PO=49 PU=27.6 LR=30.6 LRA=25.6



5/13/2020 ACPERF, record # 49977

37LYG813



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: ADDED KOBX LEAD HOLE DIM			
REV. LTR: F	BY: RMP	REVISED: 16:06:08 09/08/2004	TDR: 342766
FILE: AAA00050966		REF: 37LYG813	
MTL: -			

**BALDOR ELECTRIC Co.**

HORZ 213-5T TEFC 37M W/EPACT SHOVE

37LYG813

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005