



Customer information packet

EM3705T

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA 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	5.200 A @ 460.0 V 10.600 A @ 208.0 V 10.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	F
Type	AC
Mech. spec.	37G813
Base	
Status	PRD/A
Elec. spec.	37WGT944
Layout	37LYG813
Eff. date	05-02-2024
CD Diagram	CD0005
Poles	08
Leads	9#14
Proprietary	False
Created date	04-07-2015

High Voltage Full Load Amps	5.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
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	8
Overall Length	19.01 IN
Power Factor	62
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	865 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

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

AC Induction Motor Performance Data

Record # 49977

Typical performance - not guaranteed values

Winding: 37WGT944-R007		Type: 3744M		Enclosure: TEFC	
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 ²	

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

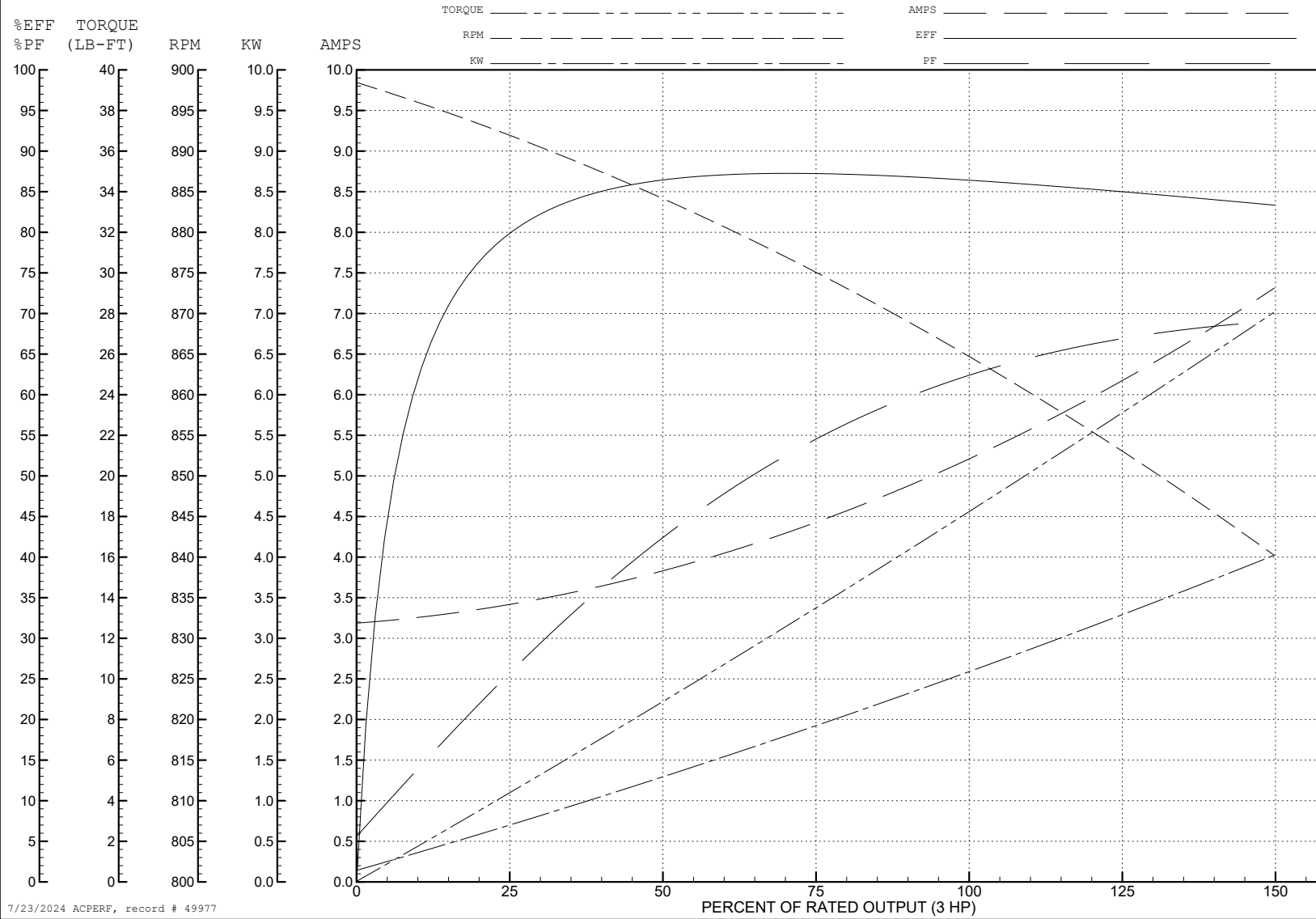
ABB Motors and Mechanical Inc.

WINDING # 37WGT944

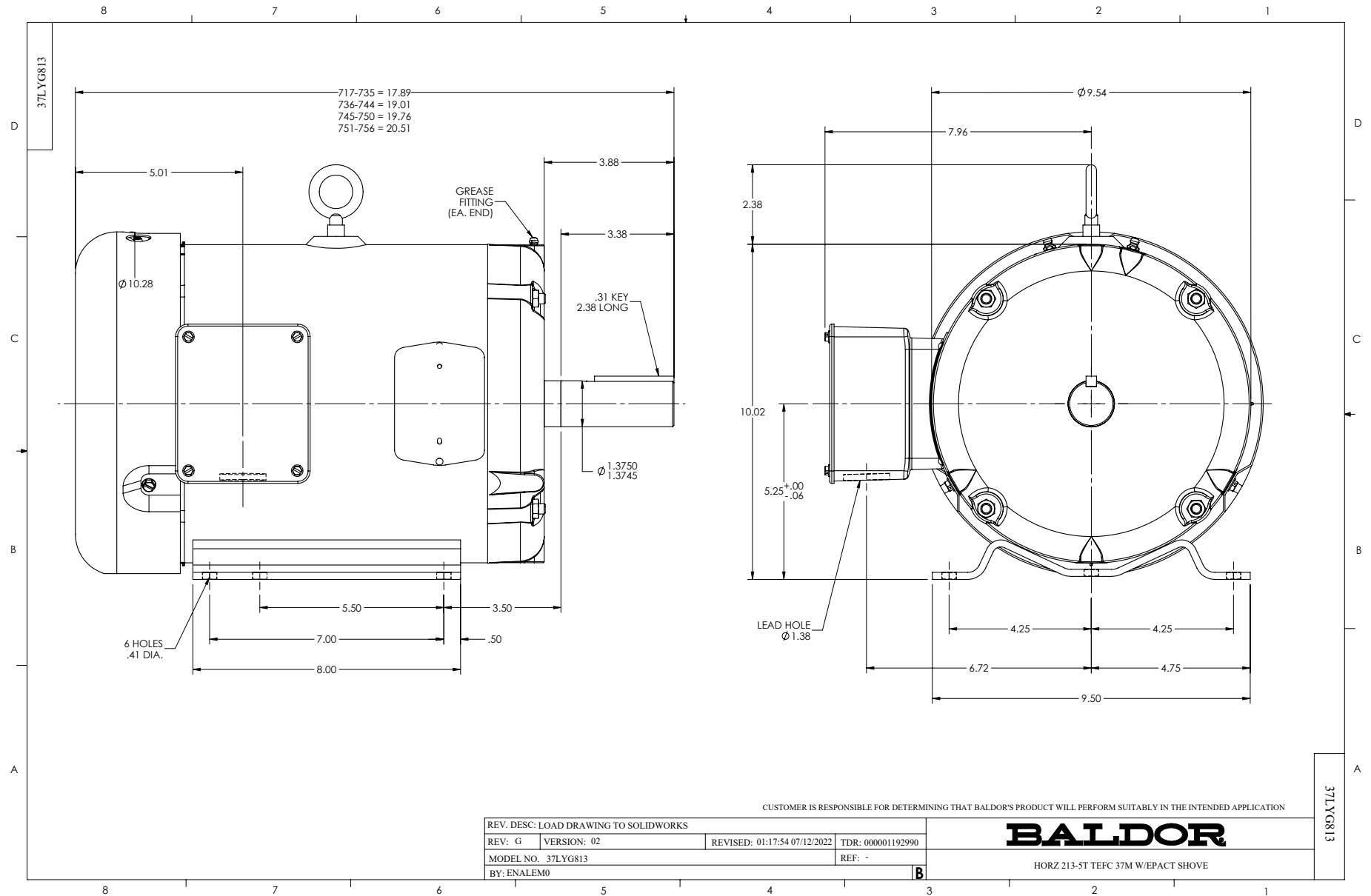
3 HP 3 PH 60 HZ 865 RPM 460 V 3744M

Typical performance - not guaranteed values.

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



7/23/2024 ACPERF, record # 49977



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