

ABB BALDOR RELIANCE III

Customer information packet

EM3311T-5BG

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3734M, OPSB, F

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	213T
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	7.600 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.6 a
Insulation Class	H

Part Detail

Revision	M
Type	AC
Mech. spec.	37N346
Base	
Status	PRD/A
Elec. spec.	37WGS691
Layout	37LYN346
Eff. date	05-14-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	09-22-2014

Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.32 IN
Power Factor	79
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP1259L											
CAT.NO.	EM3311T-5BG										
SPEC.	37N346S691G1										
HP	7.5										
VOLTS	575										
AMP	7.6										
RPM	1770										
FRAME	213T		HZ	60				PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	H				
NEMA-NOM-EFF	91.7	PF	79								
RATING	40C AMB-CONT										
CC	010A										
DE	6307		ODE	6206							
ENCL	OPSB	SN									

AC Induction Motor Performance Data

Record # 50483

Typical performance - not guaranteed values

Winding: 37WGS691-R003			Type: 3734M		Enclosure: OPSB		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		7.5	Full Load Torque		22.4 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		7.6	Breakdown Torque		74.2 LB-FT		
R.P.M.		1770	Pull-up Torque		36.4 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		43.6 LB-FT		
NEMA Design Code		A	KVA Code	J	Starting Current		54.6 A
Service Factor (S.F.)		1.15	No-load Current		3.6 A		
NEMA Nom. Eff.		91.7	Power Factor	79	Line-line Res. @ 25°C		2.33 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		36°C	
S.F. Amps				Temp. Rise @ S.F. Load		44°C	
				Locked-rotor Power Factor		37.7	
				Rotor inertia		0.836 LB-FT2	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	74	80	83	84	81
Efficiency	85.9	91.1	91.8	91.3	90.6	89.5	91.5
Speed	1792	1784	1777	1767	1758	1747	1767
Line amperes	3.96	4.92	6.19	7.73	9.37	11.2	8.68

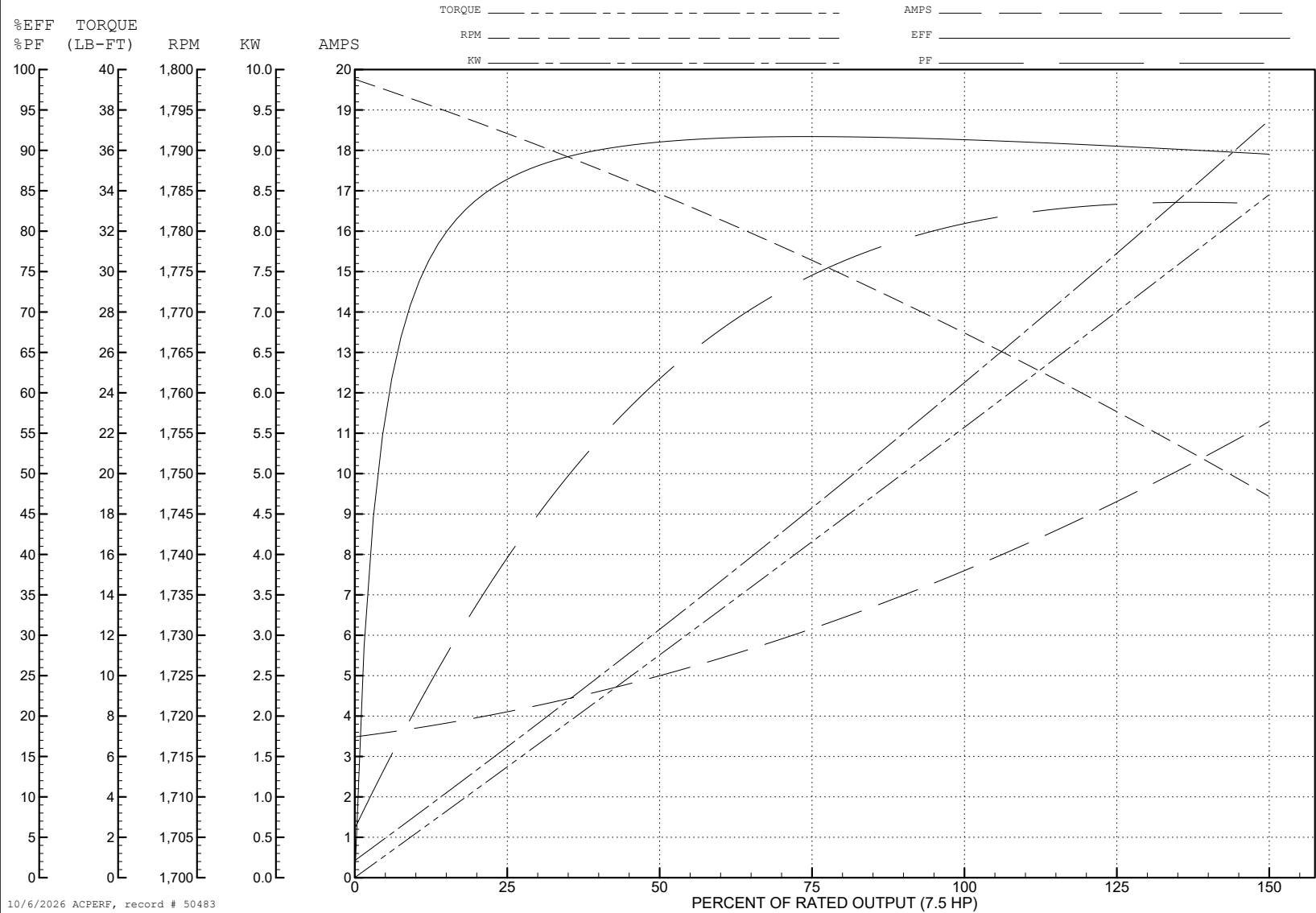
ABB Motors and Mechanical Inc.

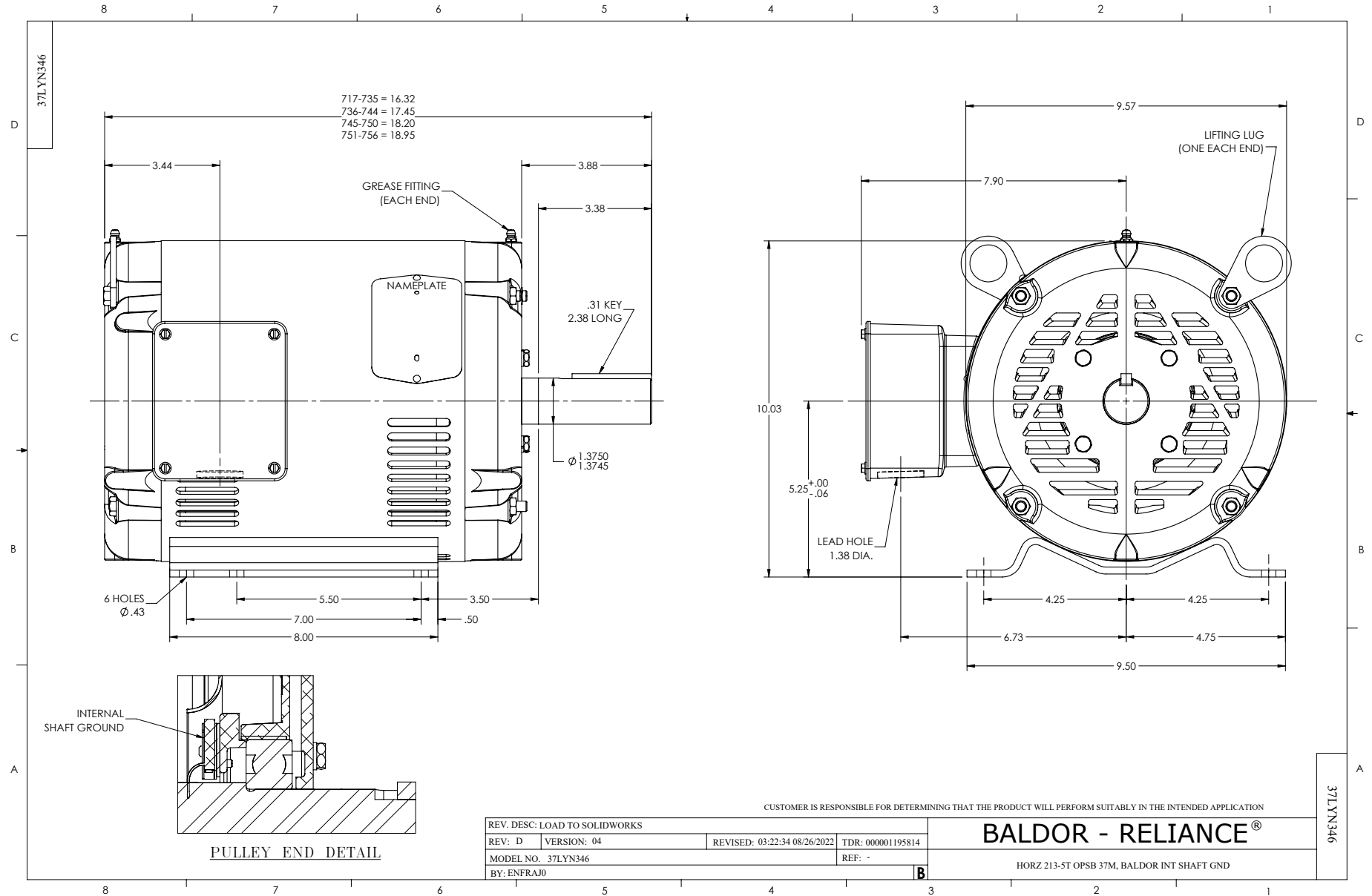
WINDING # 37WGS691

Typical performance - not guaranteed values.

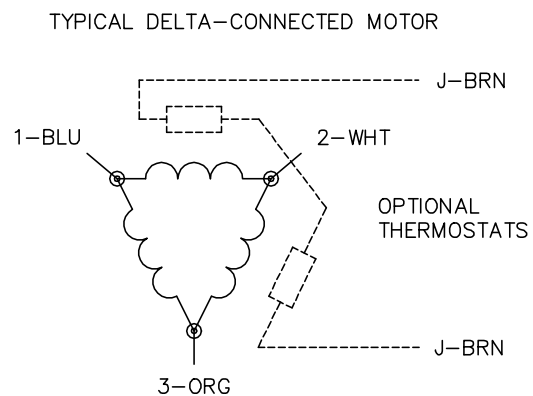
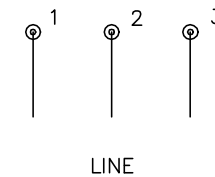
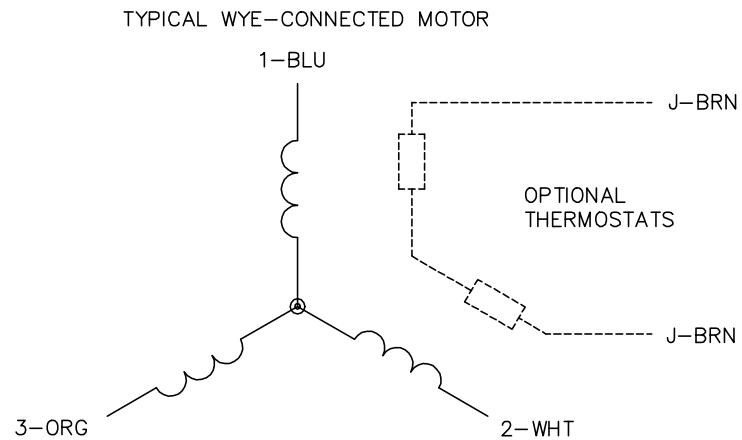
7.5 HP 3 PH 60 HZ 1770 RPM 575 V 3734M

TORQUES (LB-FT): PO=74.2 PU=36.4 LR=43.6 LRA=54.6





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.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

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

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