

ABB BALDOR RELIANCE III

Customer information packet

EM3311T-5G

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	UR CSA CSA EEV
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	8.010 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
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	8.0 a
Insulation Class	H

Part Detail

Revision	M
Type	AC
Mech. spec.	37J839
Base	
Status	PRD/A
Elec. spec.	37WGZ312
Layout	37LYJ839
Eff. date	01-08-2026
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	03-14-2016

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	77
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	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

NP3553L									
CAT.NO.	EM3311T-5G								
SPEC	37J839Z312G1								
HP	7.5								
VOLTS	575								
AMPS	8.01								
RPM	1770								
FRAME	213T		HZ	60			PH	3	
SF	1.15	CODE	J	DES	A	CLASS	H		
NEMA NOM. EFF	91	PF	77						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SER							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									

AC Induction Motor Performance Data

Record # 56695

Typical performance - not guaranteed values

Winding: 37WGZ312-R002			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		8.01	Breakdown Torque		79.1 LB-FT	
R.P.M.		1770	Pull-up Torque		39.5 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		47.3 LB-FT	
NEMA Design Code		A	KVA Code		J	
Service Factor (S.F.)		1.15	Starting Current		59.1 A	
NEMA Nom. Eff.		91	Power Factor		77	
Rating - Duty		40C AMB-CONT	Line-line Res. @ 25°C		2.39 Ω	
S.F. Amps			Temp. Rise @ Rated Load		37°C	
			Temp. Rise @ S.F. Load		45°C	
			Locked-rotor Power Factor		39.5	
			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	37	59	71	77	81	83	79
Efficiency	84.7	90.3	91.3	91.2	90.5	89.3	90.8
Speed	1792	1785	1778	1770	1761	1750	1765
Line amperes	4.45	5.34	6.54	8.01	9.6	11.4	8.96

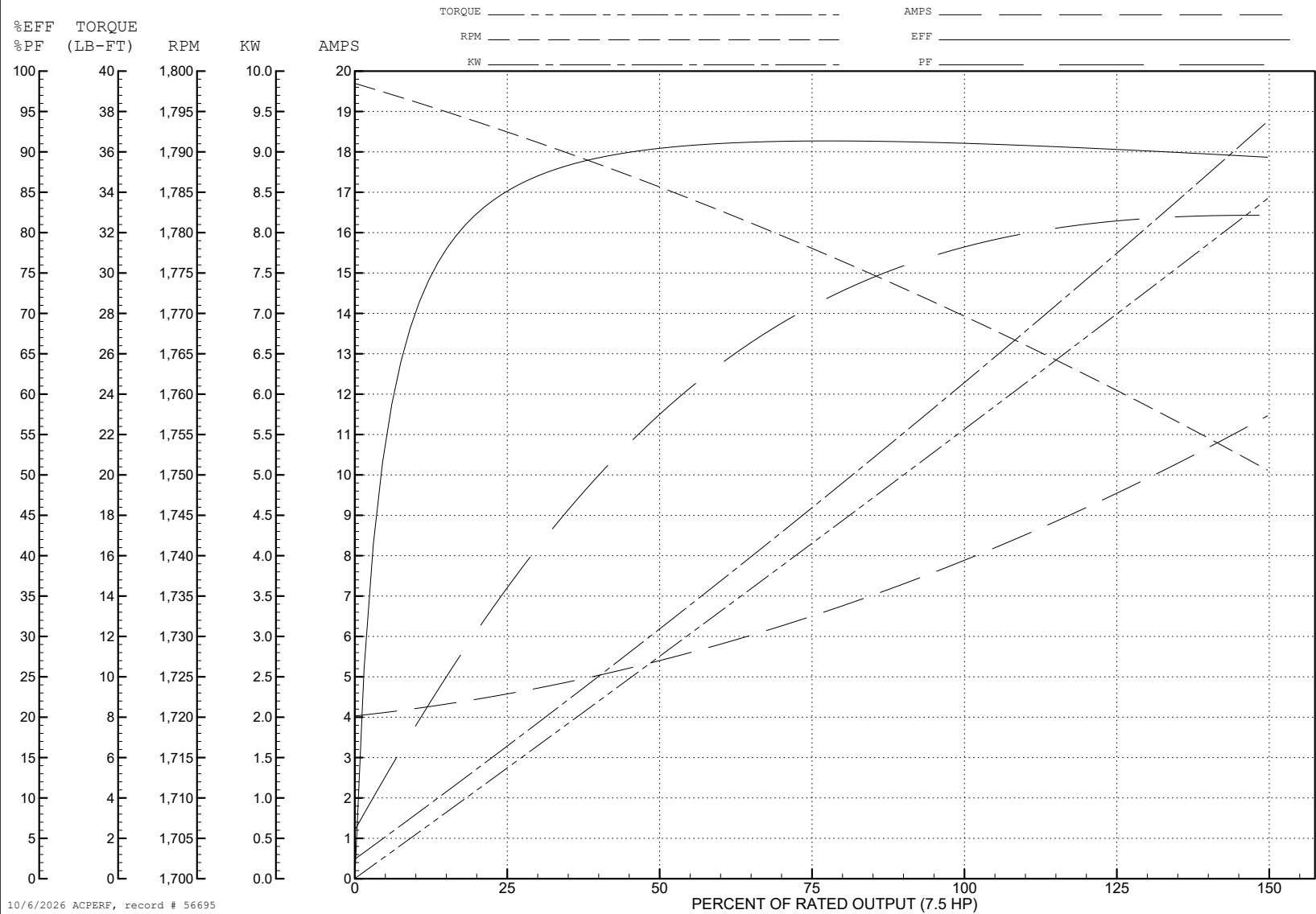
ABB Motors and Mechanical Inc.

WINDING # 37WGZ312

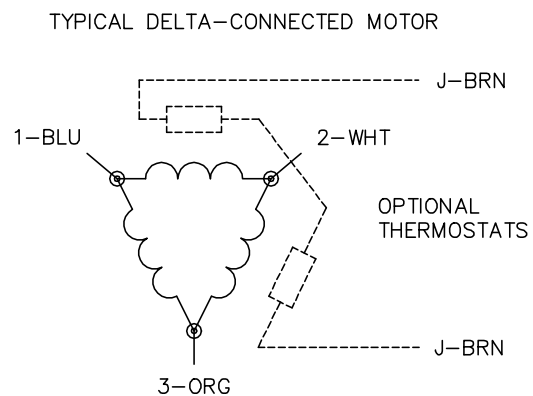
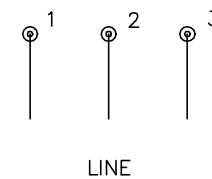
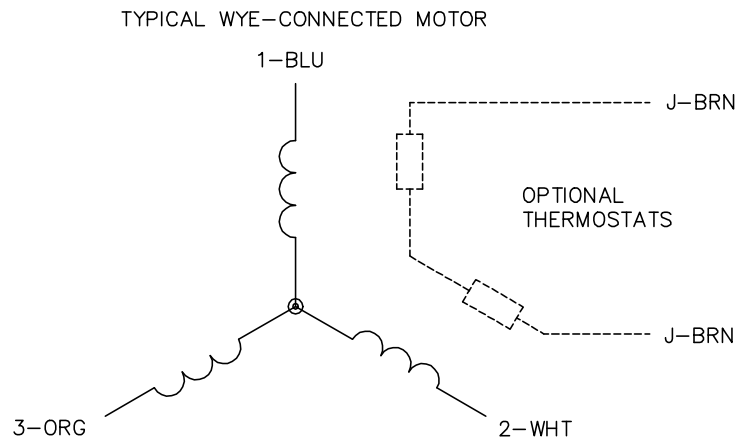
Typical performance - not guaranteed values.

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

TORQUES (LB-FT): PO=79.1 PU=39.5 LR=47.3 LRA=59.1



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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