

ABB BALDOR RELIANCE III

Customer information packet

EM3710T-8

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3738M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	200.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	21.400 A @ 200.0 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	21.4 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	J
Type	AC
Mech. spec.	37A001
Base	
Status	PRD/A
Elec. spec.	37WGR909
Layout	37LYA001
Eff. date	11-05-2025
CD Diagram	CD0006
Poles	04
Leads	3#12
Proprietary	False
Created date	12-09-2015

KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.01 IN
Power Factor	80
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	No 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

NP3441L											
CAT.NO.	EM3710T-8										
SPEC.	37A001R909G1										
HP	7.5										
VOLTS	200										
AMP	21.4										
RPM	1770										
FRAME	213T		HZ	60				PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	F				
NEMA-NOM-EFF	91.7	PF	80								
RATING	40C AMB-CONT										
CC	010A										
DE	6307		ODE	6206							
ENCL	TEFC	SN									
VPWM INVERTER READY											
CT6-60H(10:1)VT3-60H(20:1											

Parts List

Part number	Description	Quantity
SA311802	SA 37A001R909G1	1.000 ea
RA299235	RA 37A001R909G1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT 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
37EP3100A01	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 HXWSSL D 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
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL EEV	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 54314

Typical performance - not guaranteed values

Winding: 37WGR909-R001			Type: 3738M		Enclosure: TEFC		
Nameplate Data			200 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		7.5	Full Load Torque		22.2 LB-FT		
Volts		200	Start Configuration		direct on line		
Full Load Amps		21.4	Breakdown Torque		71.5 LB-FT		
R.P.M.		1770	Pull-up Torque		32.9 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		43.4 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		164 A
Service Factor (S.F.)		1.15	No-load Current		10 A		
NEMA Nom. Eff.		91.7	Power Factor	80	Line-line Res. @ 25°C		0.263 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		63°C
S.F. Amps			Temp. Rise @ S.F. Load		77°C		
			Locked-rotor Power Factor		37.2		
			Rotor inertia		0.934 LB-FT2		

Load Characteristics 200 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	63	75	80	83	84	82
Efficiency	87.2	91.6	92.2	91.9	91.1	89.9	91.4
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	11.2	13.9	17.5	21.9	26.7	32	24.8

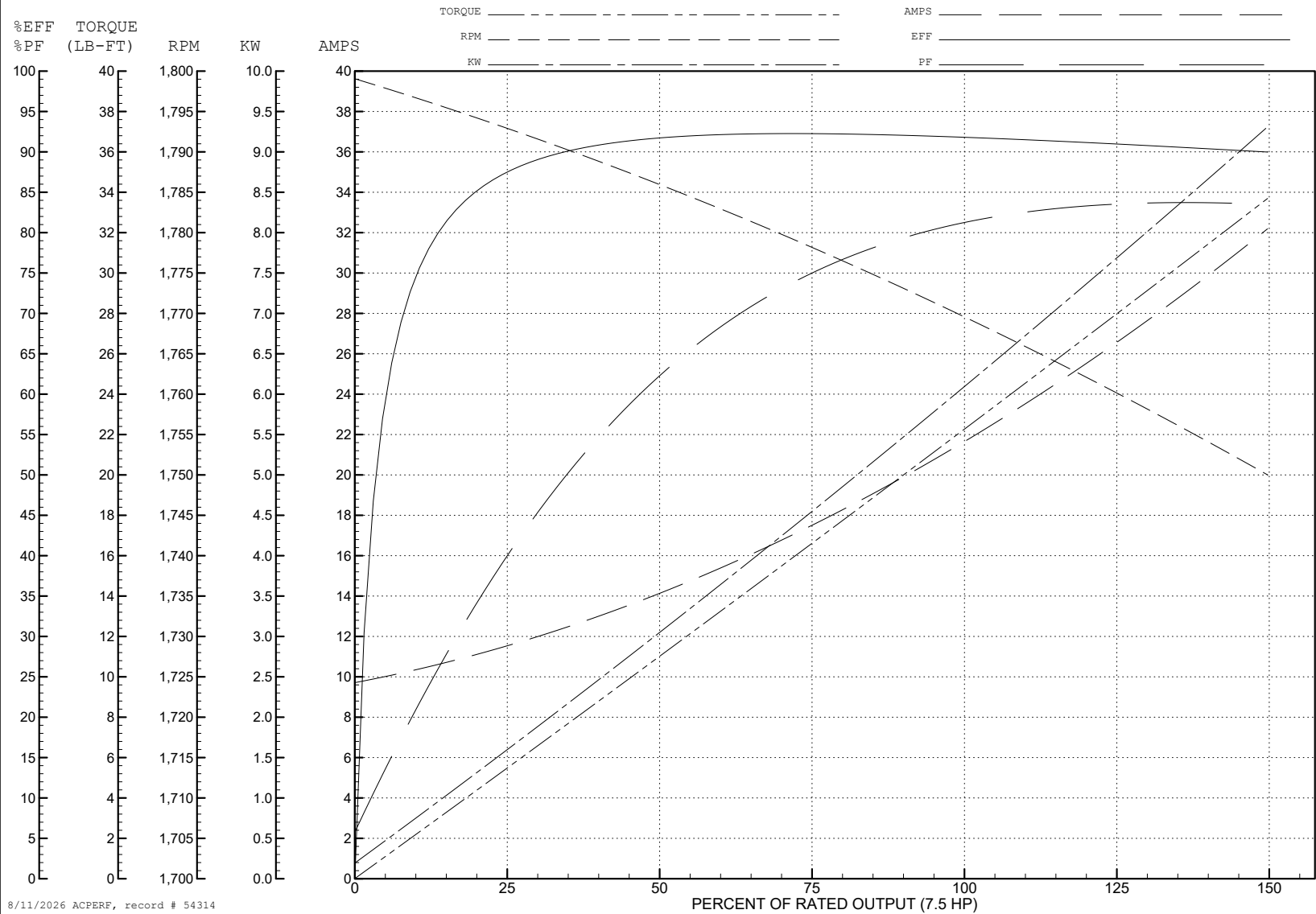
ABB Motors and Mechanical Inc.

WINDING # 37WGR909

Typical performance - not guaranteed values.

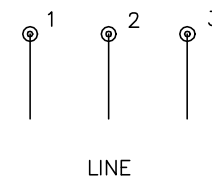
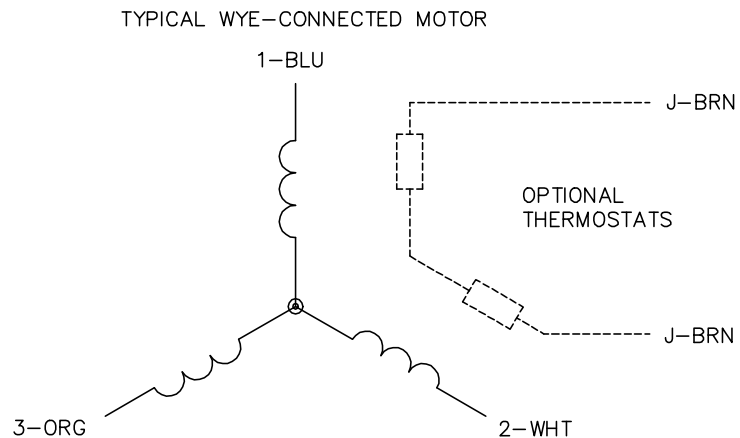
7.5 HP 3 PH 60 HZ 1770 RPM 200 V 3738M

TORQUES (LB-FT): PO=71.5 PU=32.9 LR=43.4 LRA=164





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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