

ABB BALDOR RELIANCE III

Customer information packet

EM3710T-5G

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	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	Q
Type	AC
Mech. spec.	37J838
Base	
Status	PRD/A
Elec. spec.	37WGR907
Layout	37LYJ838
Eff. date	09-23-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	12-07-2015

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	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.01 IN
Power Factor	82
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

NP3441L											
CAT.NO.	EM3710T-5G										
SPEC.	37J838R907G1										
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	82								
RATING	40C AMB-CONT										
CC	010A										
DE	6307		ODE	6206							
ENCL	TEFC	SN									
VPWM INVERTER READY											
CT6-60H(10:1)VT3-60H(20:1											

AC Induction Motor Performance Data

Record # 54305

Typical performance - not guaranteed values

Winding: 37WGR907-R002				Type: 3738M		Enclosure: TEFC		
Nameplate Data				575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		7.5		Full Load Torque		22.2 LB-FT		
Volts		575		Start Configuration		direct on line		
Full Load Amps		7.6		Breakdown Torque		71 LB-FT		
R.P.M.		1770		Pull-up Torque		32.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		43 LB-FT		
NEMA Design Code		A	KVA Code	J		Starting Current		56.9 A
Service Factor (S.F.)		1.15		No-load Current		3.48 A		
NEMA Nom. Eff.		91.7	Power Factor	82		Line-line Res. @ 25°C		2.22 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		37.3		
				Rotor inertia		0.934 LB-FT2		

Load Characteristics 575 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	87.1	91.7	91.9	92.1	91	89.9	91.4
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	3.9	4.84	6.1	7.61	9.29	11.1	8.62

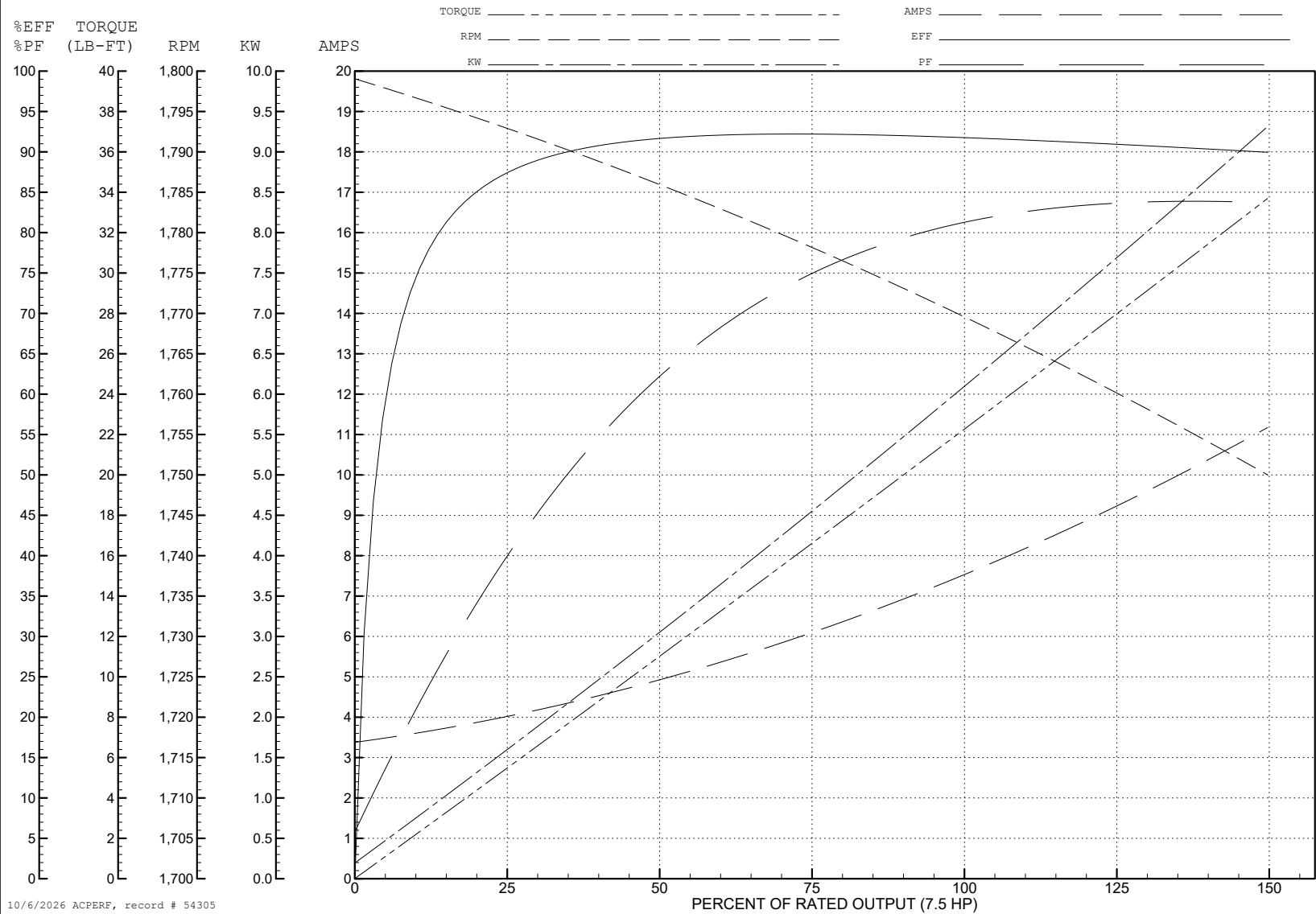
ABB Motors and Mechanical Inc.

WINDING # 37WGR907

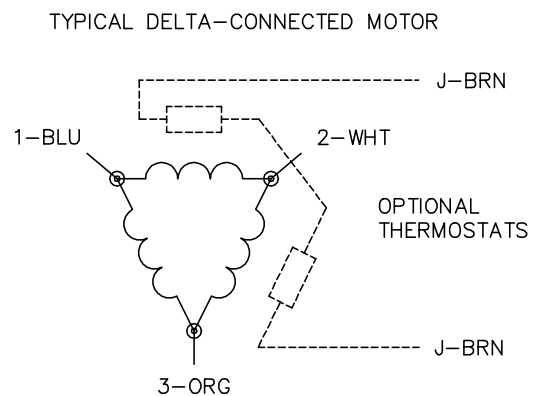
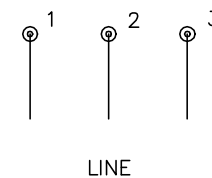
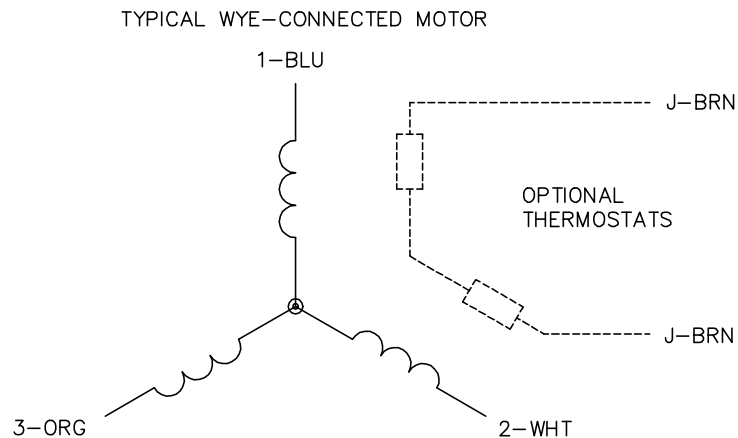
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 575 V 3738M

TORQUES (LB-FT): PO=71 PU=32.6 LR=43 LRA=56.9



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

SH 1 of 1