

ABB BALDOR RELIANCE III

Customer information packet

EM3710T-58

7.5HP, 1460RPM, 3PH, 50HZ, 213T, 3736M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
Agency Approvals	C UR US CE CURUS IE3 UKCA WEEE
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	10.800 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	K
Type	AC
Mech. spec.	37A001
Base	
Status	PRD/A
Elec. spec.	37WGS060
Layout	37LYA001
Eff. date	11-05-2025
CD Diagram	CD0382
Poles	04
Leads	6#14
Proprietary	False
Created date	12-22-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	10.8 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3736M
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	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1460 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor



Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP2716L									
CAT NO	EM3710T-58								
SPEC.	37A001S060G1								
HP	7.5/5.5KW						PH	3	
VOLTS	400								
AMP	10.8								
R.P.M. (1/MIN)	1460								
FRAME	213T		HZ		50		I.P.		44
SER.F.	1.15	CODE	H	DES	B	CL		F	
NOM.EFF.	89.6		% (100%)						
PF	82								
RATING	40C AMB-S1 CONT				CC				
DE BRG	6307		ODE		6206				
ENCL	TEFC	SN							
BLANK	IE3-90.7(75%)90.6(50%)								
	IC411 58KG								

AC Induction Motor Performance Data

Record # 54637

Typical performance - not guaranteed values

Winding: 37WGS060-R011			Type: 3736M		Enclosure: TEFC			
Nameplate Data			400 V, 50 Hz: Single Voltage Motor					
Rated Output (HP)		7.5	Full Load Torque		26.9 LB-FT			
Volts		400	Start Configuration		direct on line			
Full Load Amps		10.8	Breakdown Torque		72.1 LB-FT			
R.P.M.		1460	Pull-up Torque		36.6 LB-FT			
Hz	50 Phase	3	Locked-rotor Torque		44.4 LB-FT			
NEMA Design Code		B	KVA Code	H	Starting Current		70.4 A	
Service Factor (S.F.)		1.15	No-load Current		4.62 A			
NEMA Nom. Eff.		89.6	Power Factor		82	Line-line Res. @ 25°C		1.49 Ω
Rating - Duty		50C AMB-CONT		Temp. Rise @ Rated Load		74°C		
S.F. Amps				Temp. Rise @ S.F. Load		93°C		
				Locked-rotor Power Factor		43		
				Rotor inertia		0.885 LB-FT2		

Load Characteristics 400 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	77	82	84	84	83
Efficiency	87	90.5	90.7	89.6	88.1	86	88.7
Speed	1492	1483	1474	1463	1451	1437	1456
Line amperes	5.17	6.66	8.66	11	13.6	16.7	12.6

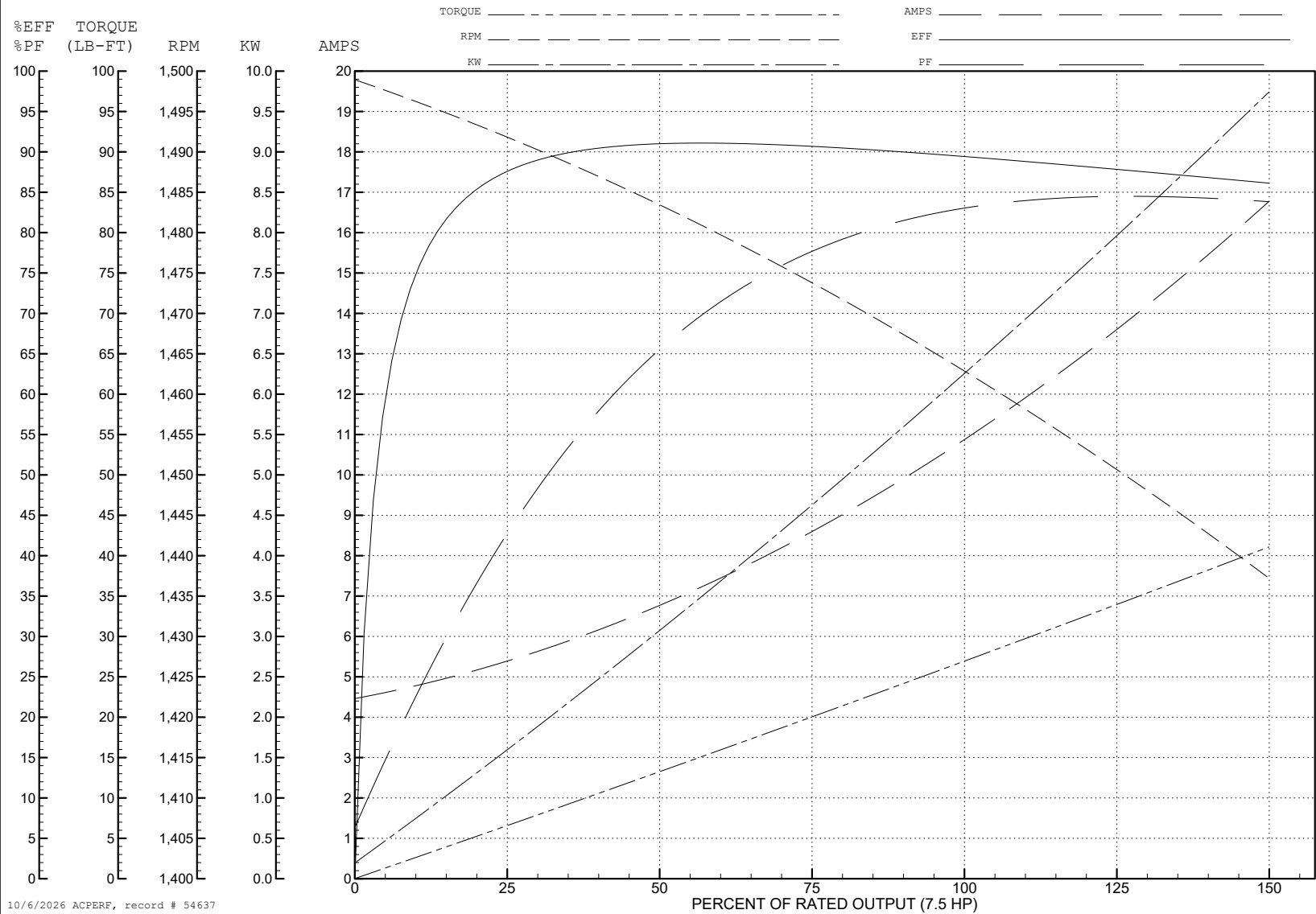
ABB Motors and Mechanical Inc.

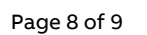
WINDING # 37WGS060

Typical performance - not guaranteed values.

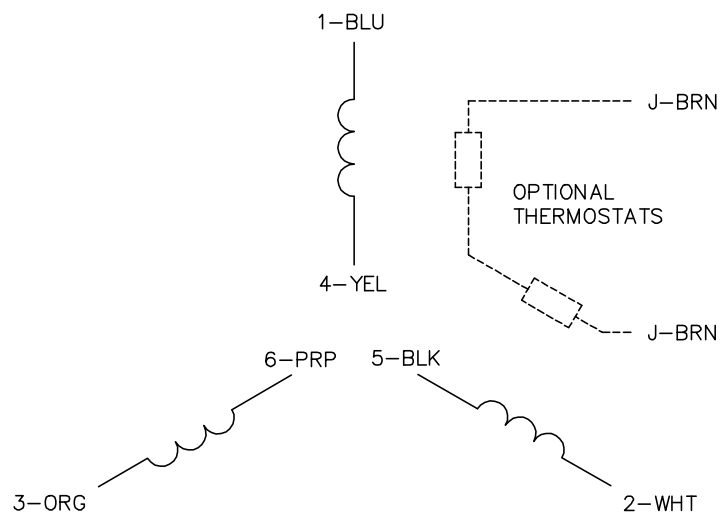
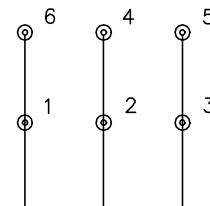
7.5 HP 3 PH 50 HZ 1460 RPM 400 V 3736M

TORQUES (LB-FT): PO=72.1 PU=36.6 LR=44.4 LRA=70.4

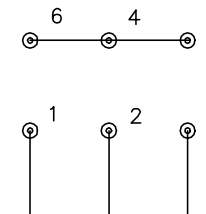




CD0382


 RUN CONNECTION
(1D)


LINE

 START CONNECTION
(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.
5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: F

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\243

REVISED: 09:05:32 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 6 LEADS, Y START/D RUN

SH 1 of 1

CD0382