

ABB BALDOR RELIANCE III

Customer information packet

M3710T-58

7.5HP, 1465RPM, 3PH, 50HZ, 213T, 3738M, 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	CSA CE 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	11.200 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	87.7 %
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	11.2 a
Insulation Class	F

Part Detail

Revision	P
Type	AC
Mech. spec.	37A001
Base	
Status	NLA/A
Elec. spec.	37WGR161
Layout	37LYA001
Eff. date	10-28-2016
CD Diagram	CD0382
Poles	04
Leads	6#14
Proprietary	False
Created date	09-21-2011

Inverter Code	Not Inverter
KVA Code	J
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	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	1465 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

NP2717L									
CAT NO	M3710T-58								
SPEC.	37A001R161H1								
HP	7.5						PH	3	
VOLTS	400								
AMP	11.2								
FRAME	213T		HZ		50		I.P.		54
SER.F.	1.15	CODE	J	DES	B	CL	F		
NEMA-NOM-EFF	87.7						% (100%)		
PF	80								
RATING	40C AMB-CONT				CC				
DE BRG	6307		ODE		6206				
ENCL	TEFC	SN							
BLANK	IE2-88.2(75%)86.5(50%)								

AC Induction Motor Performance Data

Record # 35202

Typical performance - not guaranteed values

Winding: 37WGR161-R001			Type: 3738M		Enclosure: TEFC			
Nameplate Data				400 V, 50 Hz: Single Voltage Motor				
Rated Output (HP)		7.5		Full Load Torque		26.5 LB-FT		
Volts		400		Start Configuration		direct on line		
Full Load Amps		11.2		Breakdown Torque		86.7 LB-FT		
R.P.M.		1460		Pull-up Torque		47.5 LB-FT		
Hz	50	Phase	3	Locked-rotor Torque		53 LB-FT		
NEMA Design Code		B	KVA Code	J	Starting Current		80 A	
Service Factor (S.F.)		1.15		No-load Current		5.75 A		
NEMA Nom. Eff.		87.7	Power Factor	80	Line-line Res. @ 25°C		1.23 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		86°C
S.F. Amps						Temp. Rise @ S.F. Load		102°C

Load Characteristics 400 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	40	62	75	80	84	86	82
Efficiency	80.8	86.5	88.2	88.3	87.7	85.3	88
Speed	1492	1484	1475	1465	1454	1439	1458
Line amperes	6.14	7.4	9.1	11.2	13.6	16.4	12.6

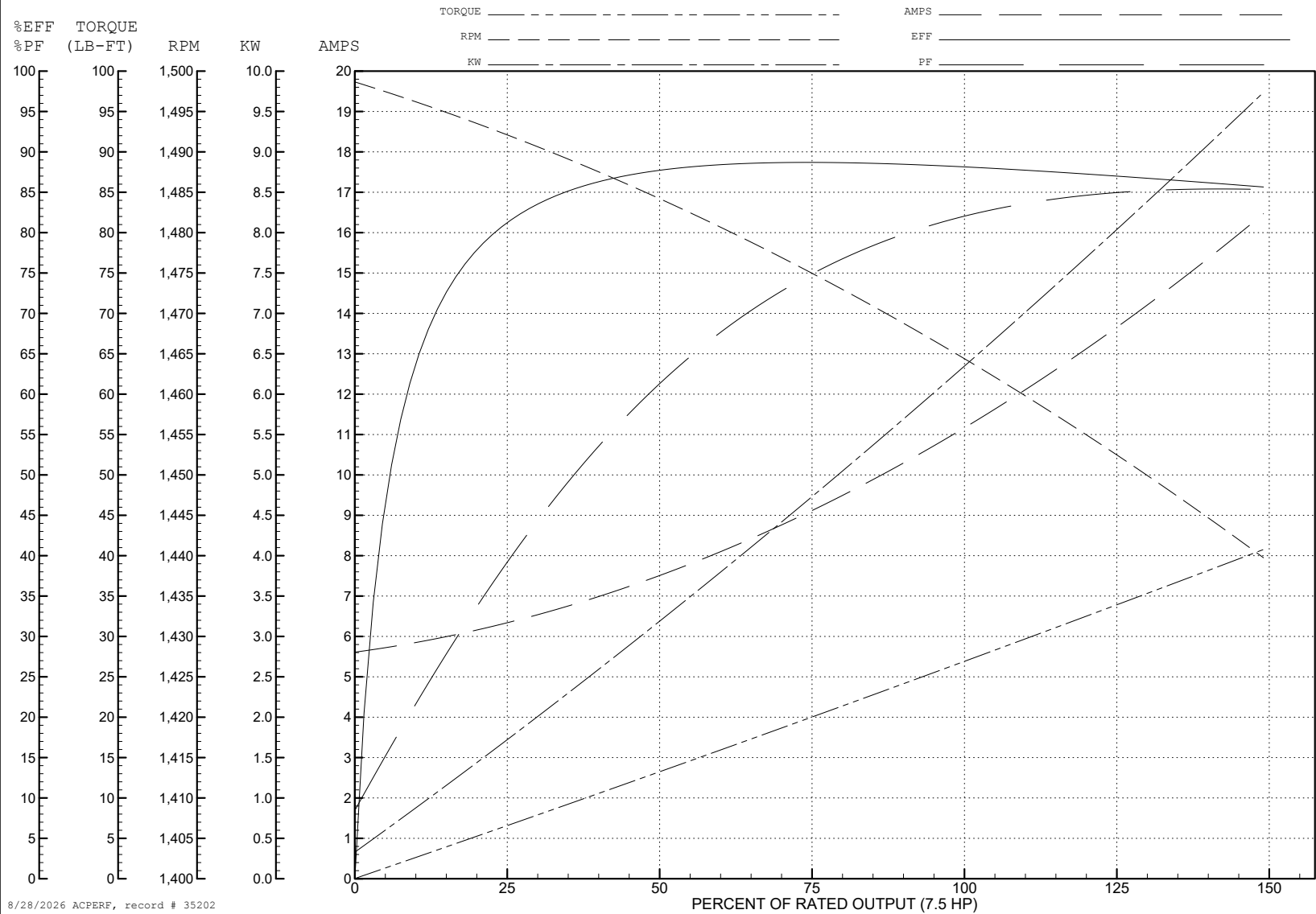
ABB Motors and Mechanical Inc.

WINDING # 37WGR161

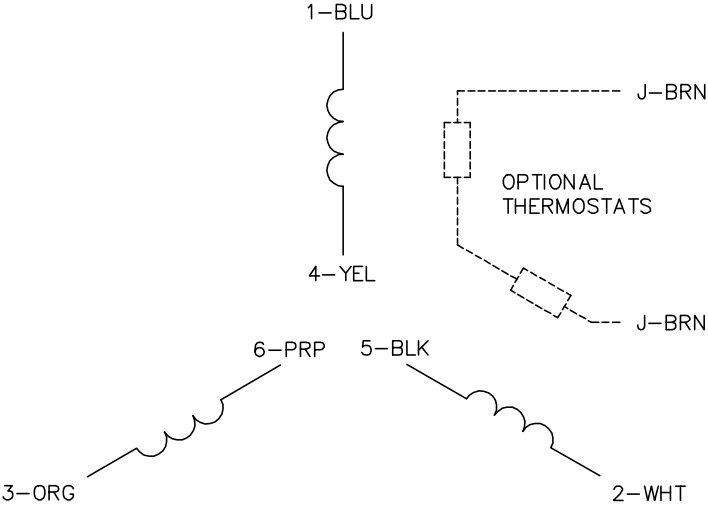
Typical performance - not guaranteed values.

7.5 HP 3 PH 50 HZ 1460 RPM 400 V 3738M

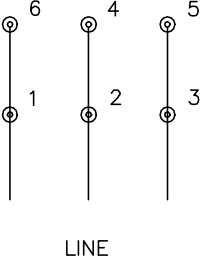
TORQUES (LB-FT): PO=86.7 PU=47.5 LR=53 LRA=80



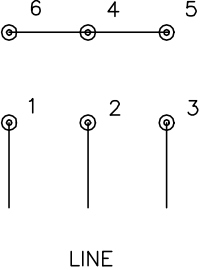
CD0382



RUN CONNECTION
(1D)



START CONNECTION
(1Y)



- 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.

CD0382

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
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