

ABB BALDOR RELIANCE III

Customer information packet

CFSWDM3709T-5E

7.5HP, 3500RPM, 3PH, 60HZ, 213TC, 3734M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Stainless 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	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM 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	6.600 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a
Insulation Class	H

Part Detail

Revision	L
Type	AC
Mech. spec.	37Q242
Base	
Status	PRD/A
Elec. spec.	37WGS610
Layout	37LYQ242
Eff. date	09-22-2023
CD Diagram	CD0006
Poles	02
Leads	3#14
Proprietary	False
Created date	10-11-2018

Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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	2
Overall Length	19.50 IN
Power Factor	93
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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

NP4427AAA02														
CAT #	CFSWDM3709T-5E					WGT		LBS						
SPEC	37Q242S610G1					ENCL	TEFC							
SER #						CC	010A	IP	69					
HP	7.5					MAG CUR	2.4							
VOLTS	575					NEMA NOM. EFF				91				
AMPS	6.6					PF	93							
RATING	40C AMB-CONT													
RPM	3500					MAX RPM		5400						
FRAME	213TC	HZ	60			CODE	K	CLASS	H					
SER.F.	1.15	SF AMP					PH	3	DES	A				
DE	6307		ODE	6307										
LUBRICATION	POLYREX EM													
ID LOGO	INVERTER TYPE				VPWM		CHP	60	TO	90	1.5:1			
ID LOGO	WK2	0.311	CT	30	TO	60	2:1							
ID LOGO	SL HZ	1.7	VT	6	TO	60	10:1							

AC Induction Motor Performance Data

Record # 69846

Typical performance - not guaranteed values

Winding: 37WGS610-R001			Type: 3734M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		7.5	Full Load Torque		11.5 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		6.6	Breakdown Torque		64.3 LB-FT	
R.P.M.		3500	Pull-up Torque		24.9 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		35.4 LB-FT	
NEMA Design Code		A	KVA Code		K	
Service Factor (S.F.)		1.15	Starting Current		66.7 A	
NEMA Nom. Eff.		91	Power Factor		93	
Rating - Duty		40C AMB-CONT	Line-line Res. @ 25°C		1.46 Ω	
S.F. Amps			Temp. Rise @ Rated Load		48°C	
			Temp. Rise @ S.F. Load		59°C	
			Locked-rotor Power Factor		32.3	
			Rotor inertia		0.311 LB-FT2	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	86	90	95	96	100	96
Efficiency	84.5	91	92.1	91.7	91.1	90.5	91.3
Speed	3583	3563	3540	3518	3495	3478	3504
Line amperes	2.74	3.7	5.24	6.62	8.23	9.45	7.59

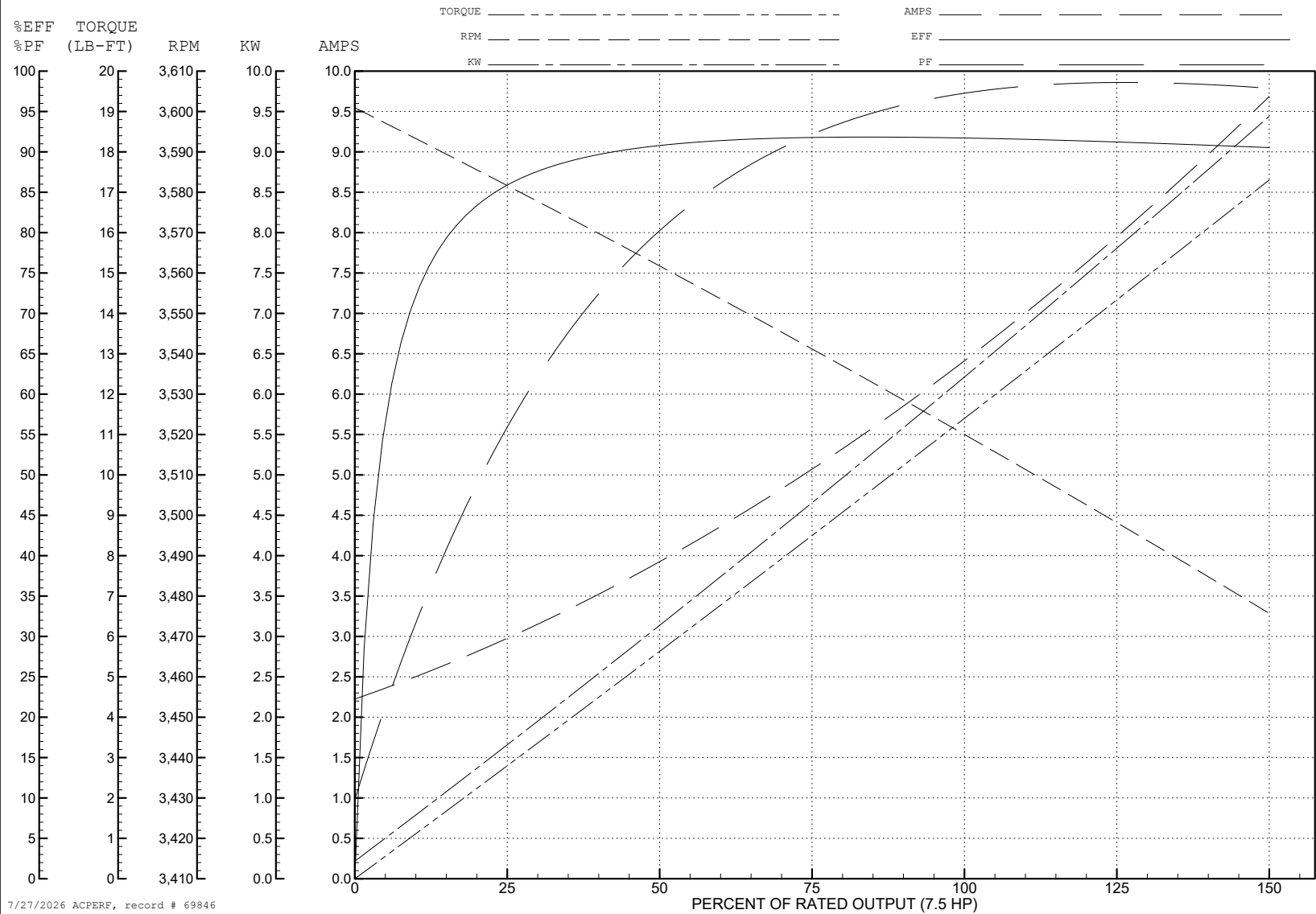
ABB Motors and Mechanical Inc.

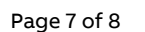
WINDING # 37WGS610

Typical performance - not guaranteed values.

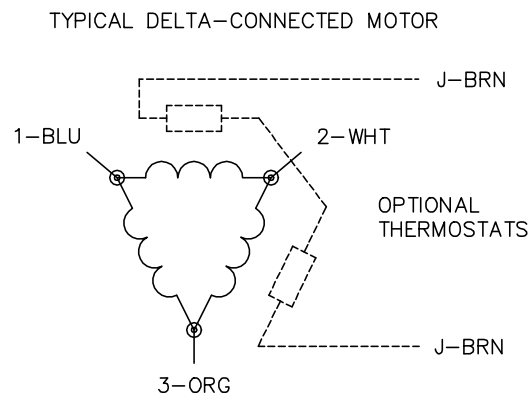
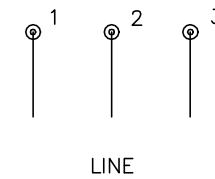
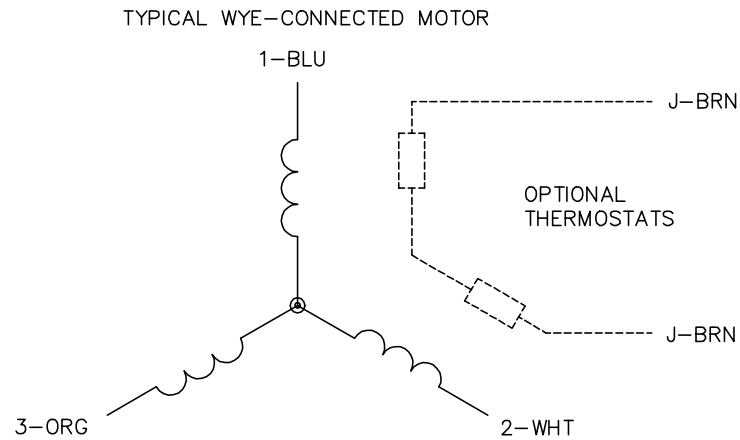
7.5 HP 3 PH 60 HZ 3500 RPM 575 V 3734M

TORQUES (LB-FT): PO=64.3 PU=24.9 LR=35.4 LRA=66.7





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