

ABB BALDOR RELIANCE III

Customer information packet

EM3709T-58

7.5HP, 2900RPM, 3PH, 50HZ, 213T, 3728M, 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	3000 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	10.400 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.2 %
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.	37WGR575
Layout	37LYA001
Eff. date	11-05-2025
CD Diagram	CD0382
Poles	02
Leads	6#14
Proprietary	False
Created date	12-22-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	10.4 a
Insulation Class	F
Inverter Code	Inverter Ready
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	3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	17.89 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	2900 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	EM3709T-58								
SPEC.	37A001R575G1								
HP	7.5/5.5KW					PH	3		
VOLTS	400								
AMP	10.4								
R.P.M. (1/MIN)	2900								
FRAME	213T		HZ	50		I.P.		44	
SER.F.	1.15	CODE	J	DES	B	CL		F	
NOM.EFF.	89.2		% (100%)						
PF	80								
RATING	40C AMB-S1 CONT				CC				
DE BRG	6307		ODE		6206				
ENCL	TEFC	SN							
BLANK	IE3-91.5(75%)90.8(50%)								
	IC411 55KG								

AC Induction Motor Performance Data

Record # 54639

Typical performance - not guaranteed values

Winding: 37WGR575-R002			Type: 3728M		Enclosure: TEFC			
Nameplate Data			400 V, 50 Hz: Single Voltage Motor					
Rated Output (HP)		7.5	Full Load Torque		13.1 LB-FT			
Volts		400	Start Configuration		direct on line			
Full Load Amps		10.4	Breakdown Torque		44.7 LB-FT			
R.P.M.		2900	Pull-up Torque		25.6 LB-FT			
Hz	50 Phase	3	Locked-rotor Torque		27.1 LB-FT			
NEMA Design Code		B	KVA Code	J	Starting Current		73.2 A	
Service Factor (S.F.)		1.15	No-load Current		4.61 A			
NEMA Nom. Eff.		89.2	Power Factor		8	Line-line Res. @ 25°C		1.05 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		56°C	
S.F. Amps					Temp. Rise @ S.F. Load		69°C	
					Locked-rotor Power Factor		37.7	
					Rotor inertia		0.255 LB-FT ²	

Load Characteristics 400 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	40	65	77	83	86	87	85
Efficiency	86.2	91.4	91.7	89.8	89.7	88.9	89.7
Speed	2980	2960	2938	2916	2890	2863	2900
Line amperes	5.08	6.33	8.22	10.4	12.8	15.4	11.8

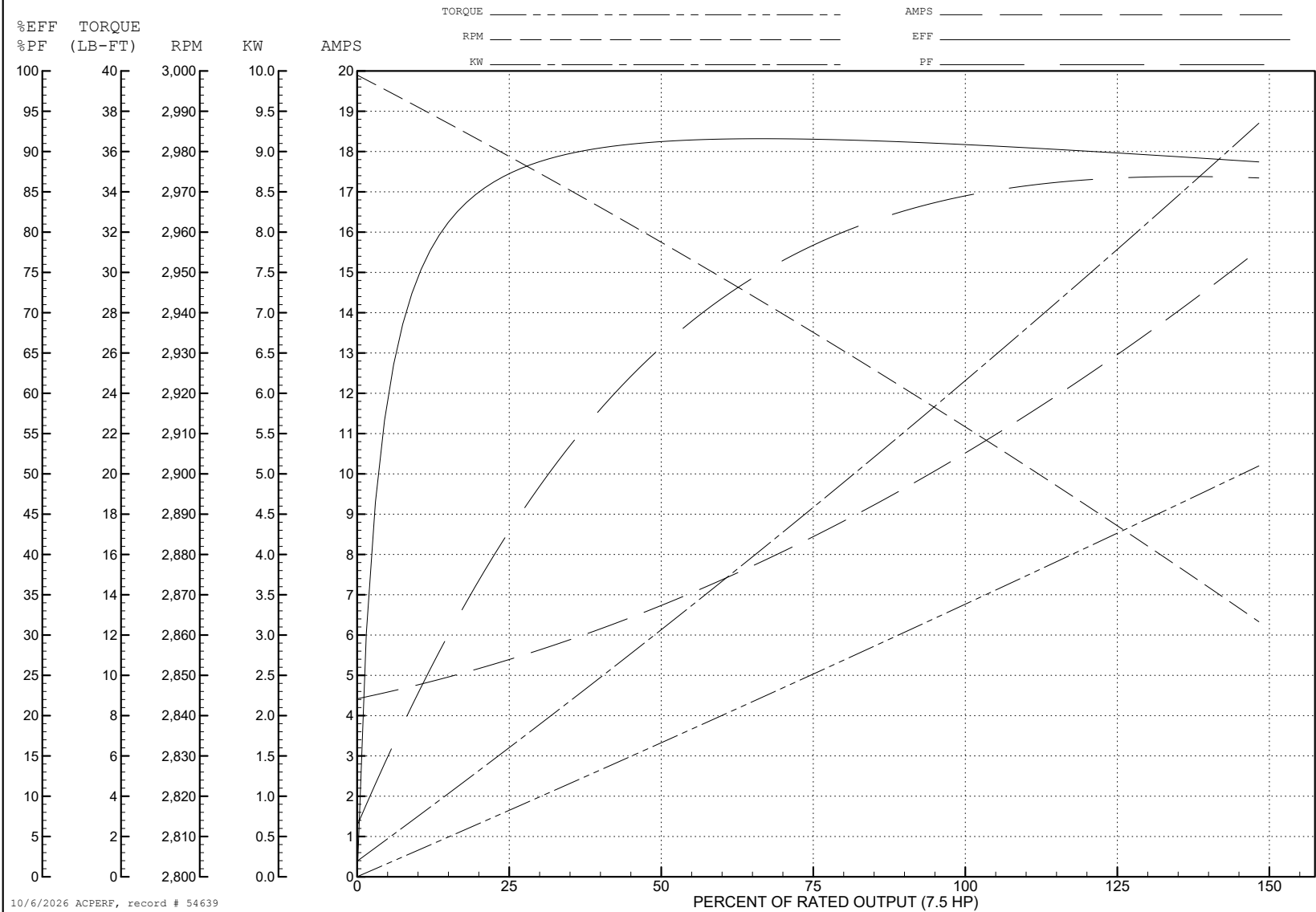
ABB Motors and Mechanical Inc.

WINDING # 37WGR575

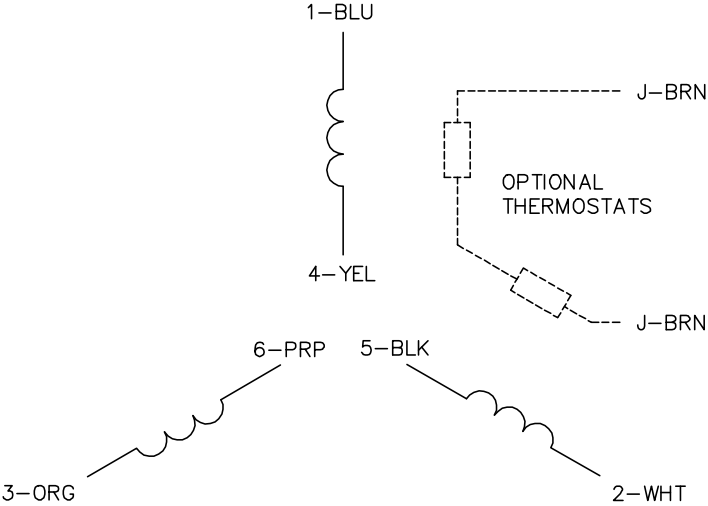
Typical performance - not guaranteed values.

7.5 HP 3 PH 50 HZ 2900 RPM 400 V 3728M

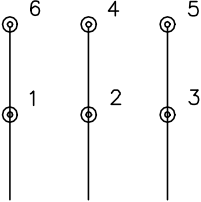
TORQUES (LB-FT): PO=44.7 PU=25.6 LR=27.1 LRA=73.2



CD0382

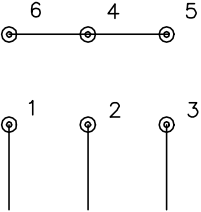


RUN CONNECTION
(1D)



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.

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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