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# Customer information packet

## EM3709T-5

7.5HP, 3520RPM, 3PH, 60HZ, 213T, 3728M, 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	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	7.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	L
Type	AC
Mech. spec.	37H244
Base	
Status	PRD/A
Elec. spec.	37WGR289
Layout	37LYH244
Eff. date	05-02-2024
CD Diagram	CD0006
Poles	02
Leads	3#14
Proprietary	False
Created date	05-10-2012

High Voltage Full Load Amps	7.0 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	3 @ 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	86
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	3520 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**

<b>NP3441L</b>									
<b>CAT.NO.</b>	EM3709T-5								
<b>SPEC.</b>	37H244R289G1								
<b>HP</b>	7.5								
<b>VOLTS</b>	575								
<b>AMP</b>	7								
<b>RPM</b>	3520								
<b>FRAME</b>	213T		<b>HZ</b>	60		<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	H	<b>DES</b>	B	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	89.5	<b>PF</b>	86						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A								
<b>DE</b>	6307		<b>ODE</b>	6206					
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>VPWM INVERTER READY</b>									
<b>CT6-60H(10:1)VT3-60H(20:1)</b>									

**AC Induction Motor Performance Data**

Record # 38326

Typical performance - not guaranteed values

<b>Winding:</b> 37WGR289-R001		<b>Type:</b> 3728M		<b>Enclosure:</b> TEFC	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	10.9 LB-FT		
<b>Volts</b>	575	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	7	<b>Breakdown Torque</b>	37.4 LB-FT		
<b>R.P.M.</b>	3520	<b>Pull-up Torque</b>	19 LB-FT		
<b>Hz</b>	60	<b>Locked-rotor Torque</b>	20.1 LB-FT		
<b>NEMA Design Code</b>	B	<b>Starting Current</b>	50.7 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	2.61 A		
<b>NEMA Nom. Eff.</b>	89.5	<b>Line-line Res. @ 25°C</b>	1.9 Ω		
<b>Rating - Duty</b>	40C	<b>Temp. Rise @ Rated Load</b>	46°C		
<b>S.F. Amps</b>	AMB-CONT	<b>Temp. Rise @ S.F. Load</b>	56°C		
		<b>Locked-rotor Power Factor</b>	33		
		<b>Rotor inertia</b>	0.255 LB-FT <sup>2</sup>		

**Load Characteristics 575 V, 60 Hz, 7.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	49	73	82	86	88	90	87
<b>Efficiency</b>	82	89	90.1	90.2	89.6	88.2	90.1
<b>Speed</b>	3579	3560	3538	3515	3490	3462	3500
<b>Line amperes</b>	3.06	4.03	5.42	6.98	8.66	10.4	7.99

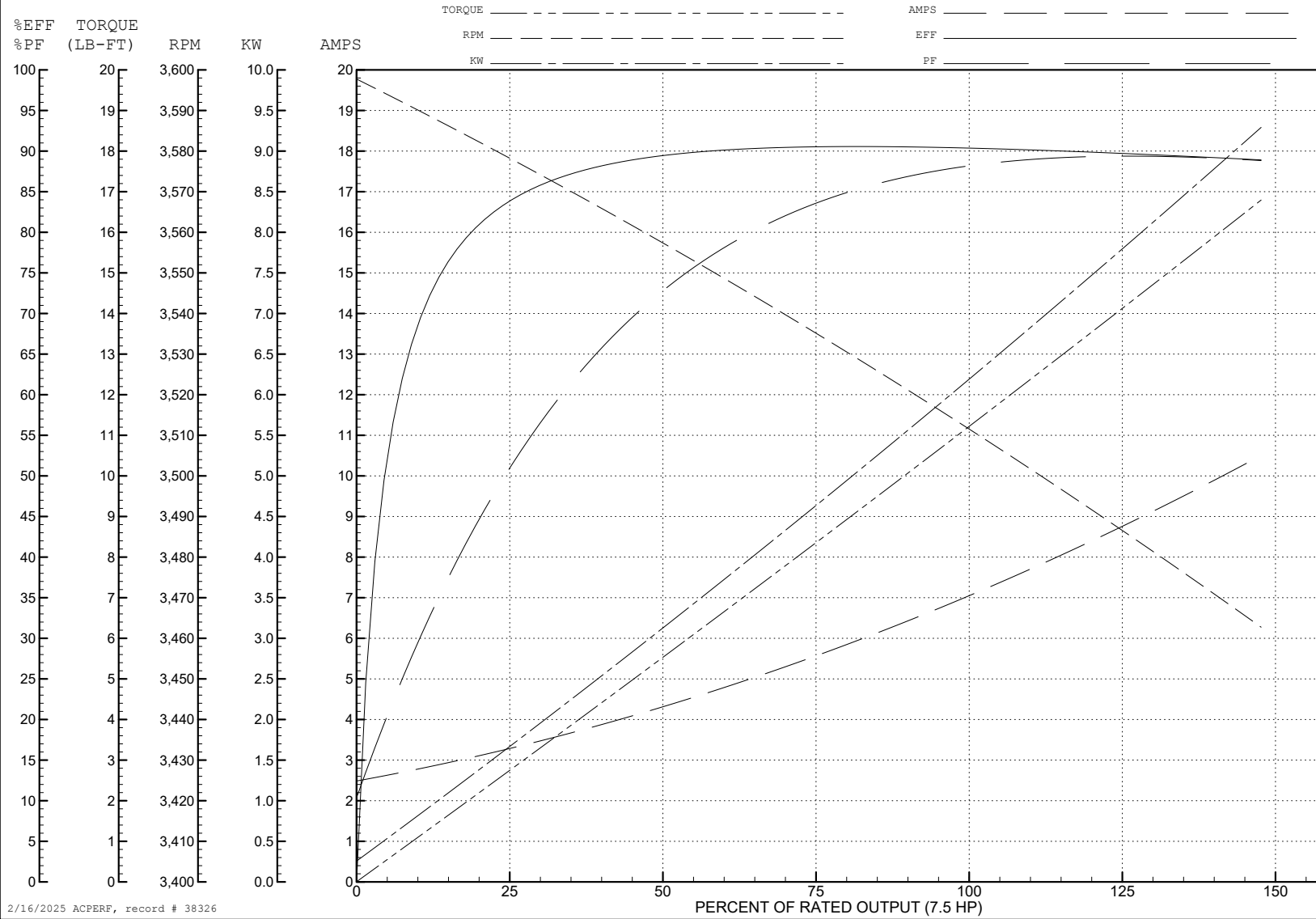
ABB Motors and Mechanical Inc.

WINDING # 37WGR289

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3520 RPM 575 V 3728M

TORQUES (LB-FT): PO=37.4 PU=19 LRA=20.1 LRA=50.7



2/16/2025 ACPERF, record # 38326



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

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