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# Customer information packet

## EM3709T-58

7.5HP, 2900RPM, 3PH, 50HZ, 213T, 3728M, TEFC, F

Class - None

Division - Not Applicable

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6/9/2025 4:11:00 AM

## 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
Auxillary Box	No Auxillary Box
Auxillary 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	J
Type	AC
Mech. spec.	37A001
Base	
Status	PRD/A
Elec. spec.	37WGR575
Layout	37LYA001
Eff. date	10-02-2024
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**

<b>NP2716L</b>									
<b>CAT NO</b>	EM3709T-58								
<b>SPEC.</b>	37A001R575G1								
<b>HP</b>	7.5/5.5KW				<b>PH</b>	3			
<b>VOLTS</b>	400								
<b>AMP</b>	10.4								
<b>R.P.M. (1/MIN)</b>	2900								
<b>FRAME</b>	213T		<b>HZ</b>	50		<b>I.P.</b>	44		
<b>SER.F.</b>	1.15	<b>CODE</b>	J	<b>DES</b>	B	<b>CL</b>	F		
<b>NOM.EFF.</b>	89.2		<b>% (100%)</b>						
<b>PF</b>	80								
<b>RATING</b>	40C AMB-S1 CONT				<b>CC</b>				
<b>DE BRG</b>	6307		<b>ODE</b>	6206					
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>BLANK</b>	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
<b>Nameplate Data</b>		<b>400 V, 50 Hz: Single Voltage Motor</b>	
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	Locked-rotor Torque	27.1 LB-FT
NEMA Design Code	B KVA Code	Starting Current	73.2 A
Service Factor (S.F.)	1.15	No-load Current	4.61 A
NEMA Nom. Eff.	89.2 Power Factor	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 <sup>2</sup>

**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

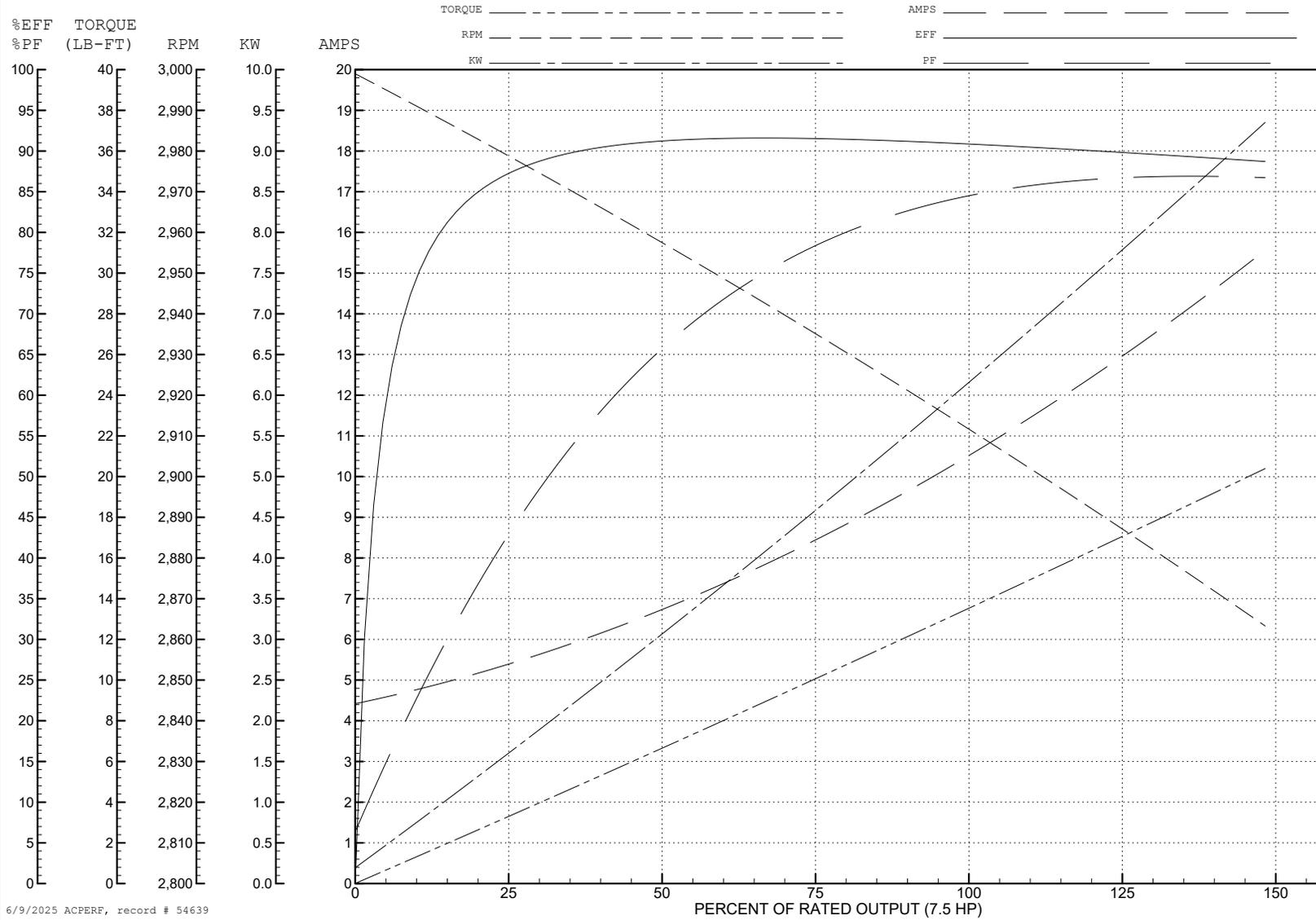
ABB Motors and Mechanical Inc.

WINDING # 37WGR575

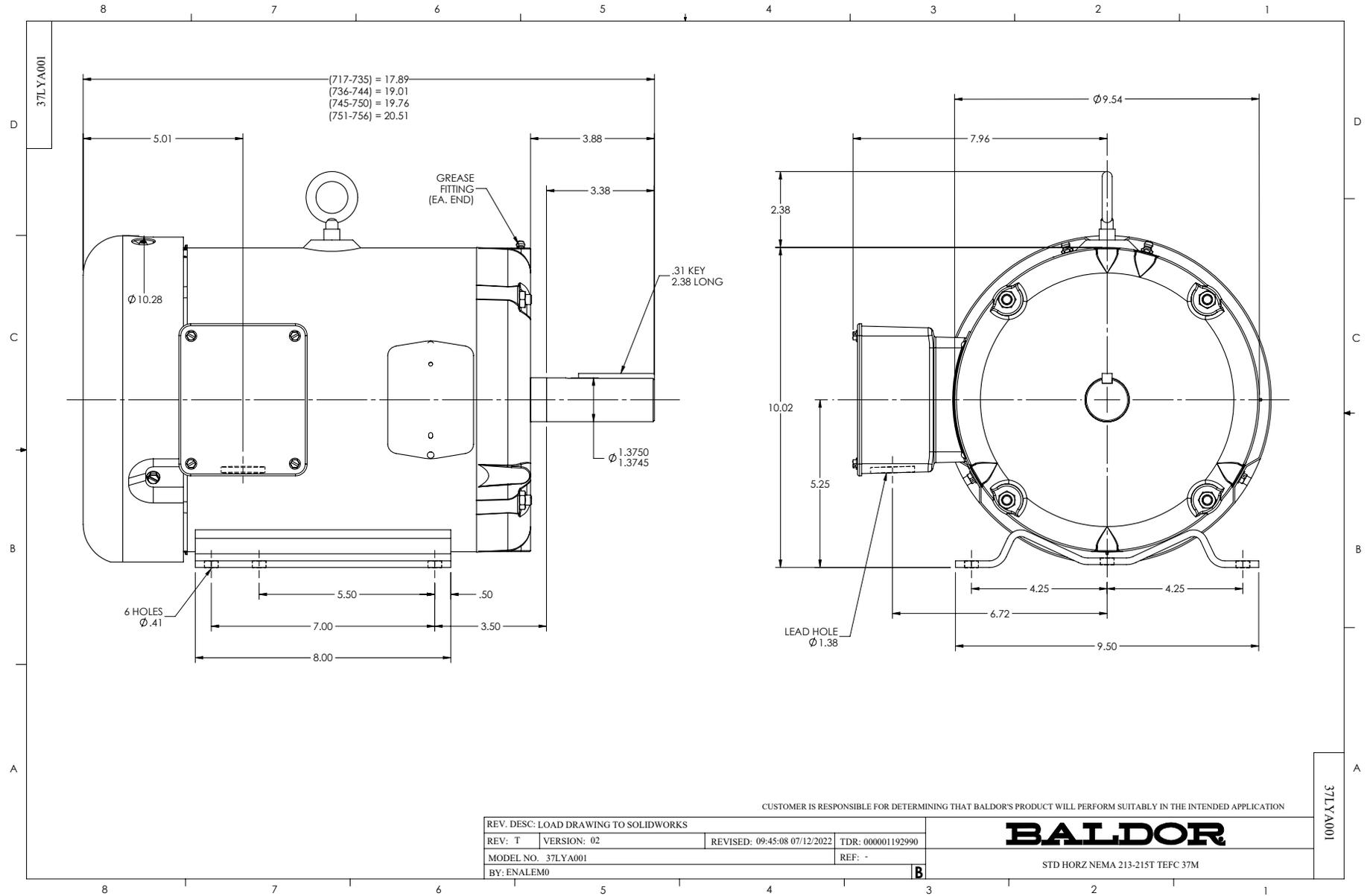
7.5 HP 3 PH 50 HZ 2900 RPM 400 V 3728M

Typical performance - not guaranteed values.

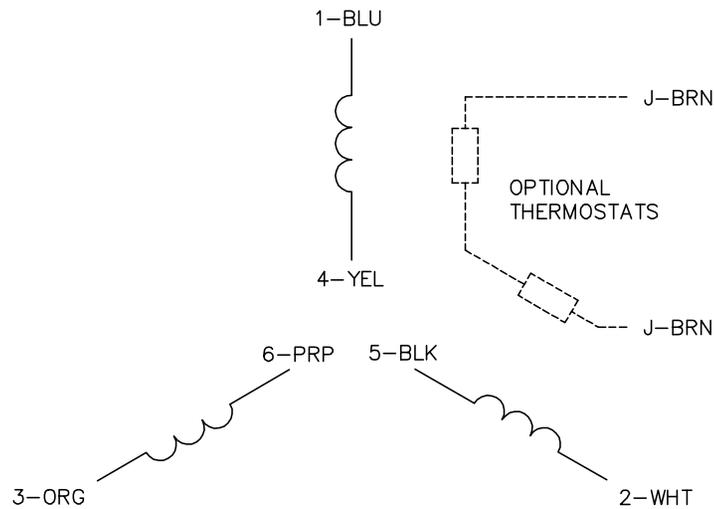
TORQUES (LB-FT): PO=44.7 PU=25.6 LR=27.1 LRA=73.2



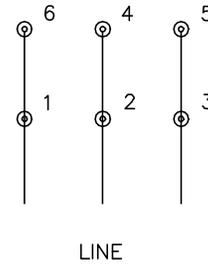
6/9/2025 ACPERF, record # 54639



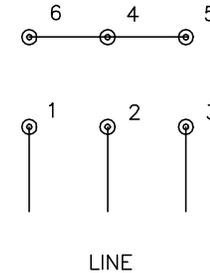
CD0382



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: -	© □	

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

SH 1 of 1