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# Customer information packet

## EM3613T-57

5HP, 2880RPM, 3PH, 50HZ, 184T, 3642M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	184T
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	5.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 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	11.200 A @ 230.0 V 6.400 A @ 400.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

## Part detail

Revision	L
Type	AC
Mech. spec.	36A001
Base	
Status	PRD/A
Elec. spec.	36WGR595
Layout	36LYA001
Eff. date	05-20-2025
CD Diagram	CD0022
Poles	02
Leads	6#16
Proprietary	False
Created date	12-22-2015

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.4 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.04 IN
Power Factor	94
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	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2880 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None

<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP2716L</b>									
<b>CAT NO</b>	EM3613T-57								
<b>SPEC.</b>	36A001R595G1								
<b>HP</b>	5/3.7KW				<b>PH</b>	3			
<b>VOLTS</b>	230/400								
<b>AMP</b>	11.2/6.4								
<b>R.P.M. (1/MIN)</b>	2880								
<b>FRAME</b>	184T		<b>HZ</b>	50		<b>I.P.</b>	44		
<b>SER.F.</b>	1.15	<b>CODE</b>	L	<b>DES</b>	A	<b>CL</b>	F		
<b>NOM.EFF.</b>	88.1		<b>% (100%)</b>						
<b>PF</b>	94								
<b>RATING</b>	40C AMB-S1 CONT				<b>CC</b>				
<b>DE BRG</b>	6206		<b>ODE</b>	6205					
<b>ENCL</b>	TEFC	<b>SN</b>							
<b>BLANK</b>	IE3-91.2(75%)91.3(50%)								
	42KG IC411								

**AC Induction Motor Performance Data**

Record # 44461

Typical performance - not guaranteed values

<b>Winding: 36WGR595-R001</b>		<b>Type: 3642M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>400 V, 50 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	5		<b>Full Load Torque</b>	9.04 LB-FT	
<b>Volts</b>	230/400		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	11.2/6.4		<b>Breakdown Torque</b>	44.9 LB-FT	
<b>R.P.M.</b>	2880		<b>Pull-up Torque</b>	36.1 LB-FT	
<b>Hz</b>	<b>50 Phase</b>	3	<b>Locked-rotor Torque</b>	40 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	L	<b>Starting Current</b>	68.1 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	1.73 A	
<b>NEMA Nom. Eff.</b>	<b>88.1 Power Factor</b>	94	<b>Line-line Res. @ 25°C</b>	1.77 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	63°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	77°C	
			<b>Locked-rotor Power Factor</b>	49	
			<b>Rotor inertia</b>	0.188 LB-FT <sup>2</sup>	

**Load Characteristics 400 V, 50 Hz, 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>	64	85	90	94	94	94	94
<b>Efficiency</b>	88.4	91.3	91.2	90.2	88.6	87	88.7
<b>Speed</b>	2969	2942	2913	2883	2851	2815	3434
<b>Line amperes</b>	2.42	3.5	4.9	6.32	7.97	9.64	7.3

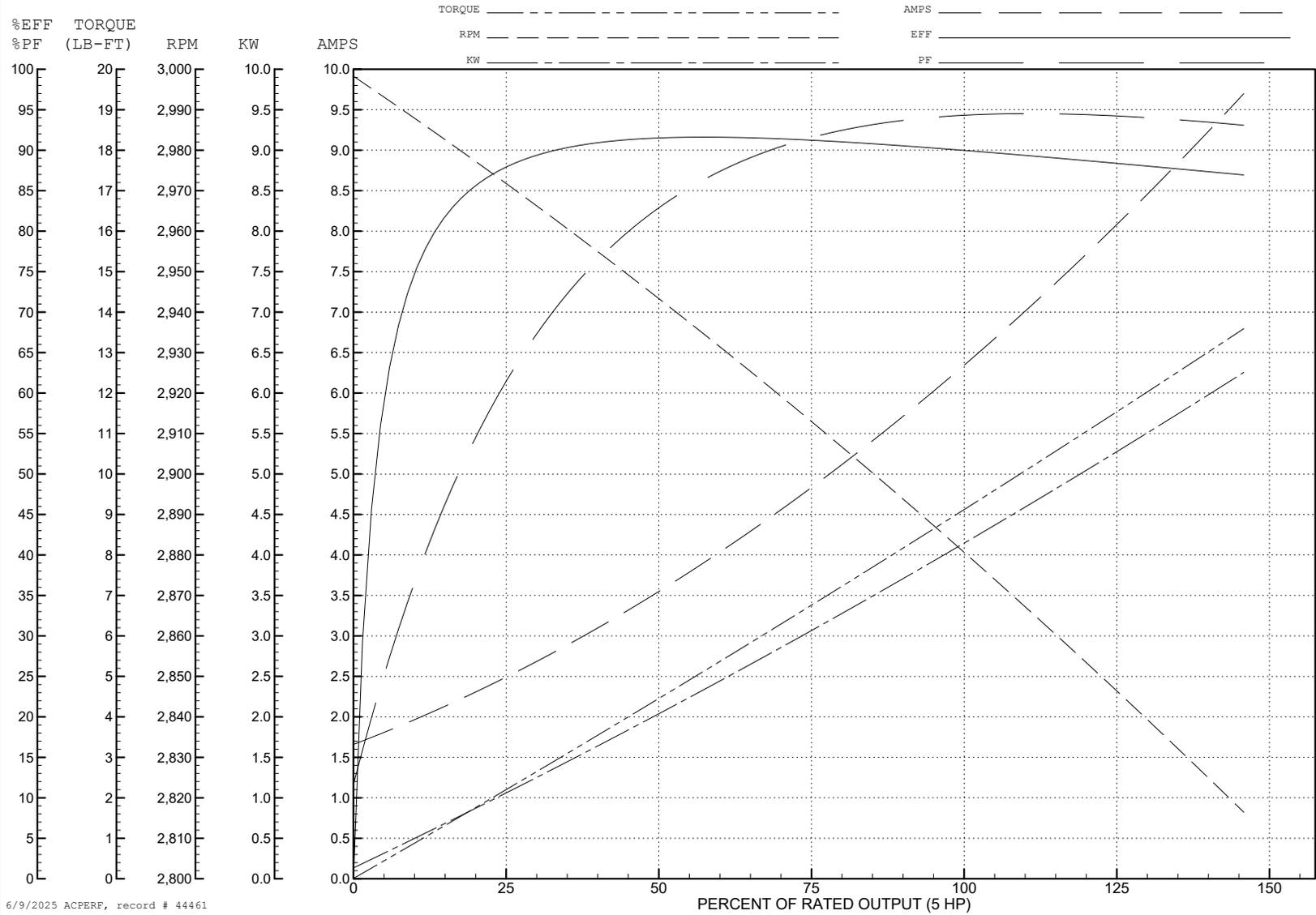
ABB Motors and Mechanical Inc.

WINDING # 36WGR595

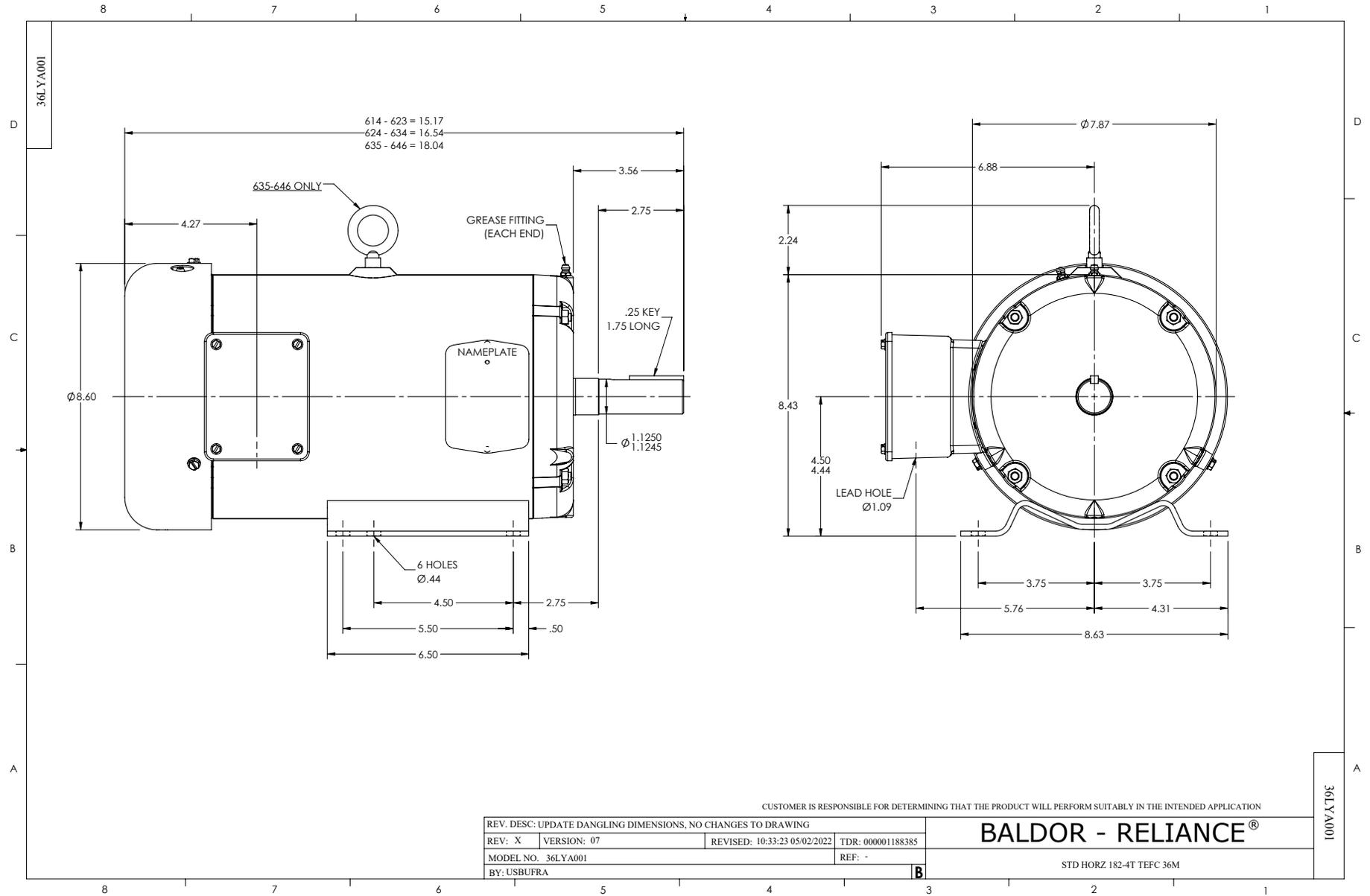
5 HP 3 PH 50 HZ 2880 RPM 400 V 3642M

Typical performance - not guaranteed values.

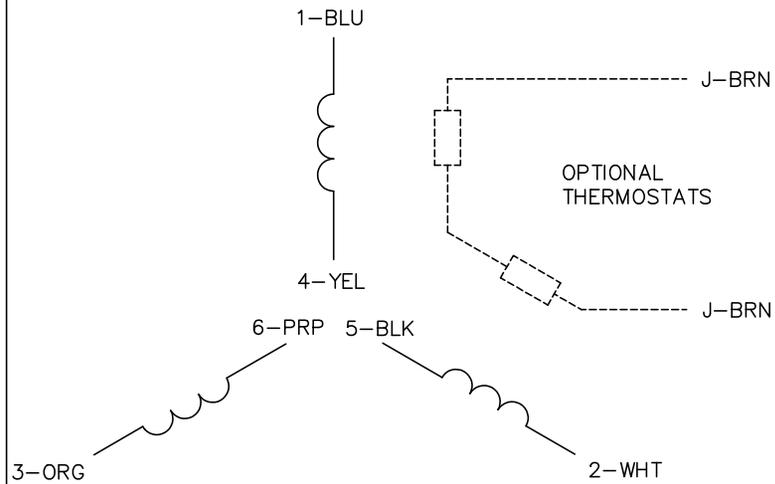
TORQUES (LB-FT): PO=44.9 PU=36.1 LR=40 LRA=68.1



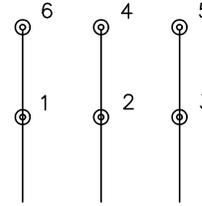
6/9/2025 ACPERF, record # 44461



CD0022

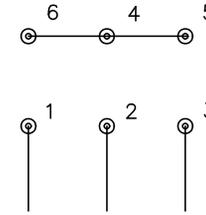


LOW VOLTAGE  
(1D)



LINE

HIGH VOLTAGE  
(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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022