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# Customer information packet

## GNEM3309T

5HP//3.7KW, 1160//955RPM, 3PH, 60//50HZ, 215

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPSB
Frame	215T
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ 3.700 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 208.0 V @ 60 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CE WEEE UKCA CURUSEEV IE3 NEMA PREMIUM
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	8.600 A @ 380.0 V 7.400 A @ 460.0 V 17.200 A @ 190.0 V 15.200 A @ 208.0 V

## Part detail

Revision	A
Type	AC
Mech. spec.	37F614
Base	
Status	PRD/A
Elec. spec.	37WGS521
Layout	37LYF614
Eff. date	05-10-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	09-01-2023

	14.800 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.4 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3744M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	17.45 IN
Power Factor	71
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

<b>Speed</b>	1160 rpm
	955 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	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>NP4304L</b>									
<b>CAT.NO.</b>	GNEM3309T								
<b>SPEC.</b>	37F614S521G5								
<b>HP</b>	5HP//3.7KW				<b>PH</b>	3			
<b>VOLTS</b>	208-230/460//190/380								
<b>AMPS</b>	15.2-14.8/7.4//17.2/8.6								
<b>R.P.M. (1/MIN)</b>	1160//955				<b>WT.</b>	63KG		<b>KG</b>	
<b>FRAME</b>	215T		<b>HZ</b>	60//50		<b>I.P.</b>	22		
<b>SER.F.</b>	1.15	<b>CODE</b>	K	<b>DES.</b>	A	<b>CLASS</b>	F		
<b>NOM.EFF.</b>	89.5//86.5		<b>% (100%)</b>						
<b>P.F.</b>	71	IC01, 10:1 VT							
<b>RATING</b>	40C AMB-S1 CONT				<b>CC</b>	010A			
<b>DE</b>	6307		<b>ODE</b>	6206					
<b>ENCL</b>	OPSB	SN							
	SFA 15.2-8.6/8.3//20/10								
	IE3-50HZ-88.9(75%),87.8(50%)								
	IE3-60HZ-90.1(75%),89.4(50%)								

**AC Induction Motor Performance Data**

Record # 100987

Typical performance - not guaranteed values

<b>Winding: 37WGS521-R014</b>		<b>Type: 3744M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>		5	<b>Full Load Torque</b>		22.5 LB-FT
<b>Volts</b>		208-230/460//190/380	<b>Start Configuration</b>		direct on line
<b>Full Load Amps</b>		15.2-14.8/7.4//17.2/8.6	<b>Breakdown Torque</b>		77.9 LB-FT
<b>R.P.M.</b>		1160//955	<b>Pull-up Torque</b>		47.4 LB-FT
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	54.8 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	K	<b>Starting Current</b>	53 A
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>		3.84 A
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	71	<b>Line-line Res. @ 25°C</b>	1.7514 Ω
<b>Rating - Duty</b>		40C	AMB-CONT	<b>Temp. Rise @ Rated Load</b>	33°C
<b>S.F. Amps</b>		15.2-8.6/8.3//20/10		<b>Temp. Rise @ S.F. Load</b>	41°C
				<b>Locked-rotor Power Factor</b>	22.7
				<b>Rotor inertia</b>	1.09 lb-ft <sup>2</sup>

**Load Characteristics 460 V, 60 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>	33	53	65	71	74	76	73
<b>Efficiency</b>	84.5	89.4	90.1	89.5	88.3	86.5	88.8
<b>Speed</b>	1191.9	1183.8	1173.7	1164.6	1153.5	1139.2	1158
<b>Line amperes</b>	4.14	4.95	6.08	7.36	8.92	10.7	8.3

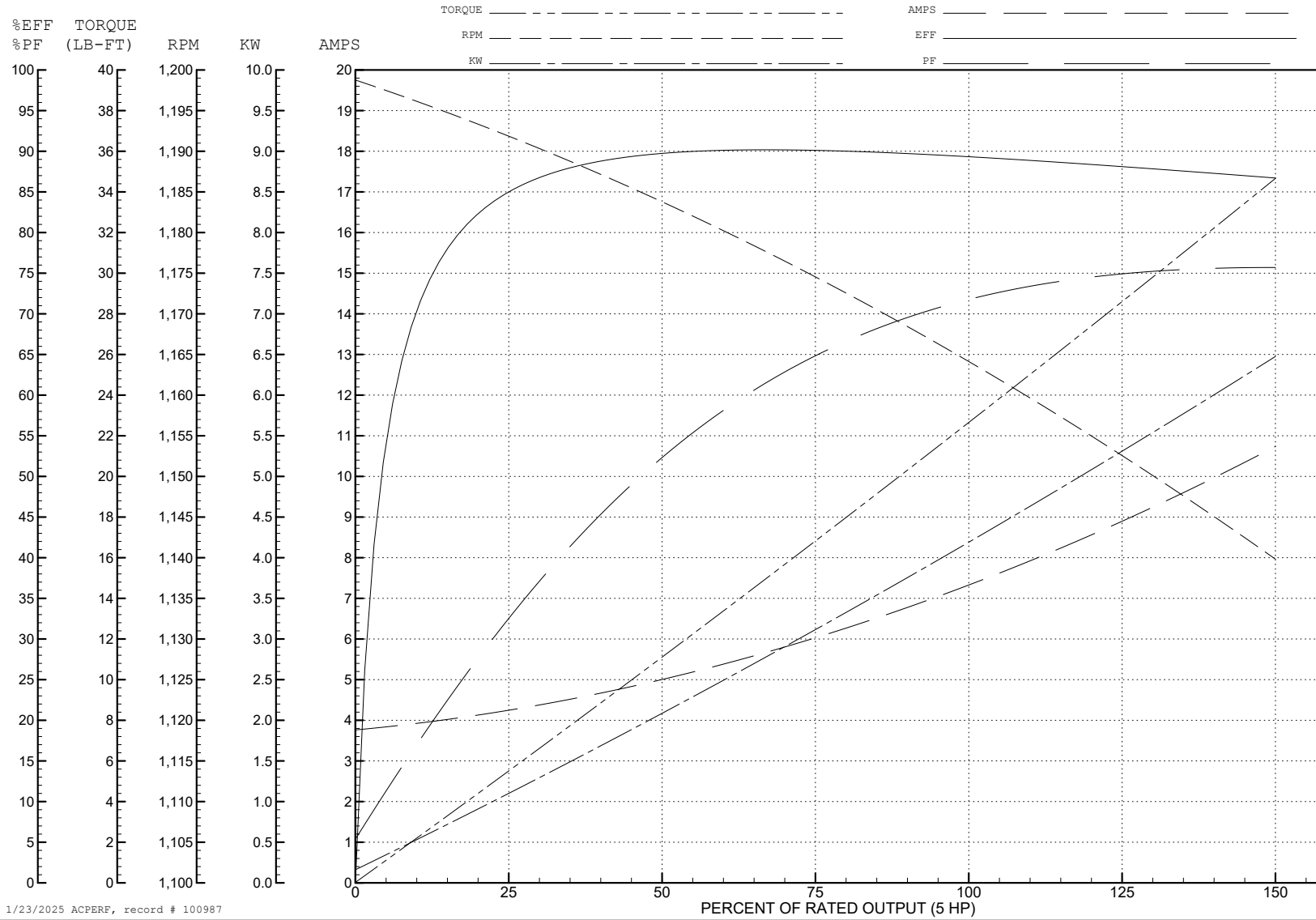
ABB Motors and Mechanical Inc.

WINDING # 37WGS521

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1164.6 RPM 460 V 3744M

TORQUES (LB-FT): PO=77.9 PU=47.4 LR=54.8 LRA=53



1/23/2025 ACPERF, record # 100987

**AC Induction Motor Performance Data**

Record # 100988

Typical performance - not guaranteed values

<b>Winding: 37WGS521-R014</b>		<b>Type: 3744M</b>		<b>Enclosure: OPSB</b>		
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>			
<b>Rated Output (HP)</b>	5		<b>Full Load Torque</b>	27.43 LB-FT		
<b>Volts</b>	208-230/460//190/380		<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	15.2-14.8/7.4//17.2/8.6		<b>Breakdown Torque</b>	75.1 LB-FT		
<b>R.P.M.</b>	1160//955		<b>Pull-up Torque</b>	52.1 LB-FT		
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	60.2 LB-FT	
<b>NEMA Design Code</b>	A		<b>KVA Code</b>	K	<b>Starting Current</b>	51.8 A
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	3.76 A		
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	71	<b>Line-line Res. @ 25°C</b>	1.74 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	44°C		
<b>S.F. Amps</b>	15.2-8.6/8.3//20/10		<b>Temp. Rise @ S.F. Load</b>	58°C		
			<b>Locked-rotor Power Factor</b>	26.3		
			<b>Rotor inertia</b>	1.09 lb-ft <sup>2</sup>		

**Load Characteristics 380 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>	39	60	71	75	76	75	76
<b>Efficiency</b>	86.8	87.8	88.9	87.9	85.5	81.4	86.5
<b>Speed</b>	990	980	968	956	939	915	946
<b>Line amperes</b>	4.17	5.25	6.8	8.61	10.89	13.9	9.98



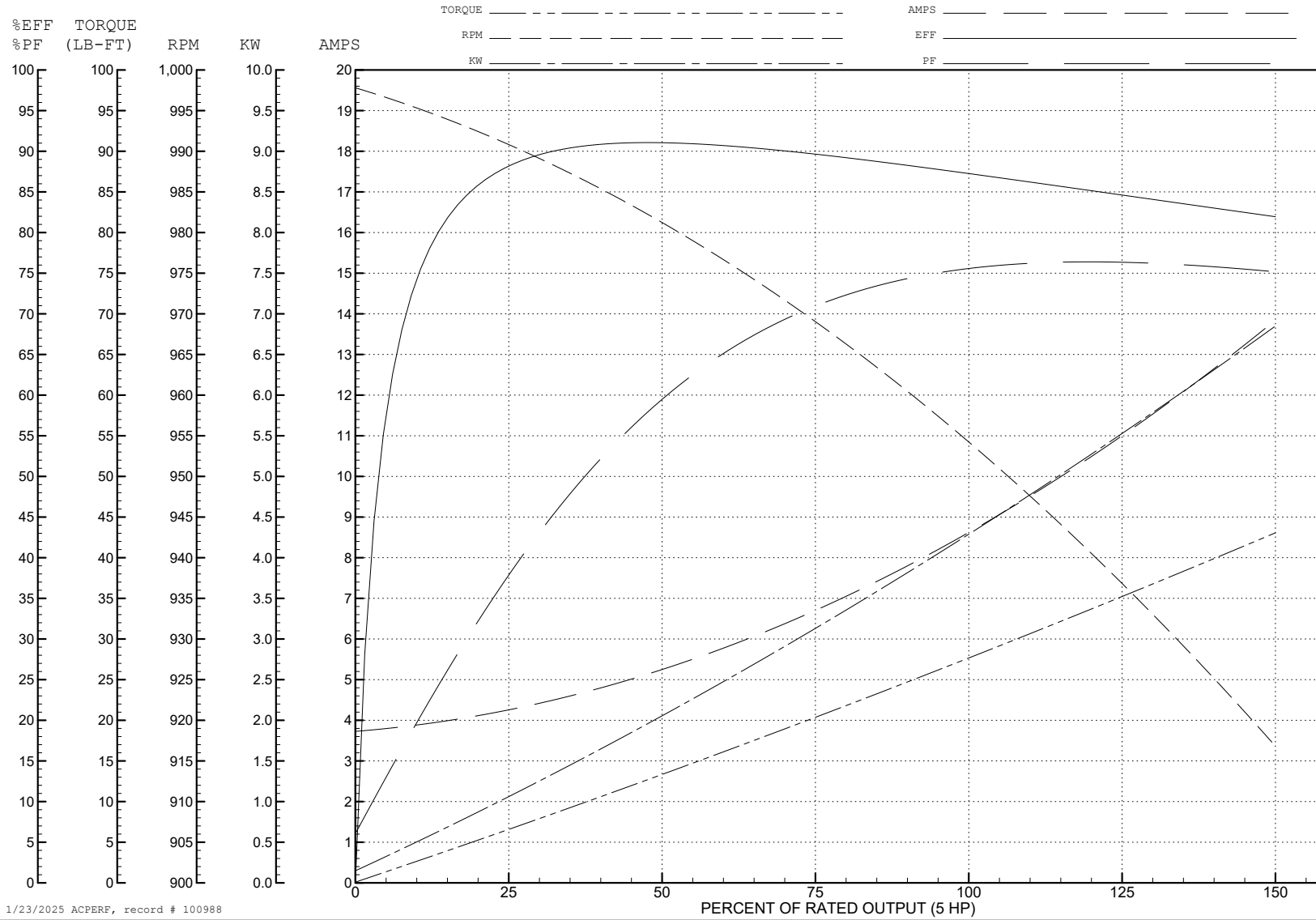
ABB Motors and Mechanical Inc.

WINDING # 37WGS521

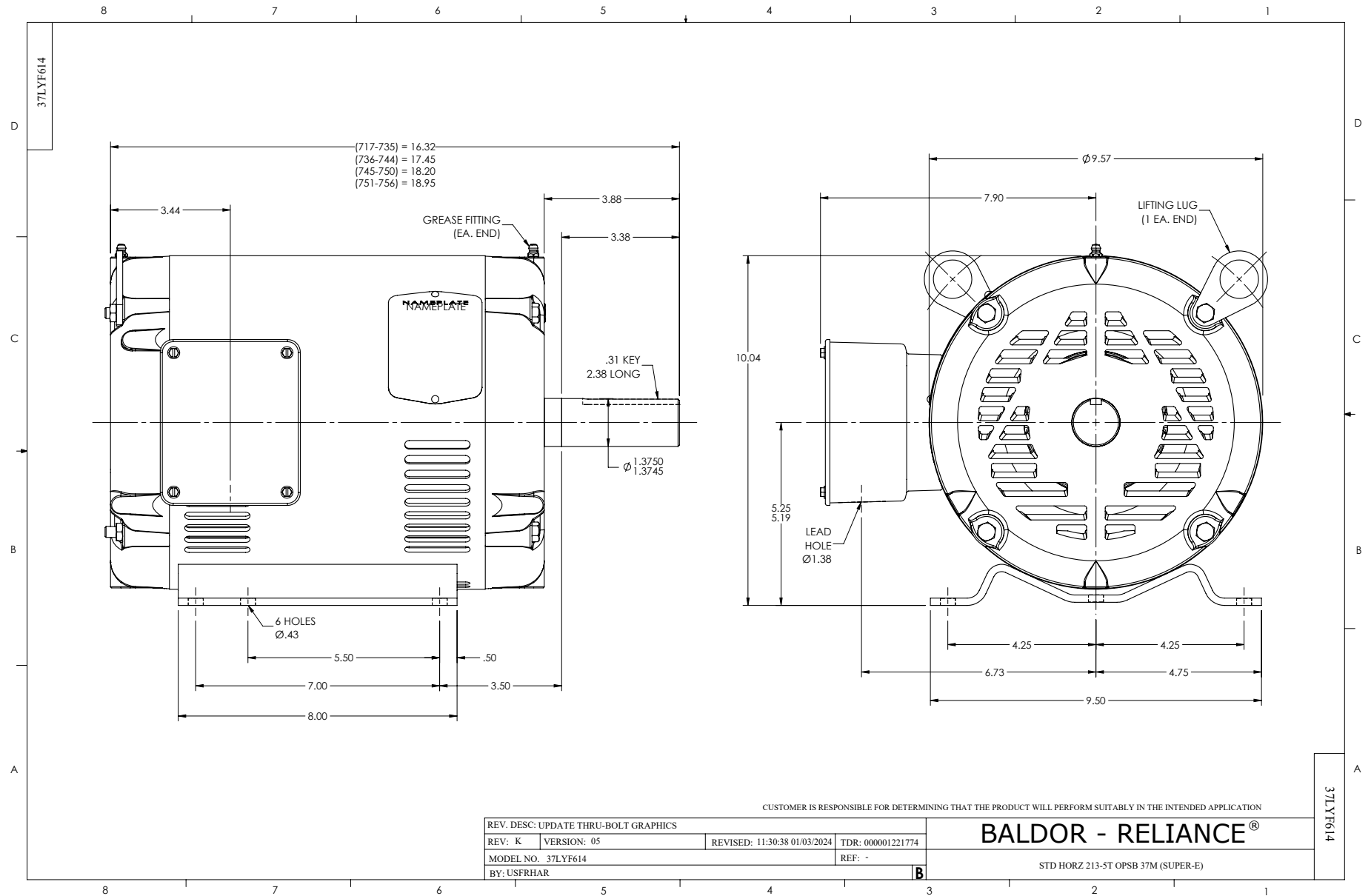
Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 956 RPM 380 V 3744M

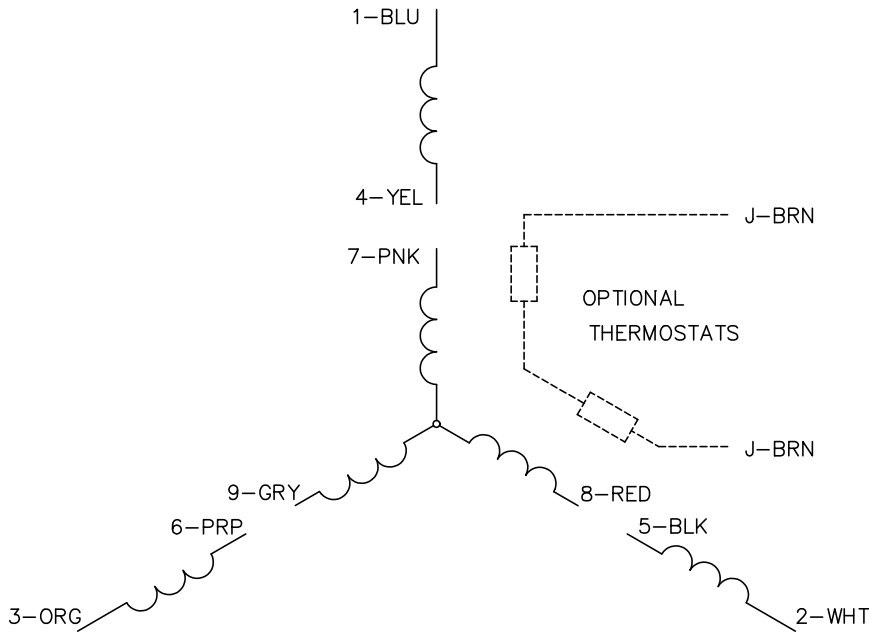
TORQUES (LB-FT): PO=75.1 PU=52.1 LR=60.2 LRA=51.8



1/23/2025 ACPERF, record # 100988



CD0005



LOW VOLTAGE  
(2Y)



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS