

**BALDOR • RELIANCE**

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# Customer information packet

## GNEM3218T

5HP, 1750//1450RPM, 3PH, 60//50HZ, 184T, 3644

Class - None

Division - Not Applicable

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## Specifications

Enclosure	OPSB
Frame	184T
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 5.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 460.0 V @ 60 HZ 208.0 V @ 60 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	WEEE UKCA IE3 CURUS CE C UR US
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	7.900 A @ 380.0 V 6.800 A @ 460.0 V 15.800 A @ 190.0 V 14.200 A @ 208.0 V

## Part detail

Revision	M
Type	AC
Mech. spec.	36G548
Base	
Status	PRD/A
Elec. spec.	36WGN116
Layout	36LYG548
Eff. date	05-09-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-15-2017

	13.600 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.8 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3644M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.50 IN
Power Factor	77
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

<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1450 rpm 1750 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

## NP4304L

<b>CAT.NO.</b>	GNEM3218T						
<b>SPEC.</b>	36G548N116G1						
<b>HP</b>	5/3.7KW	<b>PH</b>	3				
<b>VOLTS</b>	208-230/460//190/380						
<b>AMPS</b>	14.2/13.6/6.8//15.8/7.9						
<b>R.P.M. (1/MIN)</b>	1750//1450			<b>WT.</b>	44KG	<b>KG</b>	
<b>FRAME</b>	184T	<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>	90.2//88.6		<b>% (100%)</b>				
<b>P.F.</b>	77	IC01, 10:1 VT					
<b>RATING</b>	40C AMB-S1 CONT		<b>CC</b>	010A			
<b>DE</b>	6206	<b>ODE</b>	6205				
<b>ENCL</b>	OPSB	<b>SN</b>					
	IE3-50HZ-89.3(75%)89.2(50%)						
	IE3-60HZ-89.8(75%)89.0(50%)						

**AC Induction Motor Performance Data**

Record # 62315

Typical performance - not guaranteed values

Winding: 36WGN116-R001		Type: 3644M		Enclosure: OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
Rated Output (HP)		5	Full Load Torque		15.02 LB-FT
Volts	208-230/460//190/380		Start Configuration		direct on line
Full Load Amps	14.2/13.6/6.8//15.8/7.9		Breakdown Torque		51.72 LB-FT
R.P.M.		1750//1450	Pull-up Torque		29.43 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	34.74 LB-FT
NEMA Design Code	A	KVA Code	K	Starting Current	51.23 A
Service Factor (S.F.)			1.15	No-load Current	3.38 A
NEMA Nom. Eff.	90.2	Power Factor	77	Line-line Res. @ 25°C	2.13 Ω
Rating - Duty			40C AMB-CONT	Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	50°C
				Locked-rotor Power Factor	39.6
				Rotor inertia	0.41 LB-FT <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	59	71	77	81	83	79
Efficiency	83.8	89	90	90.2	89.1	87.4	89.5
Speed	1790	1781	1771	1759	1747	1732	1752
Line amperes	3.72	4.47	5.51	6.78	8.14	9.67	7.6

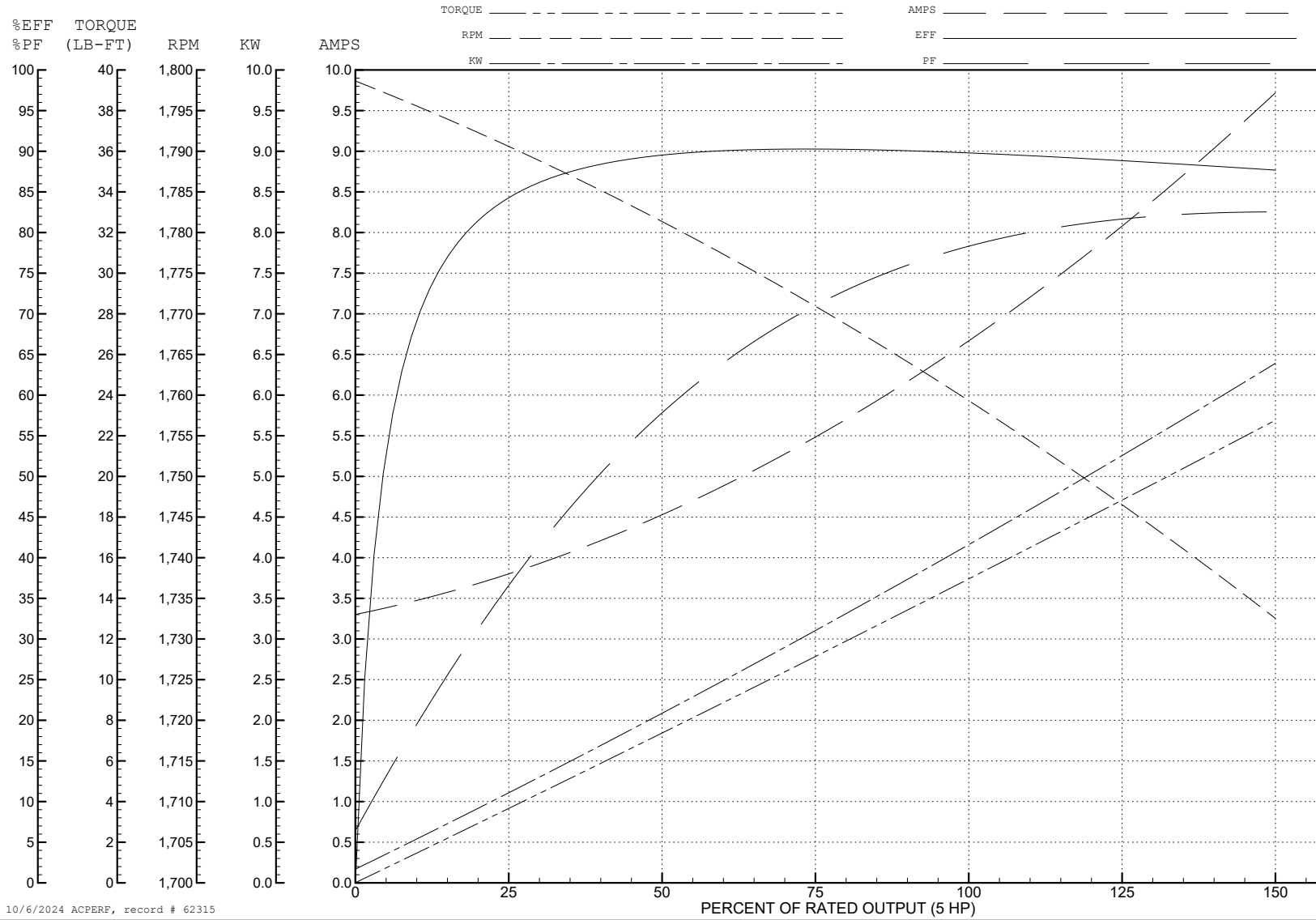
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WINDING # 36WGN116

5 HP 3 PH 60 HZ 1759 RPM 460 V 3644M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=51.72 PU=29.43 LR=34.74 LRA=51.23



10/6/2024 ACPERF, record # 62315

**AC Induction Motor Performance Data**

Record # 62316

Typical performance - not guaranteed values

Winding: 36WGN116-R001		Type: 3644M		Enclosure: OPSB		
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>			
Rated Output (HP)		5	Full Load Torque		18.2 LB-FT	
Volts		208-230/460//190/380	Start Configuration		direct on line	
Full Load Amps		14.2/13.6/6.8//15.8/7.9	Breakdown Torque		49.05 LB-FT	
R.P.M.		1750//1450	Pull-up Torque		30.01 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque	35.43 LB-FT	
NEMA Design Code		A	KVA Code	K	Starting Current	49.46 A
Service Factor (S.F.)				1.15	No-load Current	3.31 A
NEMA Nom. Eff.	90.2	Power Factor		77	Line-line Res. @ 25°C	2.13 Ω
Rating - Duty				40C AMB-CONT	Temp. Rise @ Rated Load	53°C
S.F. Amps					Temp. Rise @ S.F. Load	67°C
					Locked-rotor Power Factor	44
					Rotor inertia	0.41 LB-FT <sup>2</sup>

**Load Characteristics 380 V, 50 Hz, 5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	66	77	81	84	85	83
Efficiency	85.8	89.6	89.6	88.9	87	84.5	87.8
Speed	1489	1478	1465	1451	1436	1417	1442
Line amperes	3.76	4.78	6.2	7.89	9.76	11.88	9.01



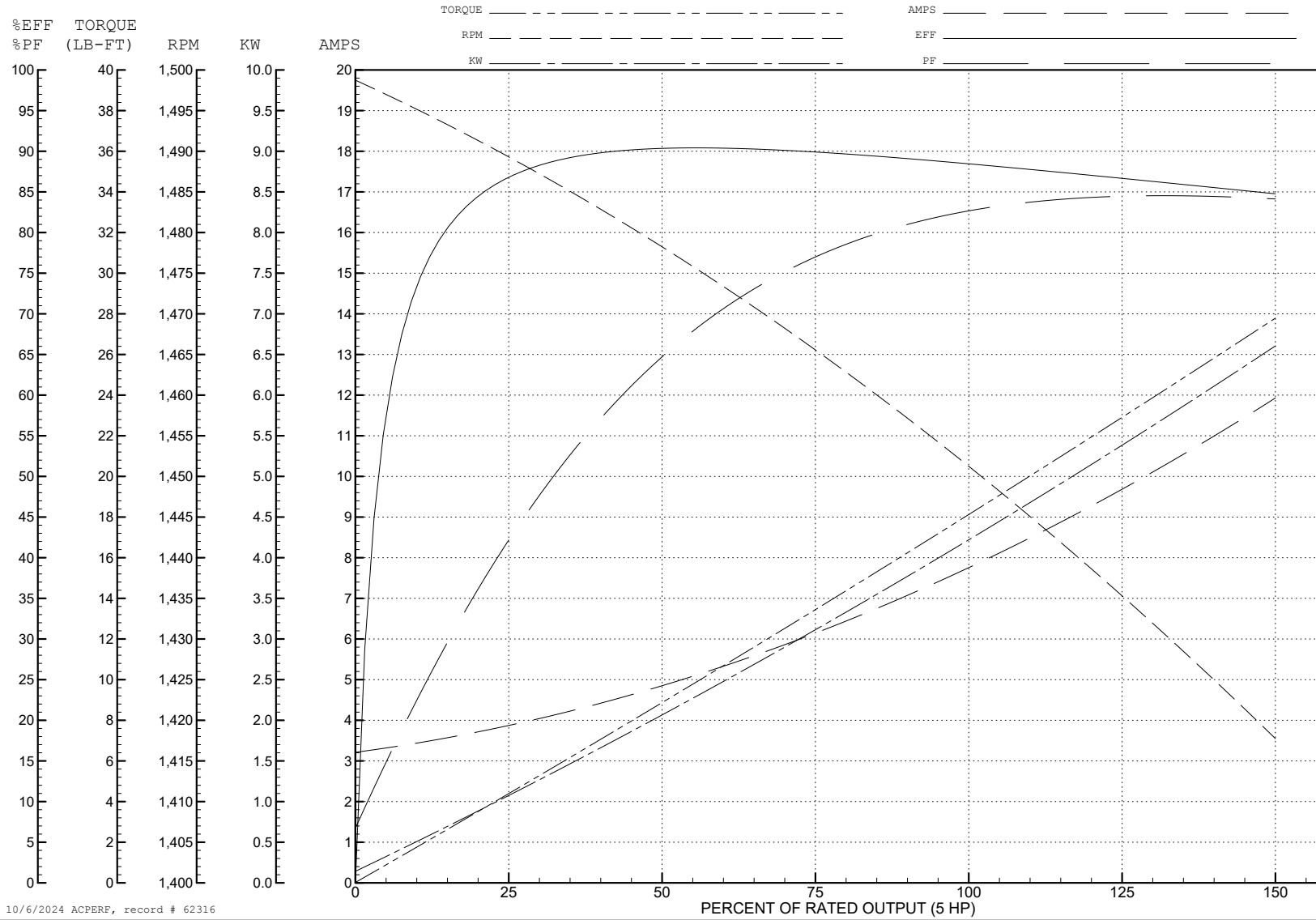
ABB Motors and Mechanical Inc.

WINDING # 36WGN116

5 HP 3 PH 50 HZ 1451 RPM 380 V 3644M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=49.05 PU=30.01 LR=35.43 LRA=49.46



10/6/2024 ACPERF, record # 62316

## AC Induction Motor Performance Data

Record # 104157

Typical performance - not guaranteed values

Winding: 36WGN116-R001		Type: 3644M		Enclosure: OPSB	
<b>Nameplate Data</b>			<b>208 V, 60 Hz: Low Voltage Connection</b>		
Rated Output (HP)		5	Full Load Torque		15.09 LB-FT
Volts		208-230/460//190/380	Start Configuration		direct on line
Full Load Amps		14.2/13.6/6.8//15.8/7.9	Breakdown Torque		41.6 LB-FT
R.P.M.		1750//1450	Pull-up Torque		23.2 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	27.4 LB-FT
NEMA Design Code	A	KVA Code	K	Starting Current	90.7 A
Service Factor (S.F.)			1.15	No-load Current	5.61 A
NEMA Nom. Eff.	90.2	Power Factor	77	Line-line Res. @ 25°C	0.531 Ω
Rating - Duty			40C AMB-CONT	Temp. Rise @ Rated Load	42°C
S.F. Amps				Temp. Rise @ S.F. Load	53°C
				Locked-rotor Power Factor	39.6
				Rotor inertia	0.41 lb-ft <sup>2</sup>

## Load Characteristics 208 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	78	82	85	85	84
Efficiency	85.9	89.9	90.2	89.9	88.4	86.2	89
Speed	1788	1777	1765	1751	1735	1717	1741
Line amperes	6.48	8.42	11.03	14.11	17.42	21.18	16.1

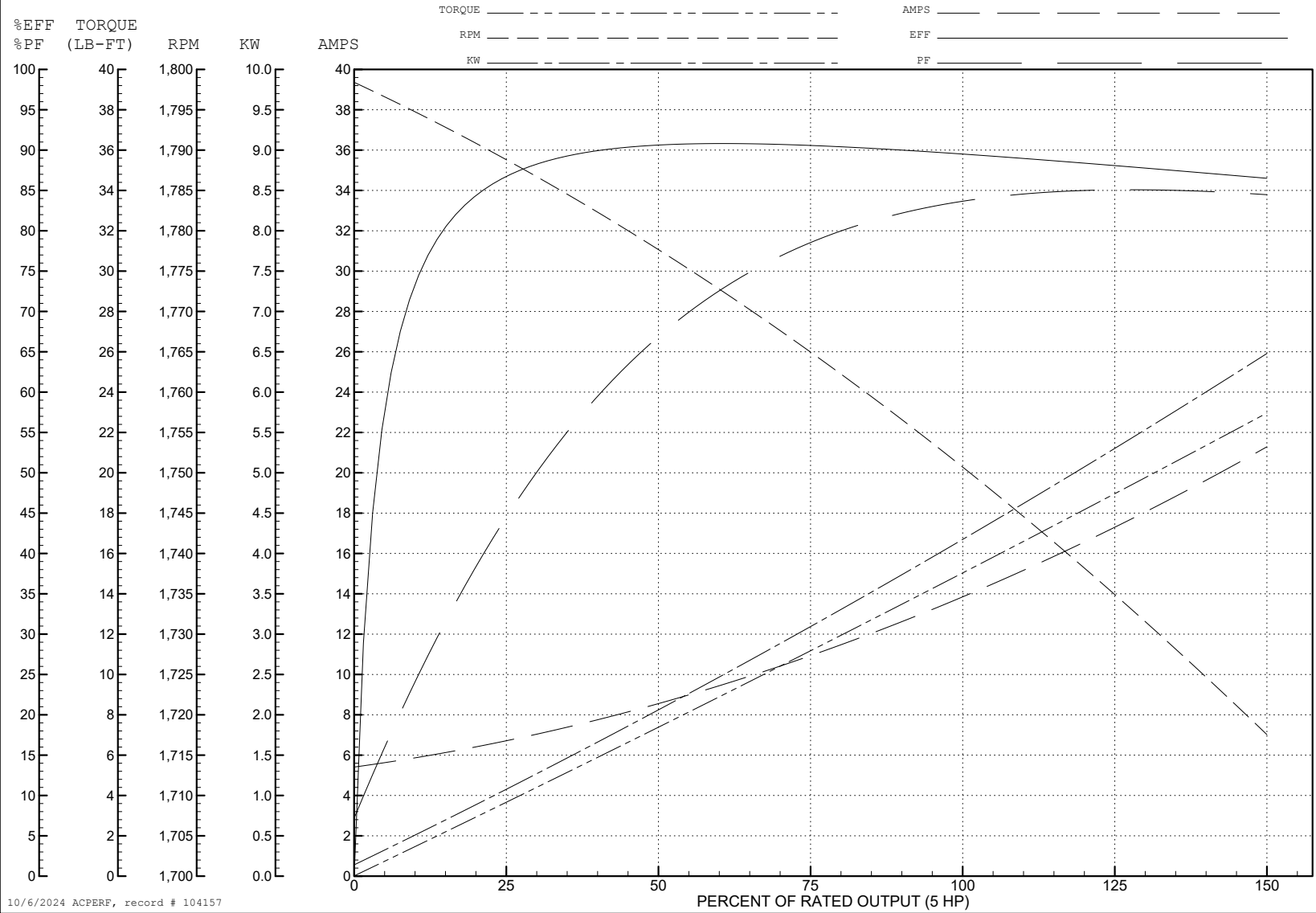
ABB Motors and Mechanical Inc.

WINDING # 36WGN116

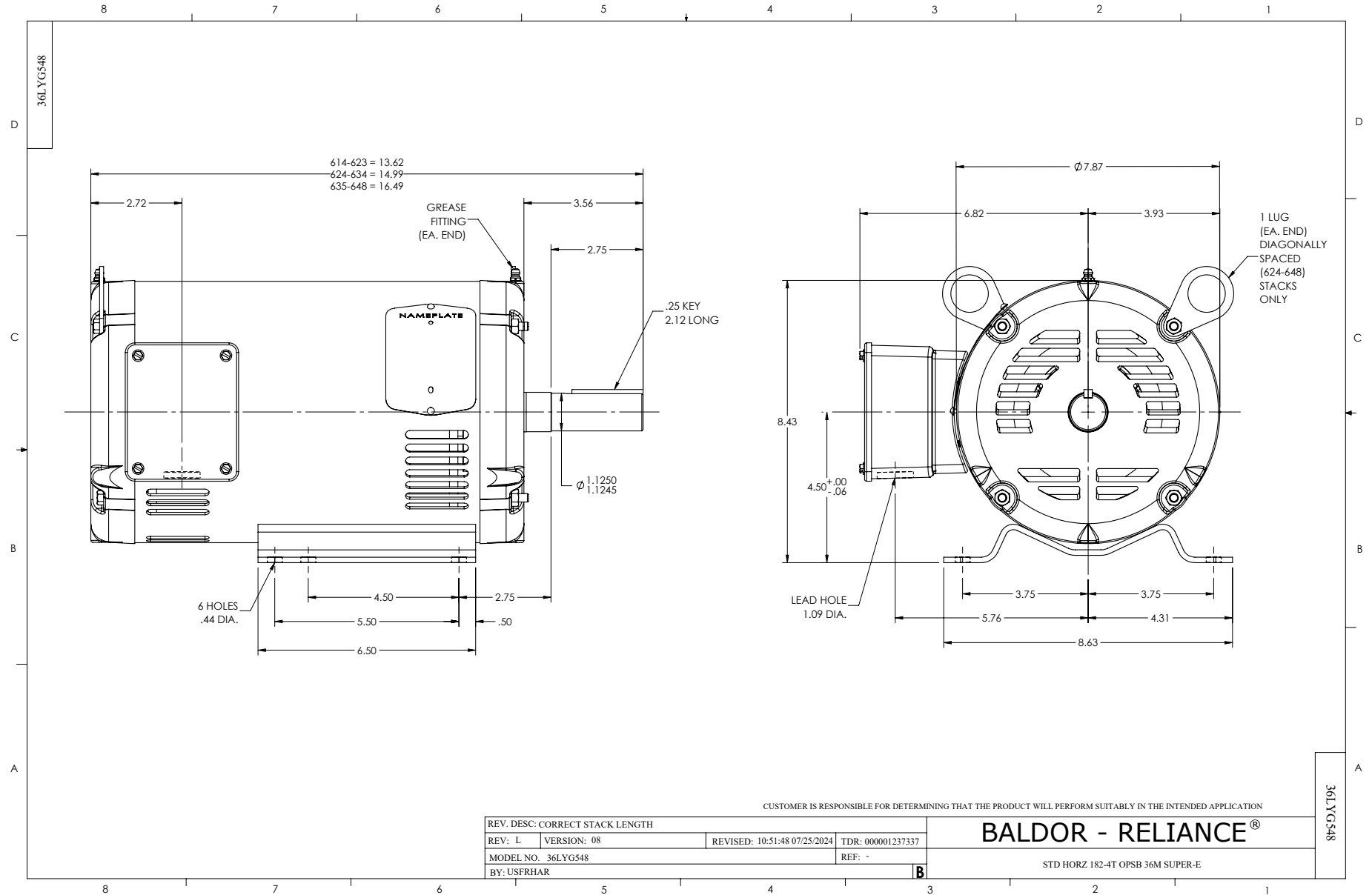
5 HP 3 PH 60 HZ 1751 RPM 208 V 3644M

Typical performance - not guaranteed values.

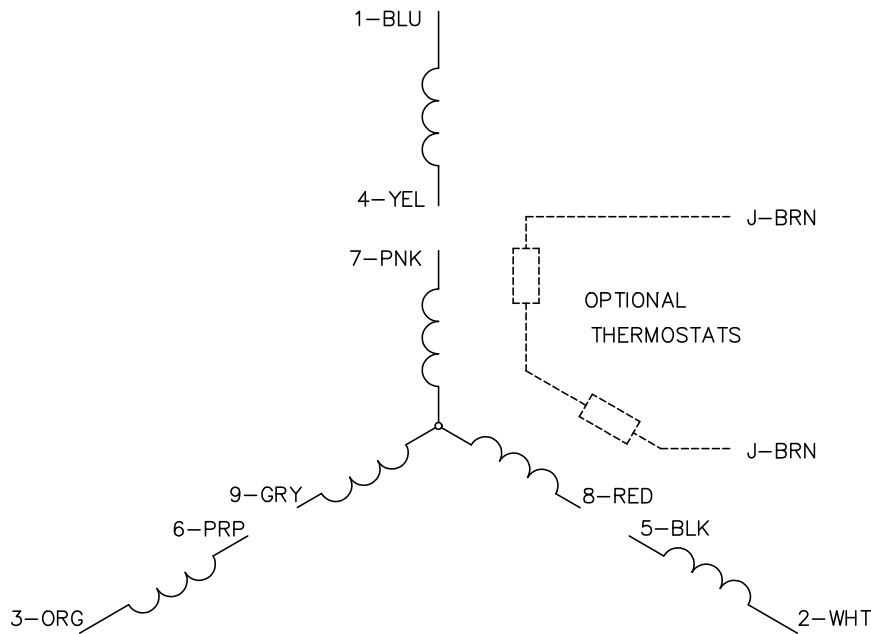
TORQUES (LB-FT): PO=41.6 PU=23.2 LR=27.4 LRA=90.7



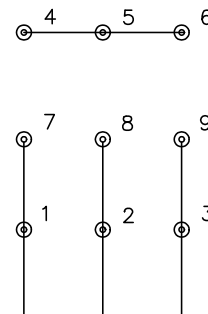
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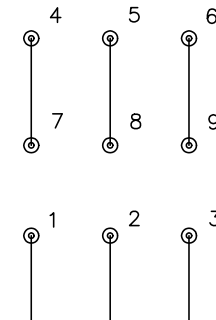


LOW VOLTAGE  
(2Y)



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
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		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS