

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3218T**

**5HP,1760RPM,3PH,60HZ,184T,3640M,OPSB,F1**

Part Detail							
Revision:	AA	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	36WGS270	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	36G548	Layout:	36LYG548	Poles:	04	Created Date:	03-24-2010
Base:	RG	Eff. Date:	04-04-2019	Leads:	9#16		

Specs			
Catalog Number:	EM3218T	Heater Indicator:	No Heater
Enclosure:	OPSB	Insulation Class:	F
Frame:	184T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	J
Motor Letter Type:	Three Phase	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	5.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 16 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3640M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	80
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End

<b>Blower:</b>	None	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Current @ Voltage:</b>	13.200 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	14.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	6.600 A @ 460.0 V	<b>Speed Code:</b>	Single Speed
<b>Design Code:</b>	B	<b>Motor Standards:</b>	NEMA
<b>Drip Cover:</b>	No Drip Cover	<b>Starting Method:</b>	Direct on line
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Bearing:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Winding:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 1:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553LUA</b>										
<b>CAT.NO.</b>	EM3218T									
<b>SPEC.</b>	36G548S270G1									
<b>HP</b>	5									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	13.2/6.6									
<b>RPM</b>	1750									
<b>FRAME</b>	184T				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	J	<b>DES</b>	B		<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	89.5		<b>PF</b>	80						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A			<b>USABLE AT 208V</b>						14
<b>DE</b>	6206			<b>ODE</b>	6205					
<b>ENCL</b>	OPSB		<b>SN</b>							
<b>VPWM INVERTER READY</b>										
<b>CT30-60(2:1) VT3-60(20:1)</b>										
<b>USABLE AT</b>	50HZ 5HP 190/380V 15.6/7.8A								SF1.0	

Parts List		
Part Number	Description	Quantity
SA192649	SA 36G548S270G1	1.000 EA
RA180283	RA 36G548S270G1	1.000 EA
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
36EP3204B00	MASTER ODE,205 BRG,GRSR	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
36EP3205D00	MASTER DE,206 BRG,1.197SH,GRSR	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 EA
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501E19	STD SQUARE KEY .25 SQUARE X 2.125 LONG	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HA6362ZP	LIFTING LUG FOR 36 FRAME MOTORS.	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HA3101A40	THRUBOLT 1/4-20 X 12.687	4.000 EA
36AD2004A01	BAFFLE PLATE,MOD 36-SLTD BAND MTRS DELTA	2.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
36-3403	C FACE KIT	A8
36EP1405A09SP	D-FLANGE KIT	A8

**AC Induction Motor Performance Data**

Record # 53360

Typical performance - not guaranteed values

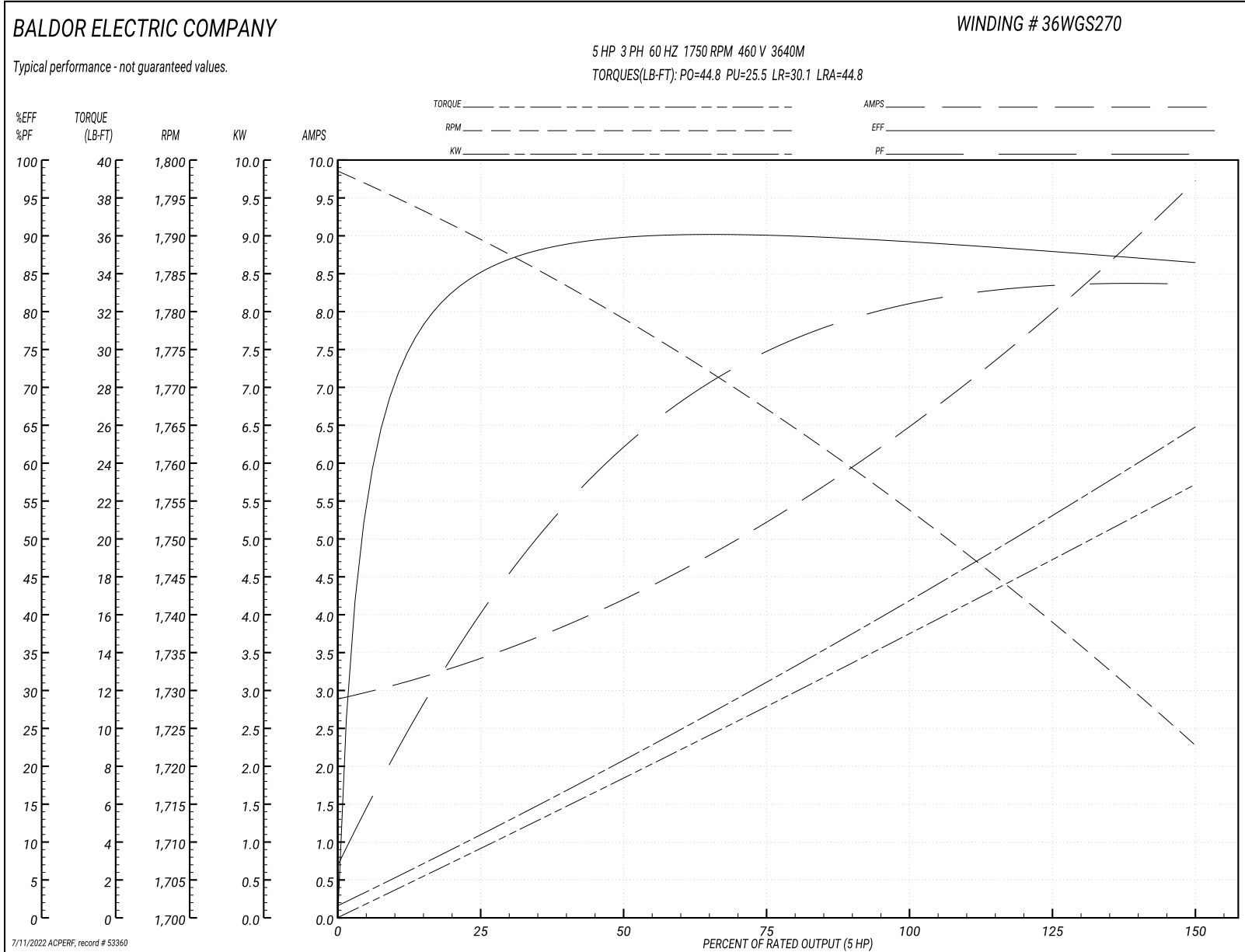
<b>Winding: 36WGS270-R004</b>		<b>Type: 3640M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	5	<b>Full Load Torque</b>	15.05 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	13.2/6.6	<b>Breakdown Torque</b>	44.8 LB-FT		
<b>R.P.M.</b>	1750	<b>Pull-up Torque</b>	25.5 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	30.1 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	J	<b>Starting Current</b>	44.8 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	2.97 A		
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	80	<b>Line-line Res. @ 25°C</b>	2.632 Ω
<b>Rating - Duty</b>	40C	<b>AMB-CONT</b>	<b>Temp. Rise @ Rated Load</b>	44°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	56°C	
			<b>Locked-rotor Power Factor</b>	41	
			<b>Rotor inertia</b>	0.372 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>	42	64	75	80	83	84	82
<b>Efficiency</b>	85.4	89.7	90.2	89.5	88.2	86.4	88.7
<b>Speed</b>	1789.2	1778.5	1766.9	1753.8	1739.5	1722.1	1745
<b>Line amperes</b>	3.33	4.14	5.26	6.59	8.05	9.68	7.47



Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 86108

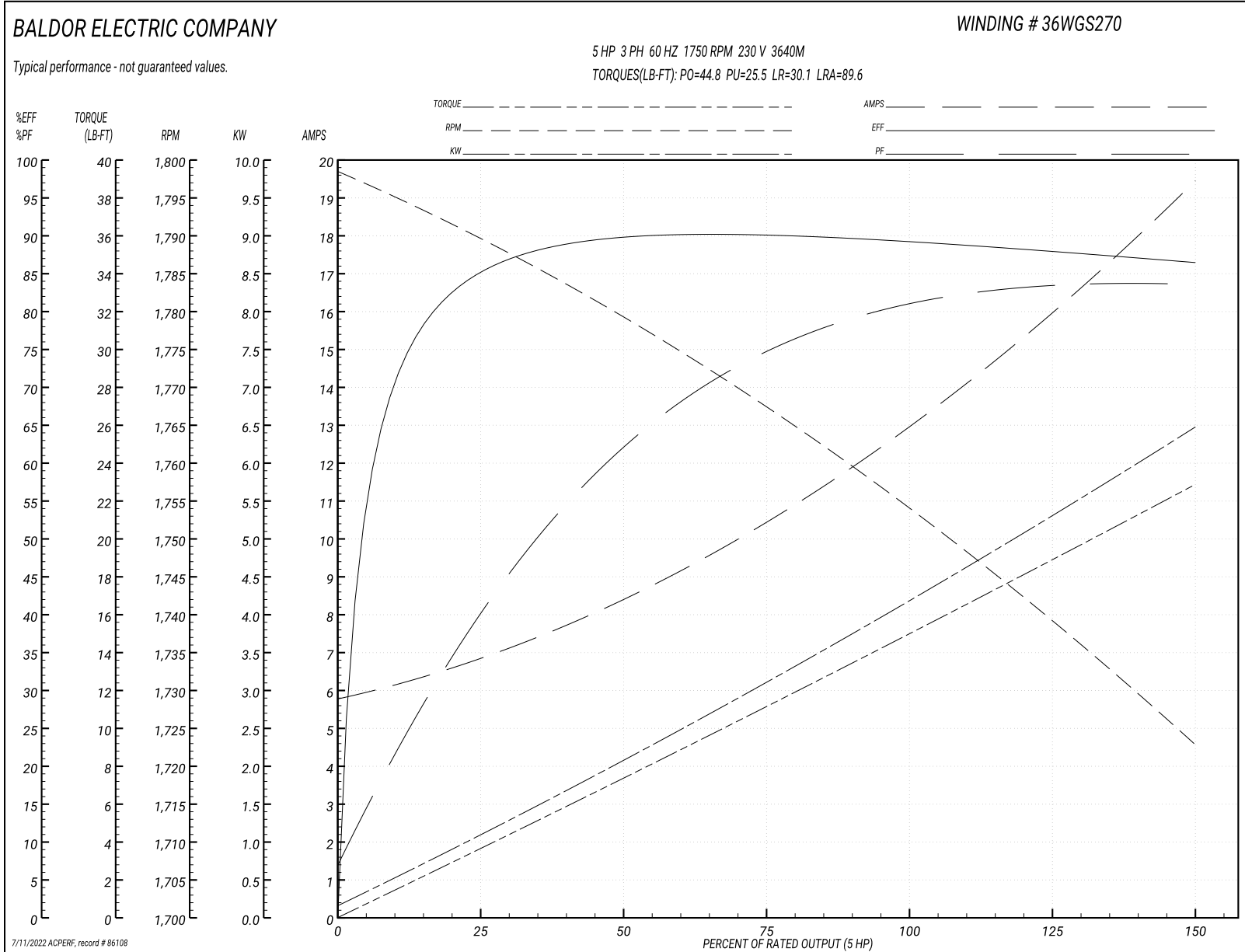
Typical performance - not guaranteed values

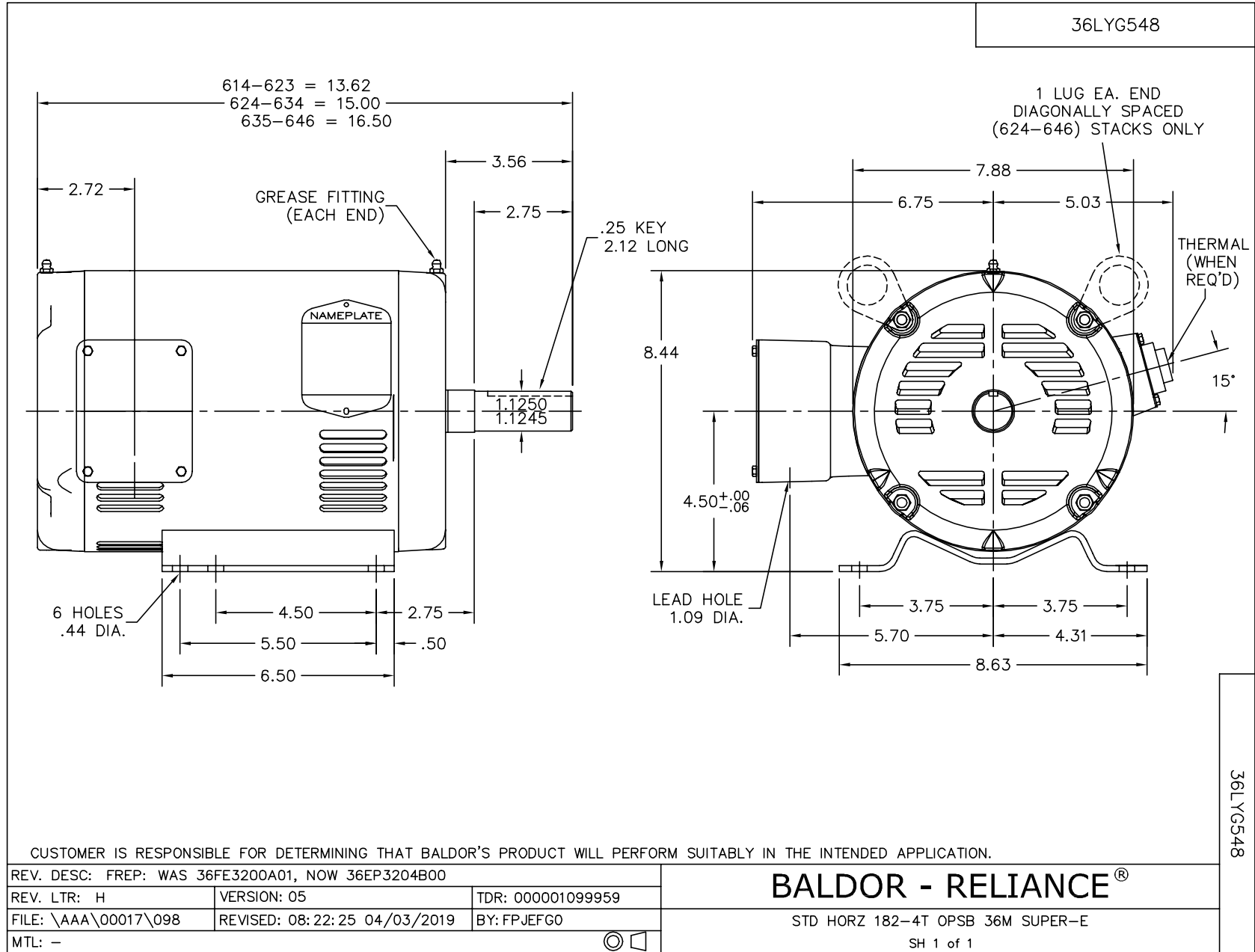
<b>Winding: 36WGS270-R004</b>		<b>Type: 3640M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	5	<b>Full Load Torque</b>	15.05 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	13.2/6.6	<b>Breakdown Torque</b>	44.8 LB-FT		
<b>R.P.M.</b>	1750	<b>Pull-up Torque</b>	25.5 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	30.1 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	J	<b>Starting Current</b>	89.6 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	5.94 A		
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	80	<b>Line-line Res. @ 25°C</b>	0.656 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	44°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	54°C	
			<b>Locked-rotor Power Factor</b>	40.8	
			<b>Rotor inertia</b>	0.372 lb-ft <sup>2</sup>	

**Load Characteristics 230 V, 60 Hz, 5 HP**

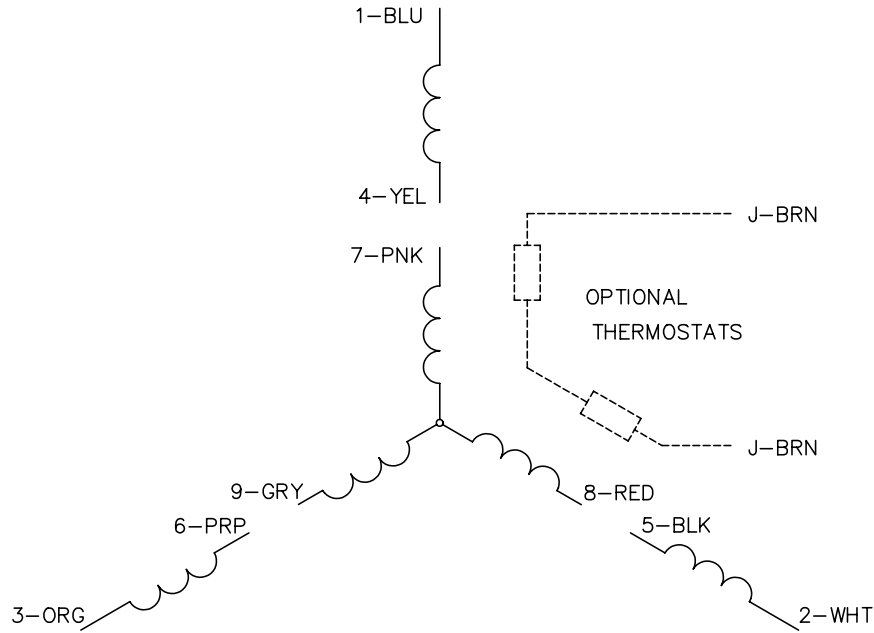
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	42	64	75	80	83	84	82
<b>Efficiency</b>	84.3	89.2	89.7	89.6	88.2	86.2	88.8
<b>Speed</b>	1789	1779	1767	1754	1740	1722	1746
<b>Line amperes</b>	6.66	8.28	10.52	13.18	16.1	19.36	14.9

Performance Graph at 230V, 60Hz, 5.0HP Typical performance - Not guaranteed values

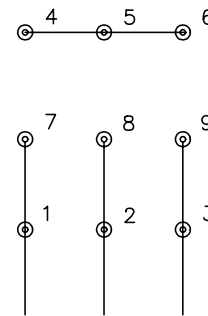




CD0005

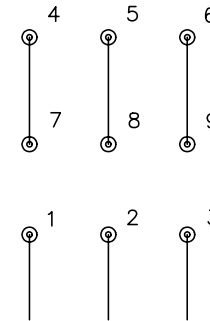


LOW VOLTAGE  
(2Y)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

90000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005