

# **BALDOR® • RELIANCE**

## **Product Information Packet**

# **VEM3613T**

**5HP,3450RPM,3PH,60HZ,184TC,3630M,TEFC,F1**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3630M	Elec. Spec:	36WGS042	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	36A003	Layout:	36LYA003
Frame:	184TC	Mounting:	F1	Poles:	02	Created Date:	05-10-2010
Base:	N	Rotation:	R	Insulation:	F	Eff. Date:	11-16-2016
Leads:	9#16					Replaced By:	
Literature:		Elec. Diagram:					

<b>Nameplate NP3441LUA</b>									
<b>CAT.NO.</b>	VEM3613T								
<b>SPEC.</b>	36A003S042G1								
<b>HP</b>	5								
<b>VOLTS</b>	230/460								
<b>AMP</b>	11.8/5.9								
<b>RPM</b>	3450								
<b>FRAME</b>	184TC			<b>HZ</b>	60			<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	L		<b>DES</b>	A	<b>CL</b>	F
<b>NEMA-NOM-EFF</b>	88.5		<b>PF</b>	91					
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A					<b>USABLE AT 208V</b>	12		
<b>DE</b>	6206		<b>ODE</b>	6205					
<b>ENCL</b>	TEFC		<b>SN</b>						
<b>VPWM INVERTER READY</b>									
<b>CT6-60H(10:1)VT3-60H(20:1</b>									
50Hz 5HP 190/380V 14.2/7.1A									SF1.0

**AC Induction Motor Performance Data**

Record # 35706 - Typical performance - not guaranteed values

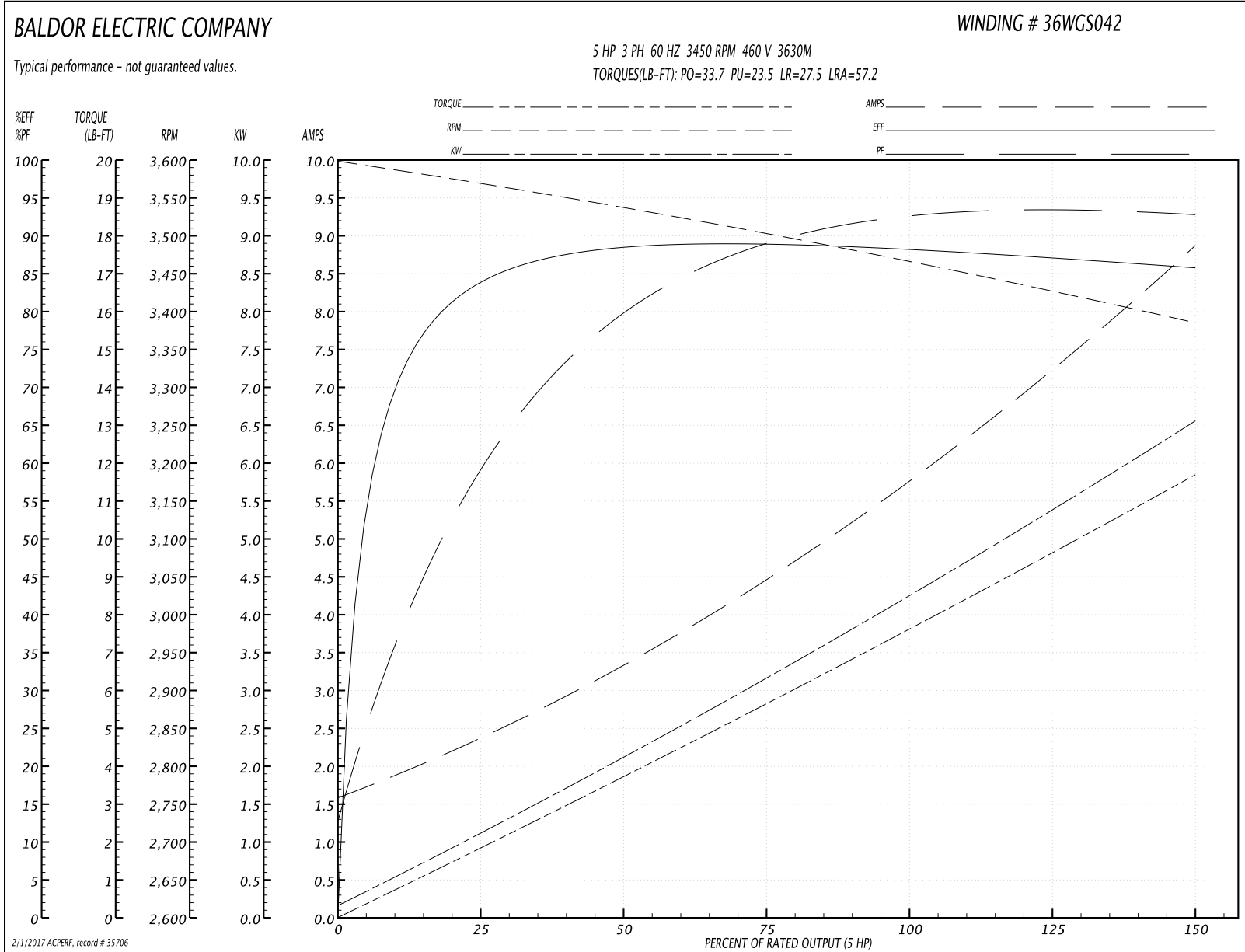
<b>Winding:</b> 36WGS042-R003	<b>Type:</b> 3630M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	5			Full Load Torque	7.64 LB-FT
Volts	208-230/460			Start Configuration	direct on line
Full Load Amps	12-11.8/5.9			Breakdown Torque	33.7 LB-FT
R.P.M.	3450			Pull-up Torque	23.5 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	27.5 LB-FT
NEMA Design Code	A	KVA Code	L	Starting Current	57.2 A
Service Factor (S.F.)	1.15			No-load Current	1.68 A
NEMA Nom. Eff.	88.5	Power Factor	91	Line-line Res. @ 25°C	2.27 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	72°C
S.F. Amps				Temp. Rise @ S.F. Load	88°C
				Locked-rotor Power Factor	45
				Rotor inertia	0.134 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	62	81	88	91	93	94	92
Efficiency	83.2	88.4	89.1	88.3	87	85.8	87.5
Speed	3569	3537	3504	3466	3428	3385	3443
Line amperes	2.24	3.26	4.47	5.85	7.26	8.8	6.7

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



**AC Induction Motor Performance Data**

Record # 35722 - Typical performance - not guaranteed values

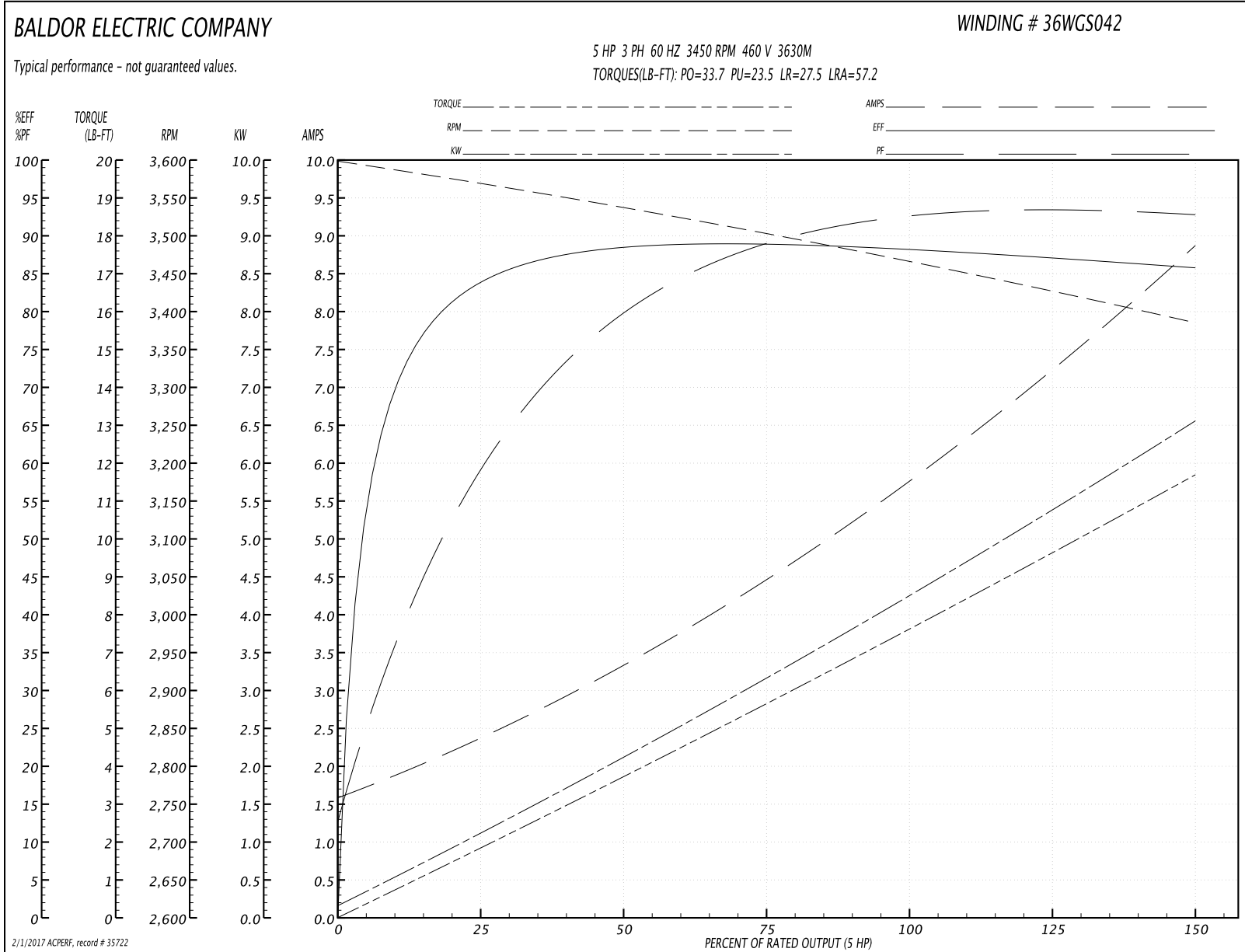
<b>Winding:</b> 36WGS042-R003	<b>Type:</b> 3630M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	5			Full Load Torque	7.64 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	11.8/5.9			Breakdown Torque	33.7 LB-FT
R.P.M.	3450			Pull-up Torque	23.5 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	27.5 LB-FT
NEMA Design Code	A	KVA Code	L	Starting Current	57.2 A
Service Factor (S.F.)	1.15			No-load Current	1.68 A
NEMA Nom. Eff.	88.5	Power Factor	91	Line-line Res. @ 25°C	2.27 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	72°C
S.F. Amps				Temp. Rise @ S.F. Load	88°C
				Locked-rotor Power Factor	45
				Rotor inertia	0.134 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	62	81	88	91	93	94	92
Efficiency	83.2	88.4	89.1	88.3	87	85.8	87.5
Speed	3569	3537	3504	3466	3428	3385	3443
Line amperes	2.24	3.26	4.47	5.85	7.26	8.8	6.7

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



**AC Induction Motor Performance Data**

Record # 59172 - Typical performance - not guaranteed values

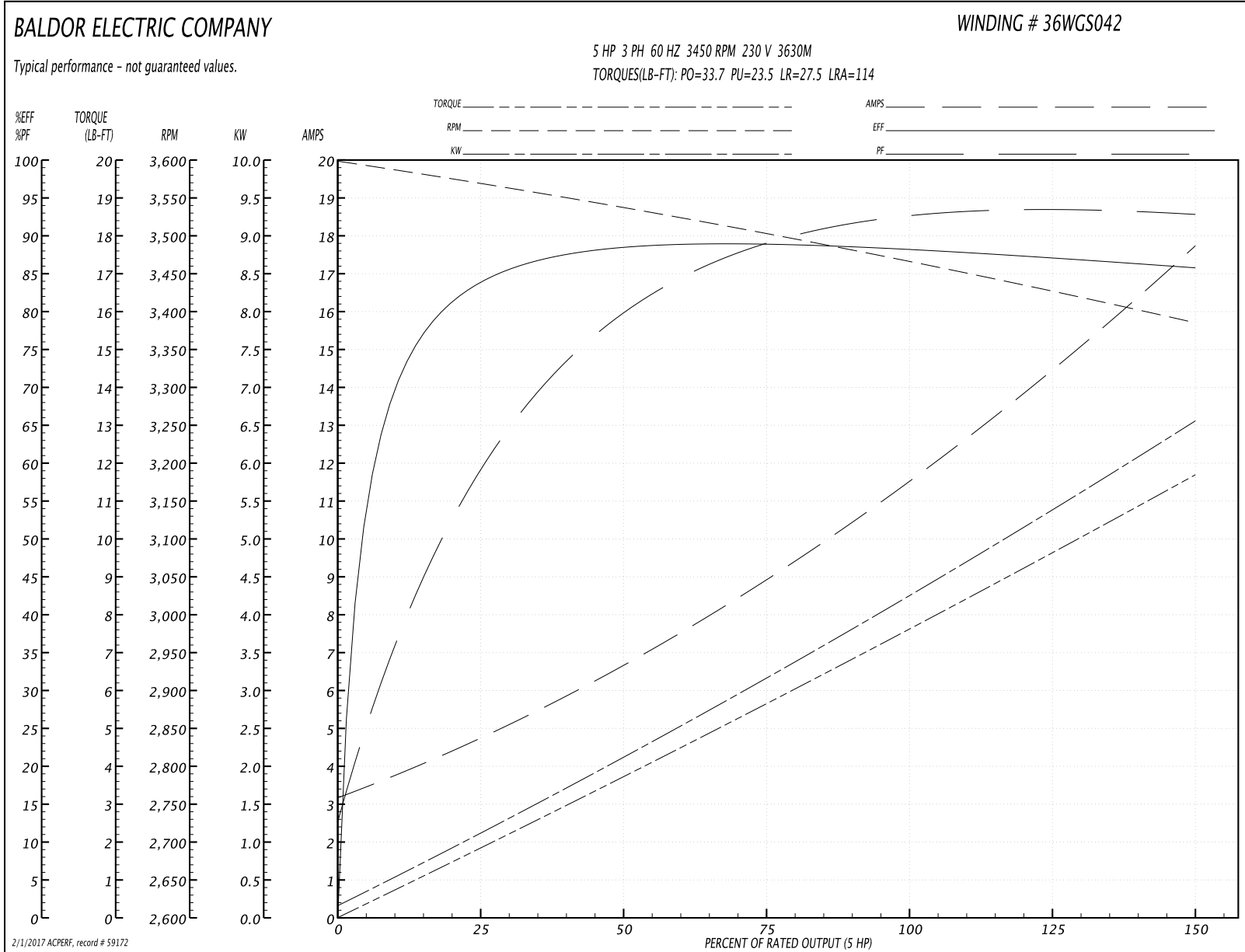
<b>Winding:</b> 36WGS042-R003	<b>Type:</b> 3630M	<b>Enclosure:</b> TEFC
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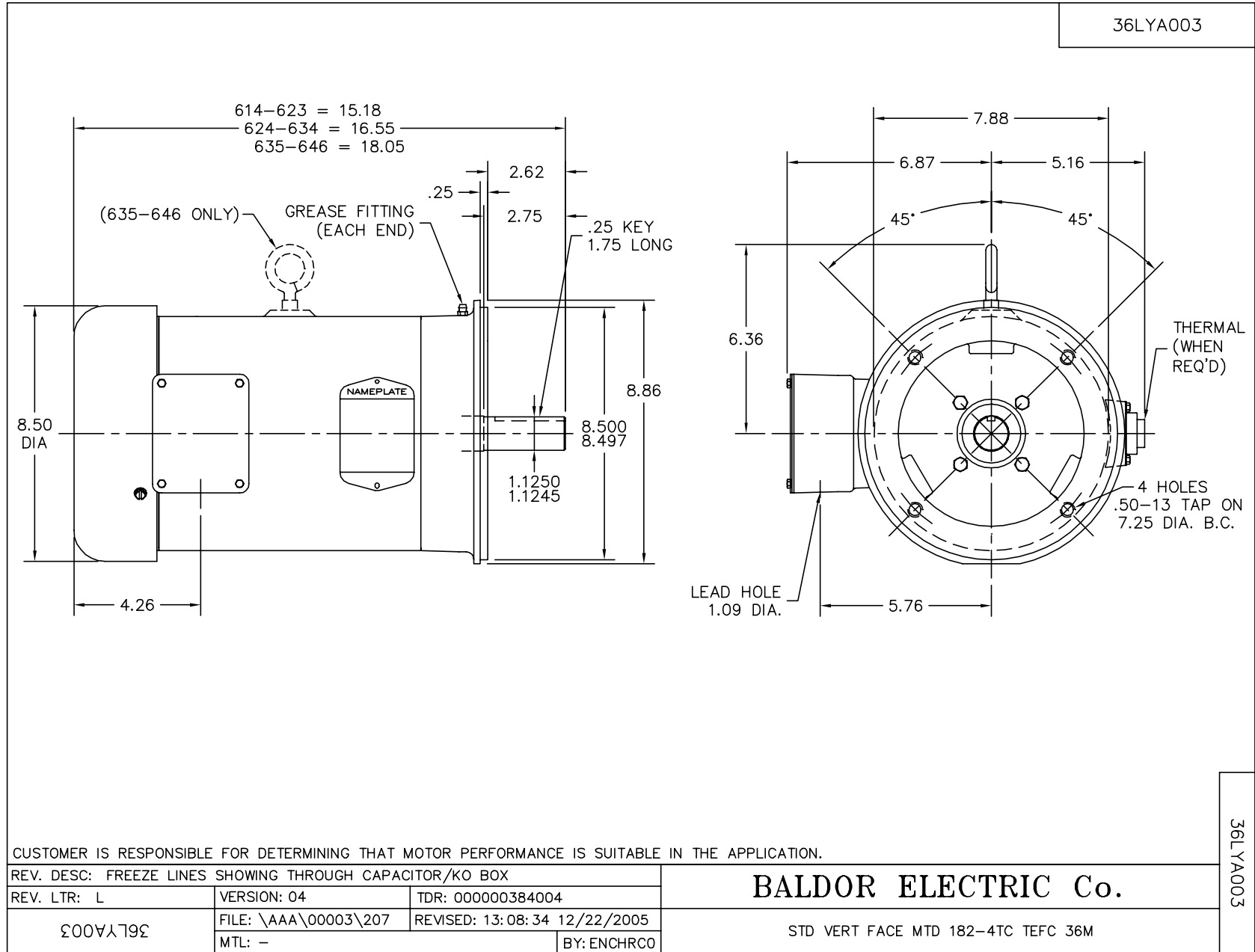
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	5			Full Load Torque	7.64 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	11.8/5.9			Breakdown Torque	33.7 LB-FT
R.P.M.	3450			Pull-up Torque	23.5 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	27.5 LB-FT
NEMA Design Code	A	KVA Code	L	Starting Current	114 A
Service Factor (S.F.)	1.15			No-load Current	3.36 A
NEMA Nom. Eff.	88.5	Power Factor	91	Line-line Res. @ 25°C	0.576 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	72°C
S.F. Amps				Temp. Rise @ S.F. Load	88°C
				Locked-rotor Power Factor	45.4
				Rotor inertia	0.134 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	81	88	91	93	94	92
Efficiency	83.2	88.4	89.1	88.3	87	85.8	87.5
Speed	3569	3537	3504	3466	3428	3385	3443
Line amperes	4.48	6.52	8.94	11.7	14.5	17.6	13.4

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





CD0005

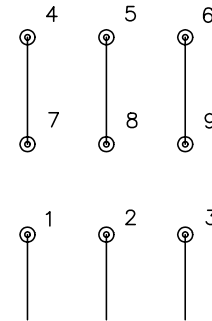


LOW VOLTAGE  
(2Y)



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