

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EBM3609Y**

**2HP,1755RPM,3PH,60HZ,184,3528M,TEFC,F1,B**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGN909	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35M527	Layout:	35LYM527	Poles:	04	Created Date:	03-24-2015
Base:	RG	Eff. Date:	07-30-2018	Leads:	9#18		

Specs			
Catalog Number:	EBM3609Y	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	184	KVA Code:	L
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	2.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3528M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	75
	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)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	2.900 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	5.800 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	6.600 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Brake Mounting	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

Nameplate NP1259L												
CAT.NO.	EBM3609Y											
SPEC.	35M527N909G1											
HP	2											
VOLTS	230/460											
AMP	5.8/2.9											
RPM	1755											
FRAME	184					HZ	60			PH	3	
SER.F.	1.15					CODE	L		DES	B	CL	F
NEMA-NOM-EFF	86.5					PF	75					
RATING	40C AMB-CONT											
CC	010A								USABLE AT 208V	6.6		
DE	6205					ODE	6203					
ENCL	TEFC					SN						

Parts List		
Part Number	Description	Quantity
SA295803	SA 35M527N909G1	1.000 EA
RA281861	RA 35M527N909G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
35EP3900T02	SPL FACE MTD FR EP-ENCL-W/STEARNS BRAKE	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3123F01	F00 W/FH MTG	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
HW2501D10	KEY, 3/16 SQ X 1.000	1.000 EA
HW2500A16	EY, USA #606, WOODRUFF	1.000 EA
35FH4005A13	IEC FH W/GRSR & 1.09 SHAFT HOLE, W/	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
84XN3816J28	HEX SOC HD, 3/8-16 X 1.75 LONG	2.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
35FN3002A02SP	EXFN, PLASTIC, 6.376 OD, .987 ID W/KEY	1.000 EA
HW2500A16	EY, USA #606, WOODRUFF	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 EA
76BK3100BQF	1-056-031-00-BQF BRAKE TDR# 79345	1.000 EA
LB1404	BRAKE CONNECTION LABEL	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP1259L	ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM	1.000 EA
G7PA1000	PKG GRP, PRINT PK1034A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

**AC Induction Motor Performance Data**

Record # 53344 - Typical performance - not guaranteed values

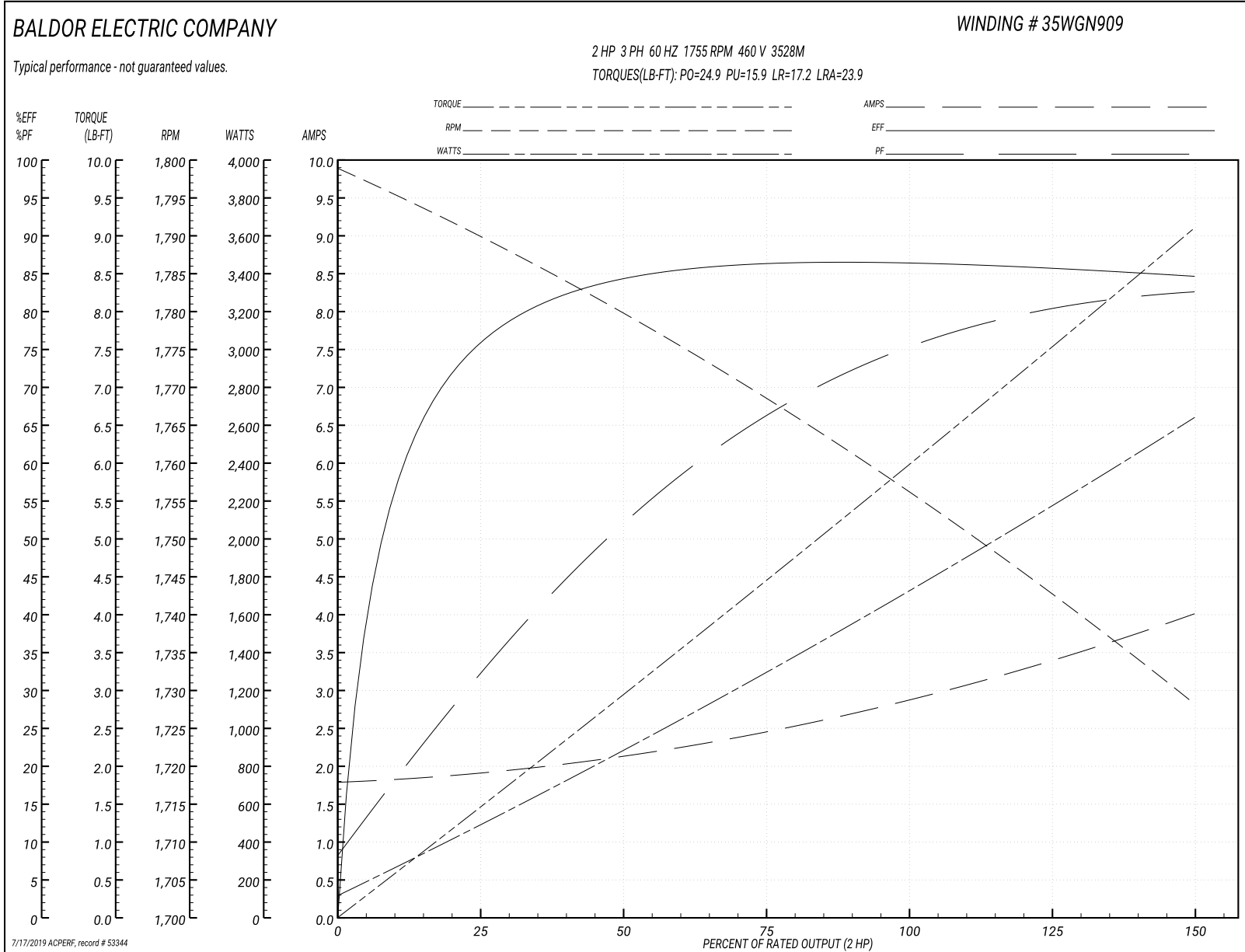
<b>Winding:</b> 35WGN909-R032	<b>Type:</b> 3528M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	24.9 LB-FT
R.P.M.	1755			Pull-up Torque	15.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17.2 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	23.9 A
Service Factor (S.F.)	1.15			No-load Current	1.81 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	8.02 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	65°C
S.F. Amps				Temp. Rise @ S.F. Load	77°C
				Locked-rotor Power Factor	52.4
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	66	74	80	83	78
Efficiency	75.5	84	86.3	86.5	85.8	84.5	86.2
Speed	1790	1779	1769	1756	1743	1728	1748
Line amperes	1.89	2.11	2.46	2.91	3.4	4	3.2

Performance Graph at 460V, 60Hz, 2.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 57956 - Typical performance - not guaranteed values

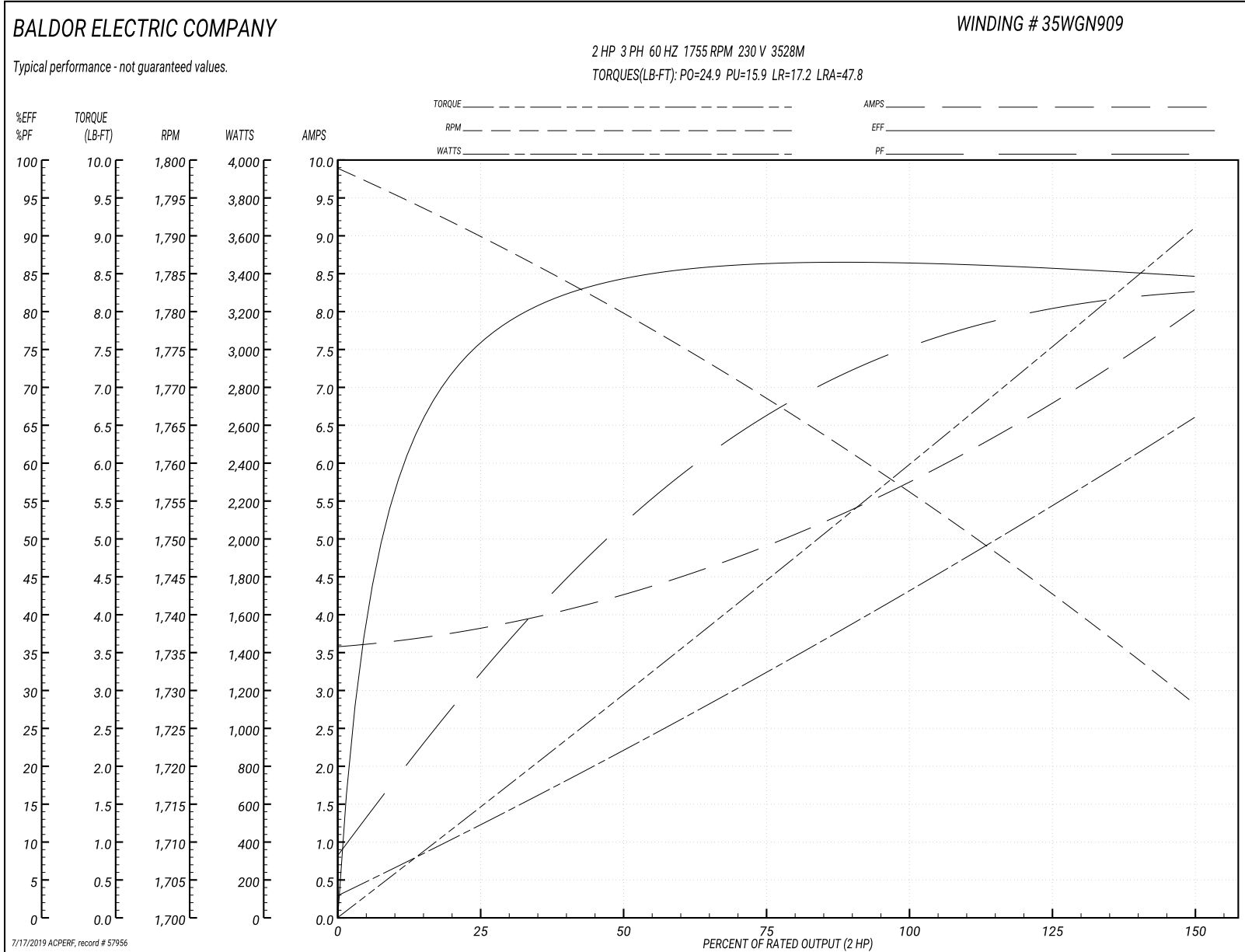
<b>Winding:</b> 35WGN909-R032	<b>Type:</b> 3528M	<b>Enclosure:</b> TEFC
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Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	24.9 LB-FT
R.P.M.	1755			Pull-up Torque	15.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17.2 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	47.8 A
Service Factor (S.F.)	1.15			No-load Current	3.62 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	2 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	65°C
S.F. Amps				Temp. Rise @ S.F. Load	77°C
				Locked-rotor Power Factor	52.4
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	66	74	80	83	78
Efficiency	75.6	84.1	86.4	86.6	85.9	84.6	86.2
Speed	1790	1779	1769	1756	1743	1728	1748
Line amperes	3.78	4.22	4.92	5.82	6.8	8	6.41

Performance Graph at 230V, 60Hz, 2.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 73870 - Typical performance - not guaranteed values

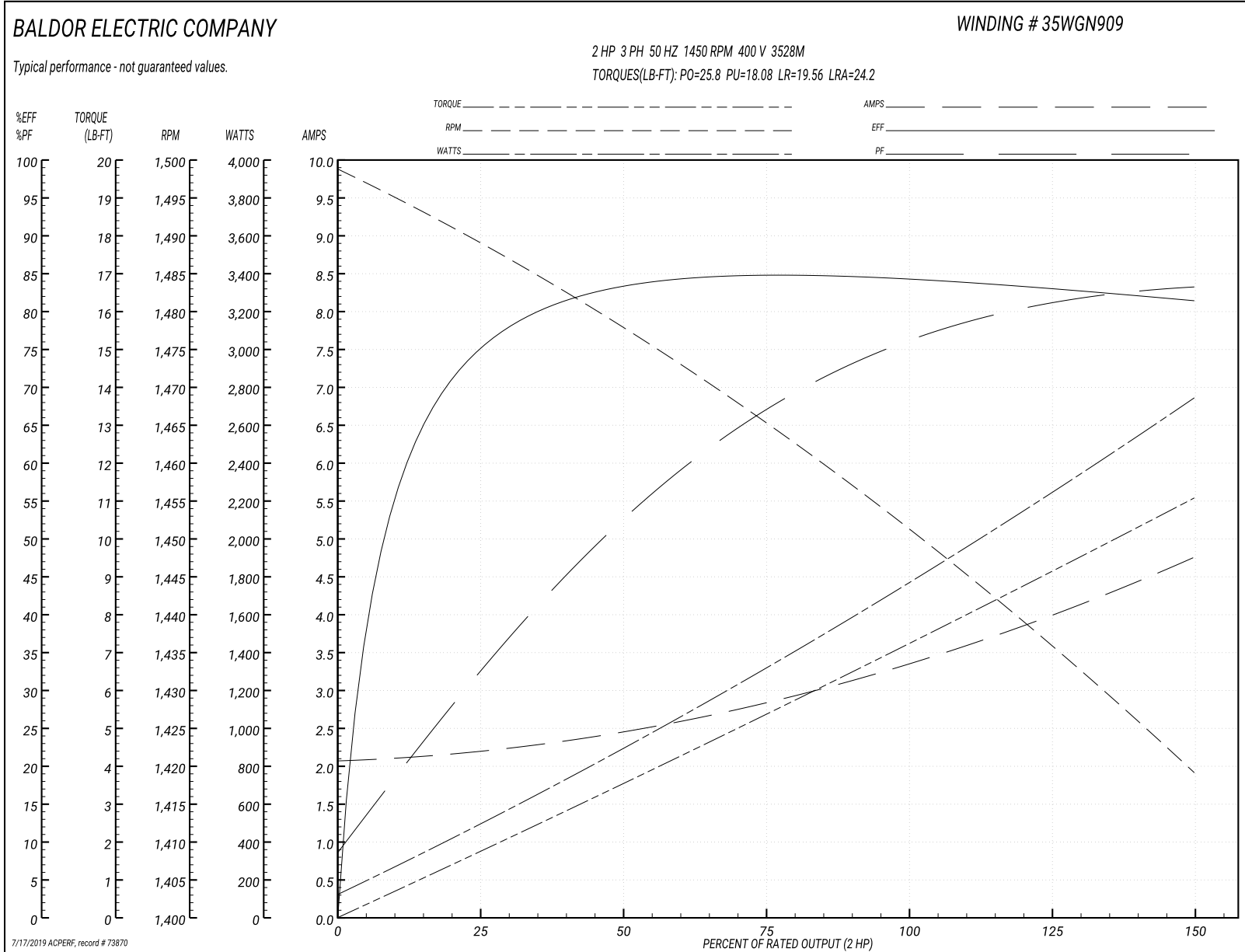
<b>Winding:</b> 35WGN909-R032	<b>Type:</b> 3528M	<b>Enclosure:</b> TEFC
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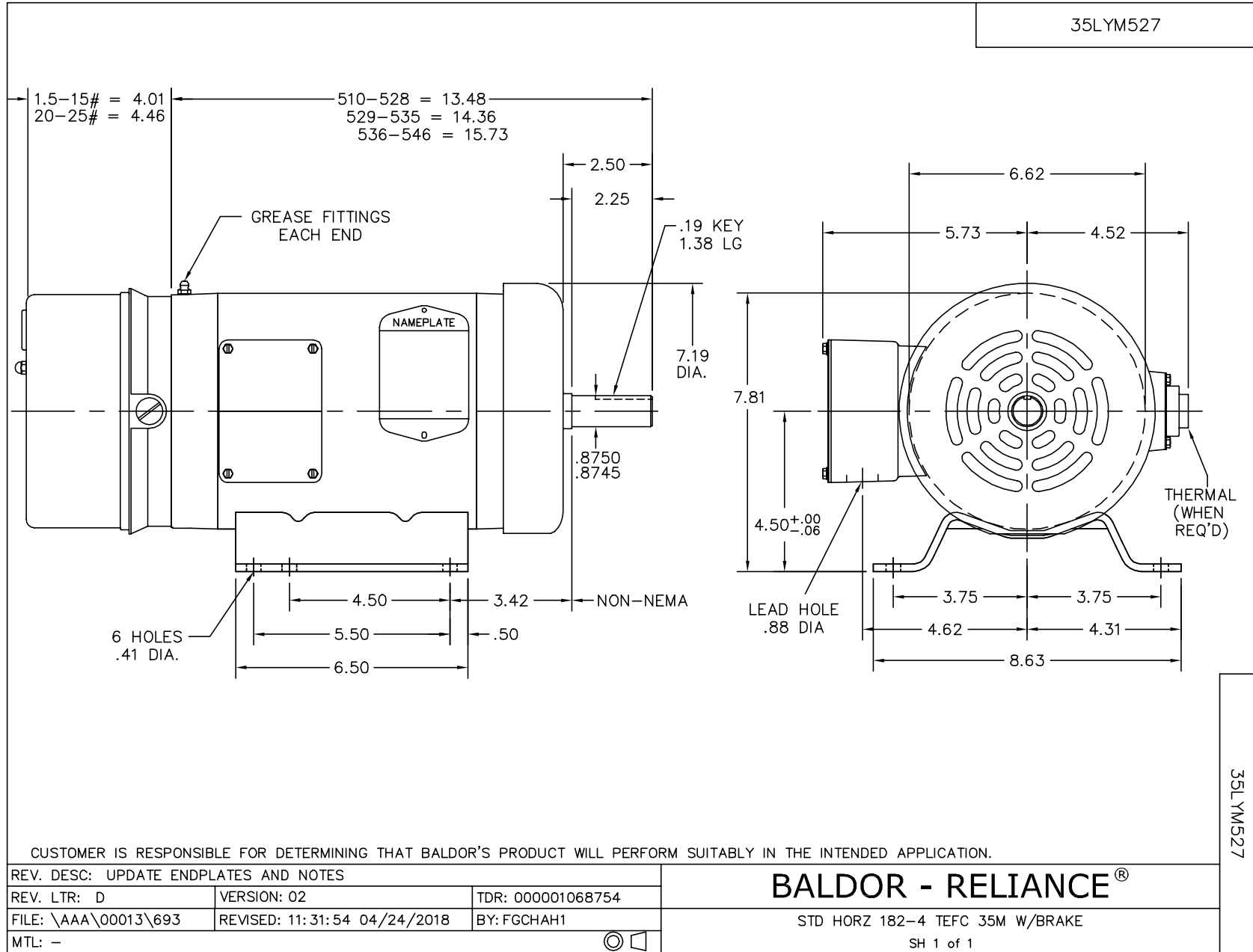
Nameplate Data				400 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	7.25 LB-FT
Volts	200/400			Start Configuration	direct on line
Full Load Amps	6.8/3.4			Breakdown Torque	25.8 LB-FT
R.P.M.	1450			Pull-up Torque	18.08 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	19.56 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	24.2 A
Service Factor (S.F.)	1.15			No-load Current	2.09 A
NEMA Nom. Eff.	84.5	Power Factor	75	Line-line Res. @ 25°C	8.02 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	85°C
S.F. Amps				Temp. Rise @ S.F. Load	104°C
				Locked-rotor Power Factor	58.9
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 400 V, 50 Hz, 2 HP

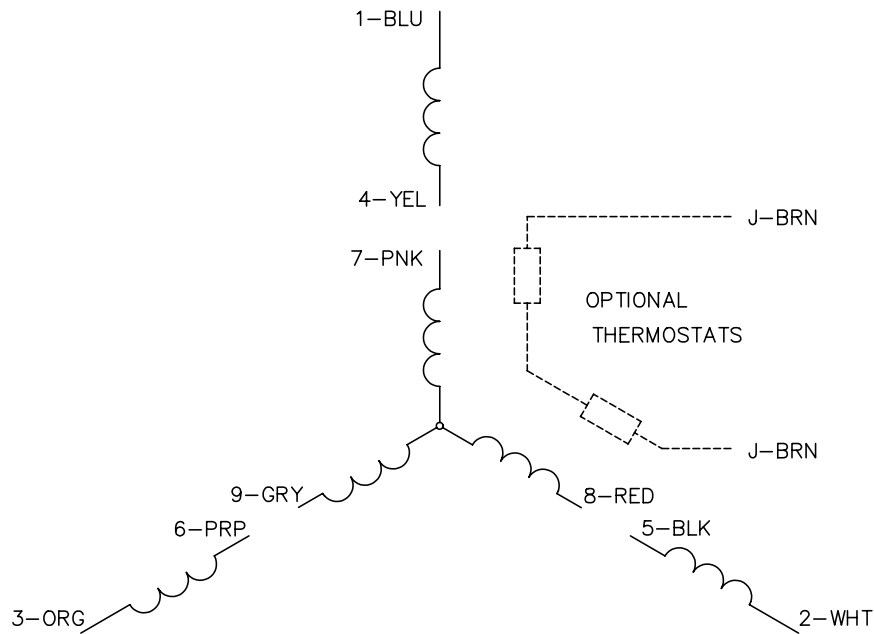
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	54	67	75	81	84	79
Efficiency	74.5	82.9	84.7	84.5	83.2	81.2	83.7
Speed	1489	1477	1466	1451	1436	1419	1442
Line amperes	2.18	2.43	2.85	3.39	3.99	4.75	3.75

Performance Graph at 400V, 50Hz, 2.0HP Typical performance - Not guaranteed values

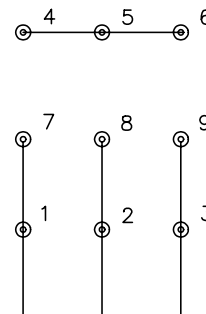




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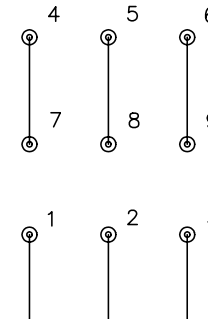


LOW VOLTAGE  
(2Y)



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.

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