

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **EM3609**

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

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3528M	Elec. Spec:	35WGN909	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	35L108	Layout:	35LYL108
Frame:	184	Mounting:	F1	Poles:	04	Created Date:	02-23-2015
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	11-16-2016
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP1259L												
CAT.NO.	EM3609											
SPEC.	35L108N909G1											
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	6206					ODE	6203					
ENCL	TEFC					SN						

Parts List		
Part Number	Description	Quantity
SA294213	SA 35L108N909G1	1.000 EA
RA280295	RA 35L108N909G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
HW3001B01	BRASS CUP WASHER, FOR #8 SCREW	1.000 EA
35FE3100M01	FREP TEFC ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP3113A01	PU ENDPLATE, MACH W/206 BRG	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT	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, POLYREX EM EXXON (USe 4824-15A)	0.050 LB

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A20	THRUBOLT 10-32 X 9.812	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP1259L	ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1000/bx) 11/14	1.000 EA

**AC Induction Motor Performance Data**

Record # 53344 - Typical performance - not guaranteed values

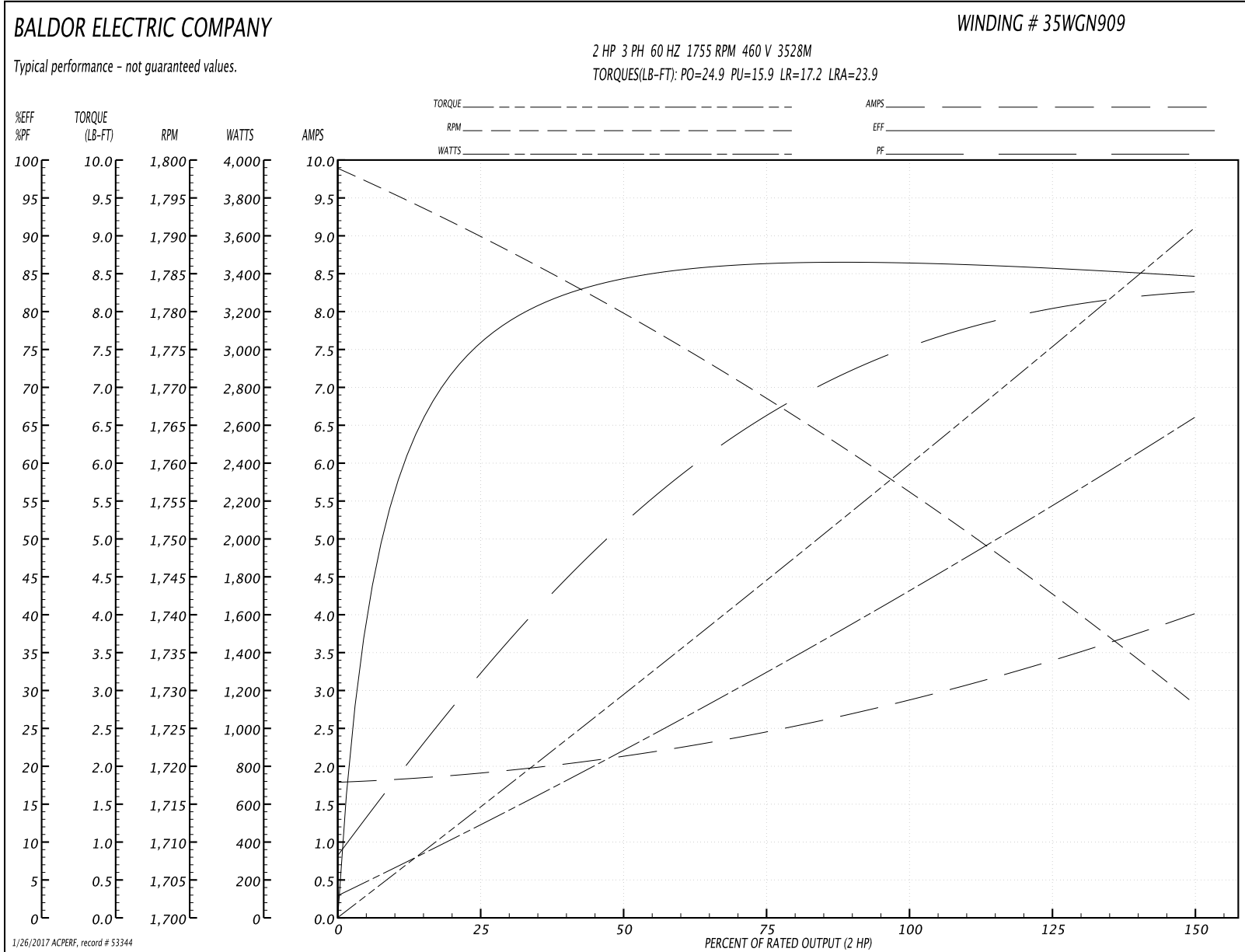
<b>Winding:</b> 35WGN909-R032	<b>Type:</b> 3528M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			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	75.6	84.1	86.4	86.6	85.9	84.6	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

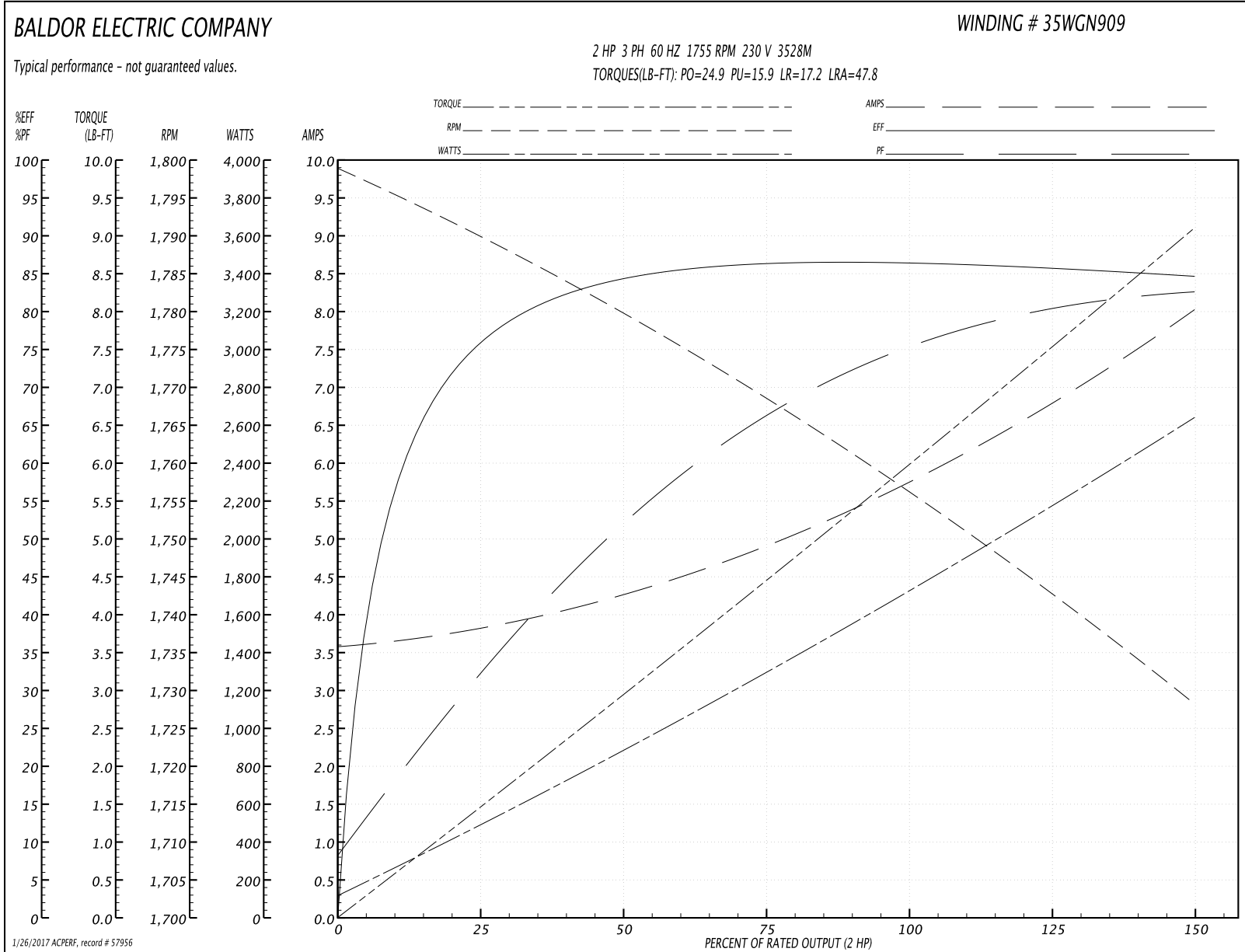
<b>Winding:</b> 35WGN909-R032	<b>Type:</b> 3528M	<b>Enclosure:</b> TEFC
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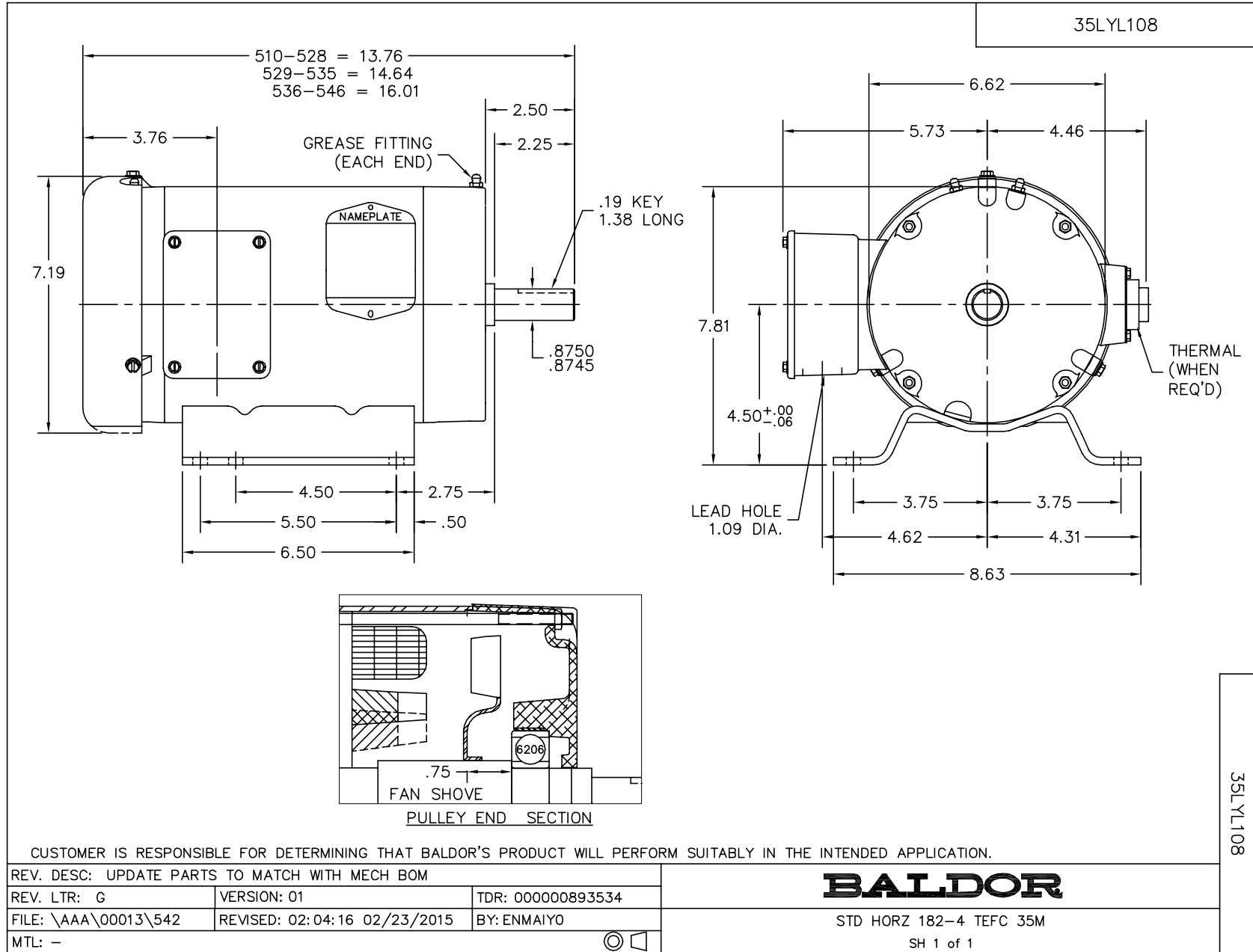
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	24.9 LB-FT
R.P.M.	1755			Pull-up Torque	15.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17.2 LB-FT
NEMA Design 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





CD0005

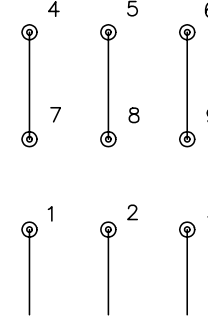


LOW VOLTAGE  
(2Y)



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
9000D		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005