

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **VEM7037T**

**2//1.5HP,1755//1455RPM,3PH,60//50HZ,145T**

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3528M	Elec. Spec:	35WGN909	CD Diagram:	CD0005
Enclosure:	XPFC	Mfg Plant:		Mech. Spec:	35E380	Layout:	35LYE380
Frame:	145TC	Mounting:	F1	Poles:	04	Created Date:	09-30-2015
Base:	N	Rotation:	R	Insulation:	B	Eff. Date:	09-01-2016
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP1426XPSLEV	
NO.	[ ] CC 010A
SER.	[ ]
SPEC.	35E380N909G1
CAT.NO.	VEM7037T
HP	2//1.5 T. CODE T3C
VOLTS	230/460//190/380
AMPS	5.8/2.9//5.4/2.7
RPM	1755//1455
HZ	60//50 PH 3 CL B
SER.F.	1.00 DES B CODE L
RATING	40C AMB-CONT
FRAME	145TC NEMA-NOM-EFF 86.5
USABLE AT 208V	5.8 PF 75
BLANK	[ ]

Parts List		
Part Number	Description	Quantity
SA308538	SA 35E380N909G1	1.000 EA
RA295870	RA 35E380N909G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
35CB3001A02SP	EXPL PROOF CONDUIT BOX, 3/4"PIPE TAP LEA	1.000 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
35EP3700A01SP	FR ENDPLATE, XPFC	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP3702A01SP	PU EP-205 BRG-35X-56C-143-5TC	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
HA3013A01	1/2-20X5/8 SPL.HX BOLT	2.000 EA
HW3021C06	3/32 DI X .625 PIN (F/S)	2.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A01SP	IEC FH NO GREASER W/PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB3500A01SP	CONDUIT BOX LID, MACH	1.000 EA
51XN2520A16	SCREW, HEX WS SLT, ZN, 1/4-20 X 1.00	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	6.000 EA
NP0018F	ALUM UL XP CONDUIT BOX NAMEPLATE	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.017 GA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HA3104A08	THRUBOLT-5/16-18X9.375 X X	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0145B01	CONNECTION LABEL	1.000 EA
NP1426XPSLEV	SS XP UL CSA-EEV CC CL-I GP-D	1.000 EA
36PA1001	PKG GRP, PRINT PK1017A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA

**AC Induction Motor Performance Data**

Record # 42533 - Typical performance - not guaranteed values

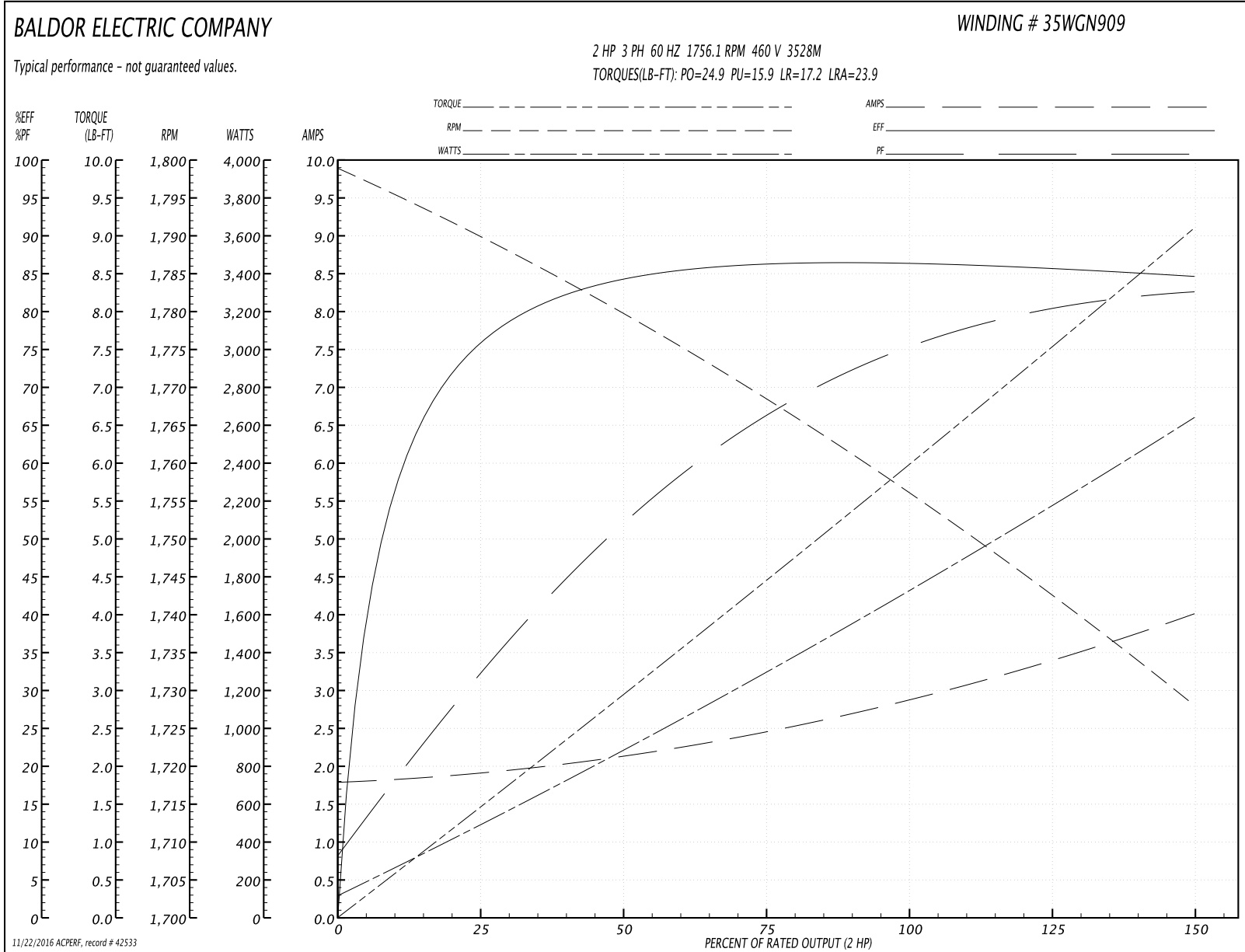
<b>Winding:</b> 35WGN909-R003	<b>Type:</b> 3528M	<b>Enclosure:</b> XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2//1.5			Full Load Torque	5.98 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	5.8/2.9//5.4/2.7			Breakdown Torque	24.9 LB-FT
R.P.M.	1755//1455			Pull-up Torque	15.9 LB-FT
Hz	60//50	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			No-load Current	1.81 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	8.1641 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	65°C
				Locked-rotor Power Factor	52
				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
Power Factor	33	53	66	75	80	83
Efficiency	75.7	84.1	86.3	86.5	85.9	84.6
Speed	1790	1779.4	1768.5	1756.1	1742.7	1727.9
Line amperes	1.89	2.11	2.46	2.91	3.4	4

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



**AC Induction Motor Performance Data**

Record # 42534 - Typical performance - not guaranteed values

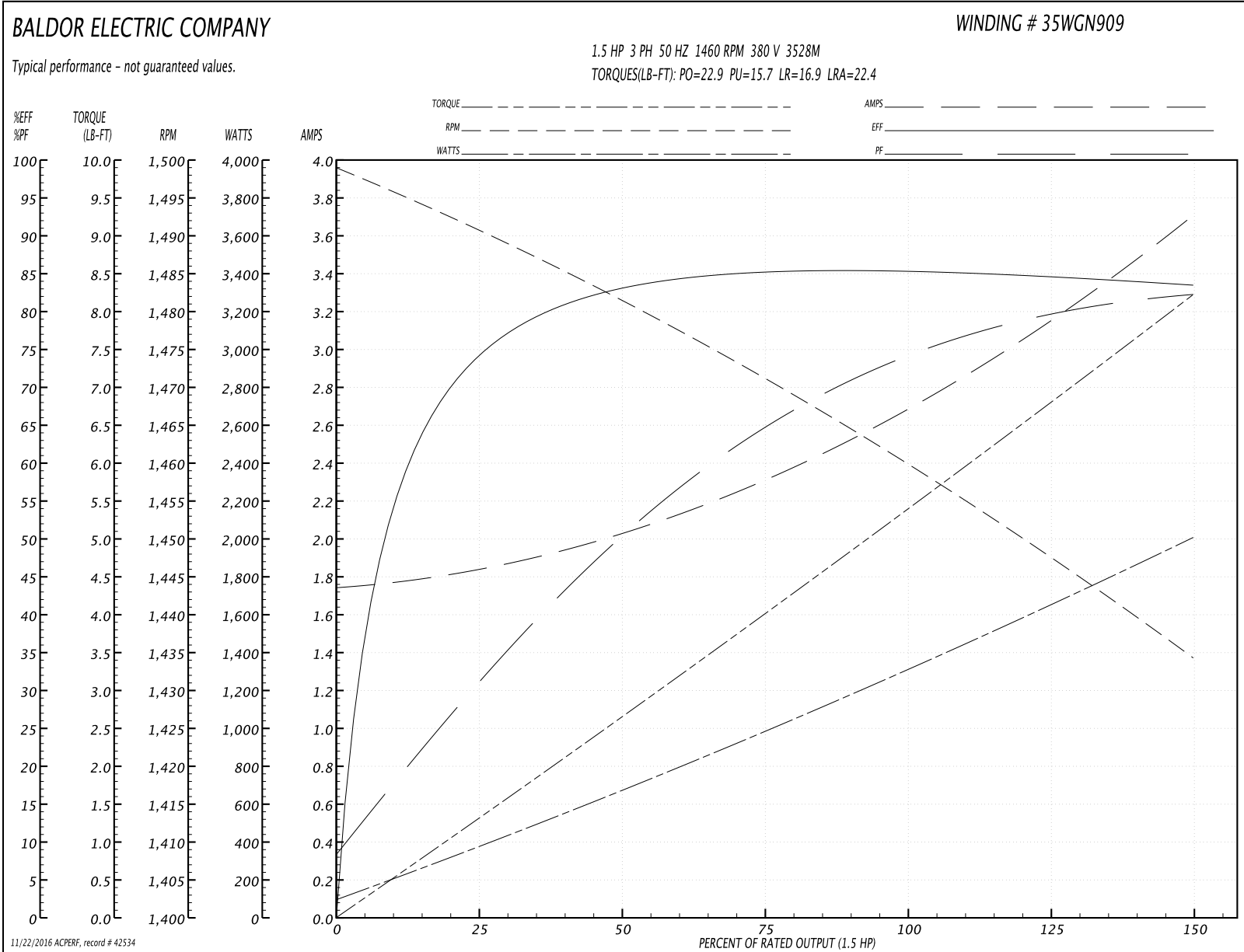
<b>Winding:</b> 35WGN909-R003	<b>Type:</b> 3528M	<b>Enclosure:</b> XPFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	2//1.5			Full Load Torque	5.39 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	5.8/2.9//5.4/2.7			Breakdown Torque	22.9 LB-FT
R.P.M.	1755//1455			Pull-up Torque	15.7 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	16.9 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	22.4 A
Service Factor (S.F.)	1			No-load Current	1.76 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	8.49 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	59°C
				Locked-rotor Power Factor	58
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 380 V, 50 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	32	51	65	73	80	83
Efficiency	73.8	82.8	85.3	85.4	84.8	83.4
Speed	1491	1481	1471	1460	1448	1434
Line amperes	1.82	2.01	2.32	2.71	3.15	3.7

Performance Graph at 380V, 50Hz, 1.5HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 44302 - Typical performance - not guaranteed values

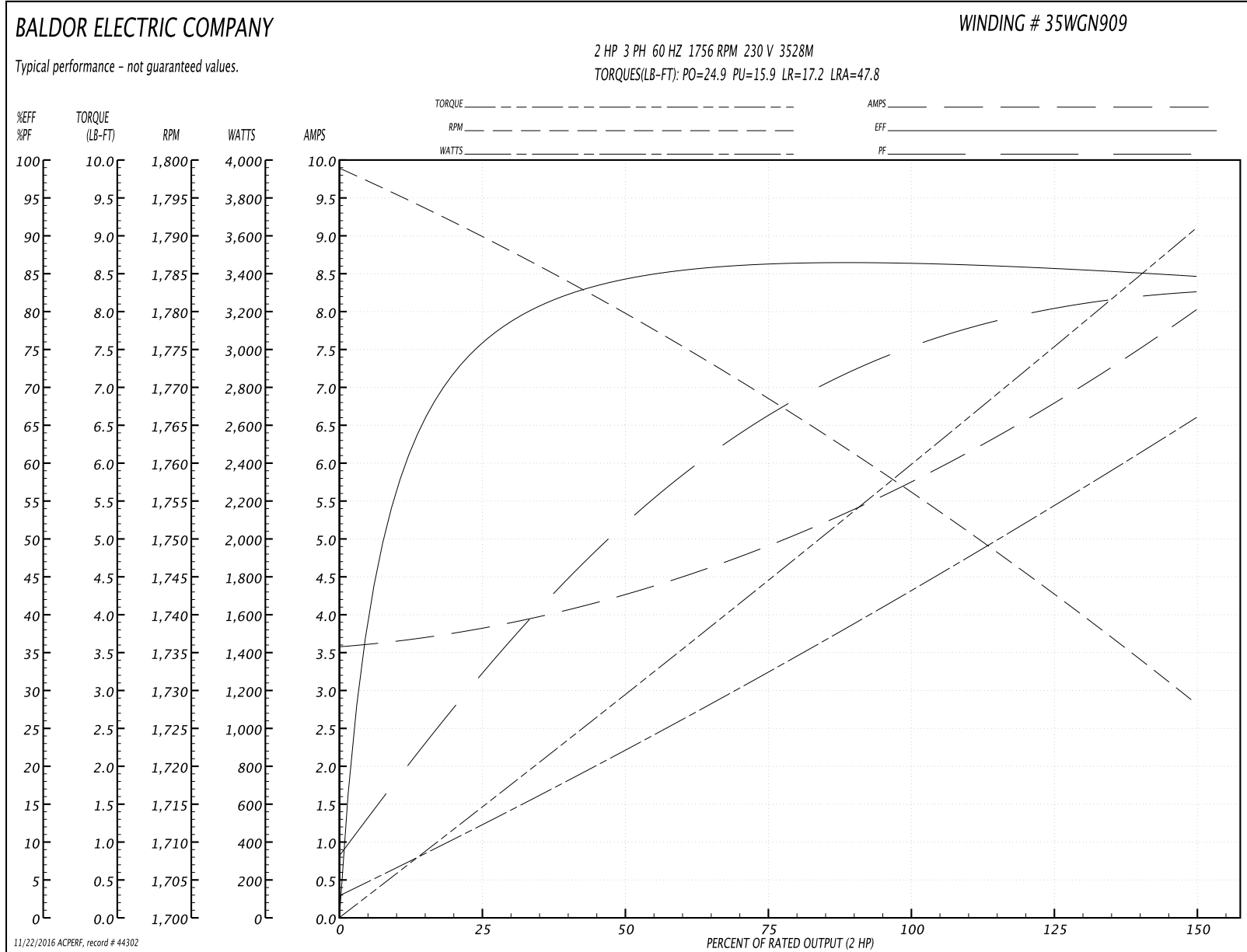
<b>Winding:</b> 35WGN909-R003	<b>Type:</b> 3528M	<b>Enclosure:</b> XPFC
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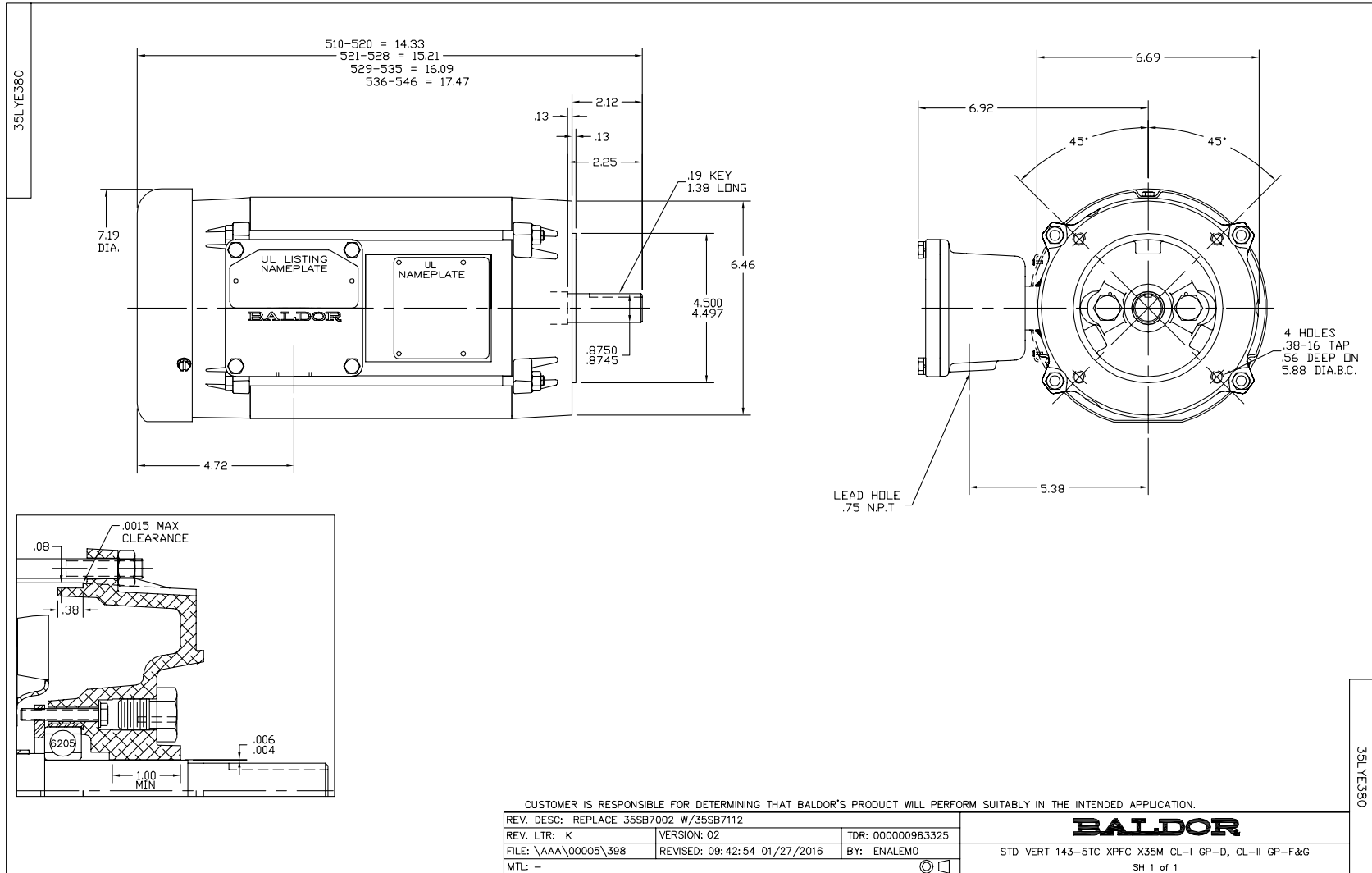
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	2//1.5			Full Load Torque	5.98 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	5.8/2.9//5.4/2.7			Breakdown Torque	24.9 LB-FT
R.P.M.	1755//1455			Pull-up Torque	15.9 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	17.2 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	47.8 A
Service Factor (S.F.)	1			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
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 2 HP

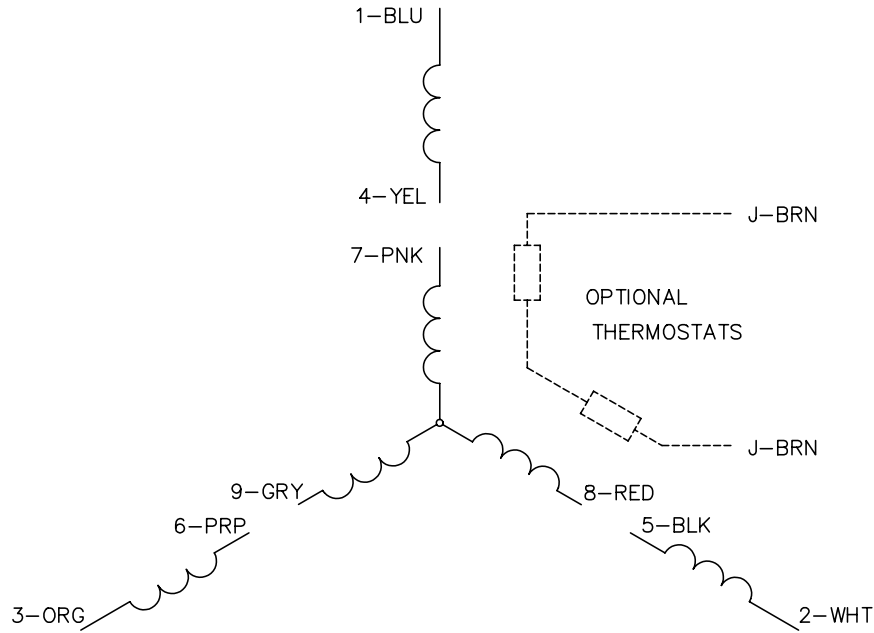
% of Rated Load	25	50	75	100	125	150
Power Factor	33	53	66	74	80	83
Efficiency	75.6	84.1	86.4	86.4	85.9	84.6
Speed	1790	1779	1769	1756	1743	1728
Line amperes	3.78	4.22	4.92	5.82	6.8	8

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

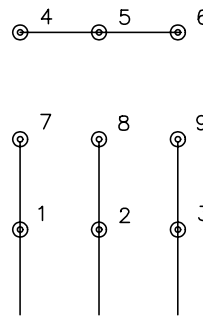




CD0005

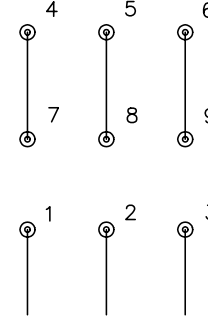


LOW VOLTAGE  
(2Y)



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005