BALDOR • RELIANCE

Product Information Packet

EFM3558T

2HP,1755RPM,3PH,60HZ,145T,3528M,TEFC,F2

Part Detail

Revision:	M	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Elec. Spec:**	35WGN909	**CD Diagram:**	CD0005	**Mfg Plant:**	
Mech. Spec:	35AA006	**Layout:**	35LYAA006	**Poles:**	04	**Created Date:**	06-19-2013
Base:	RG	**Eff. Date:**	09-27-2018	**Leads:**	9#18 Y		

Specs

Catalog Number:	EFM3558T	**Insulation Class:**	F
Enclosure:	TEFC	**Inverter Code:**	Inverter Ready
Frame:	145T	**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:**	F2
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

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

Nameplate NP3441L

CAT.NO.	EFM3558T								
SPEC.	35AA006N909G1								
HP	2								
VOLTS	230/460								
AMP	5.8/2.9								
RPM	1755								
FRAME	145T	**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**							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									

Parts List

Part Number	Description	Quantity
SA264998	SA 35AA006N909G1	1.000 EA
RA251703	RA 35AA006N909G1	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
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3123F00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 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 **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
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB

Parts List (continued)

Part Number	Description	Quantity
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
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

AC Induction Motor Performance Data
Record # 53344
Typical performance - not guaranteed values

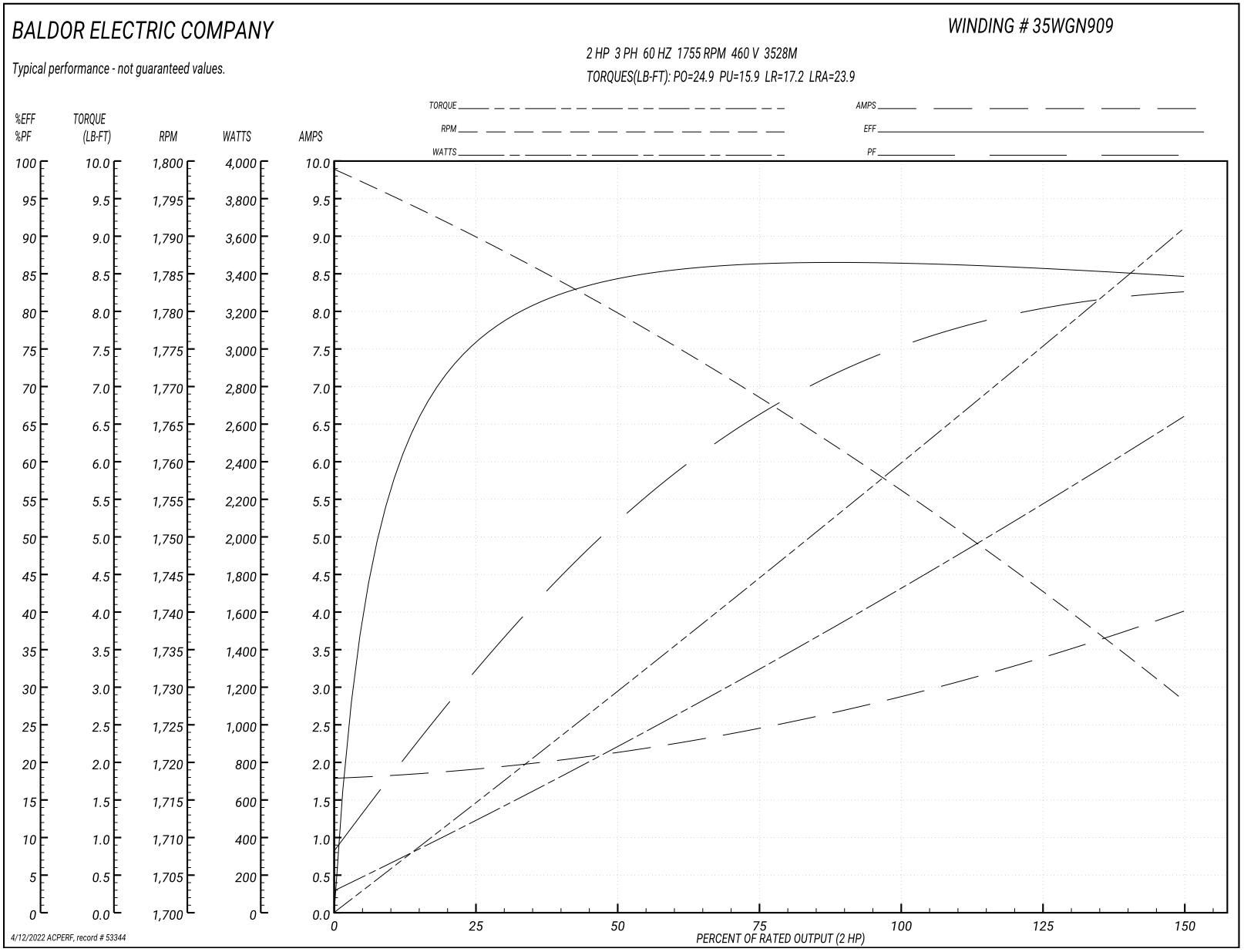
Winding: 35WGN909-R032	**Type:** 3528M	**Enclosure:** TEFC

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. @ 25ºC**	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-FT2

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

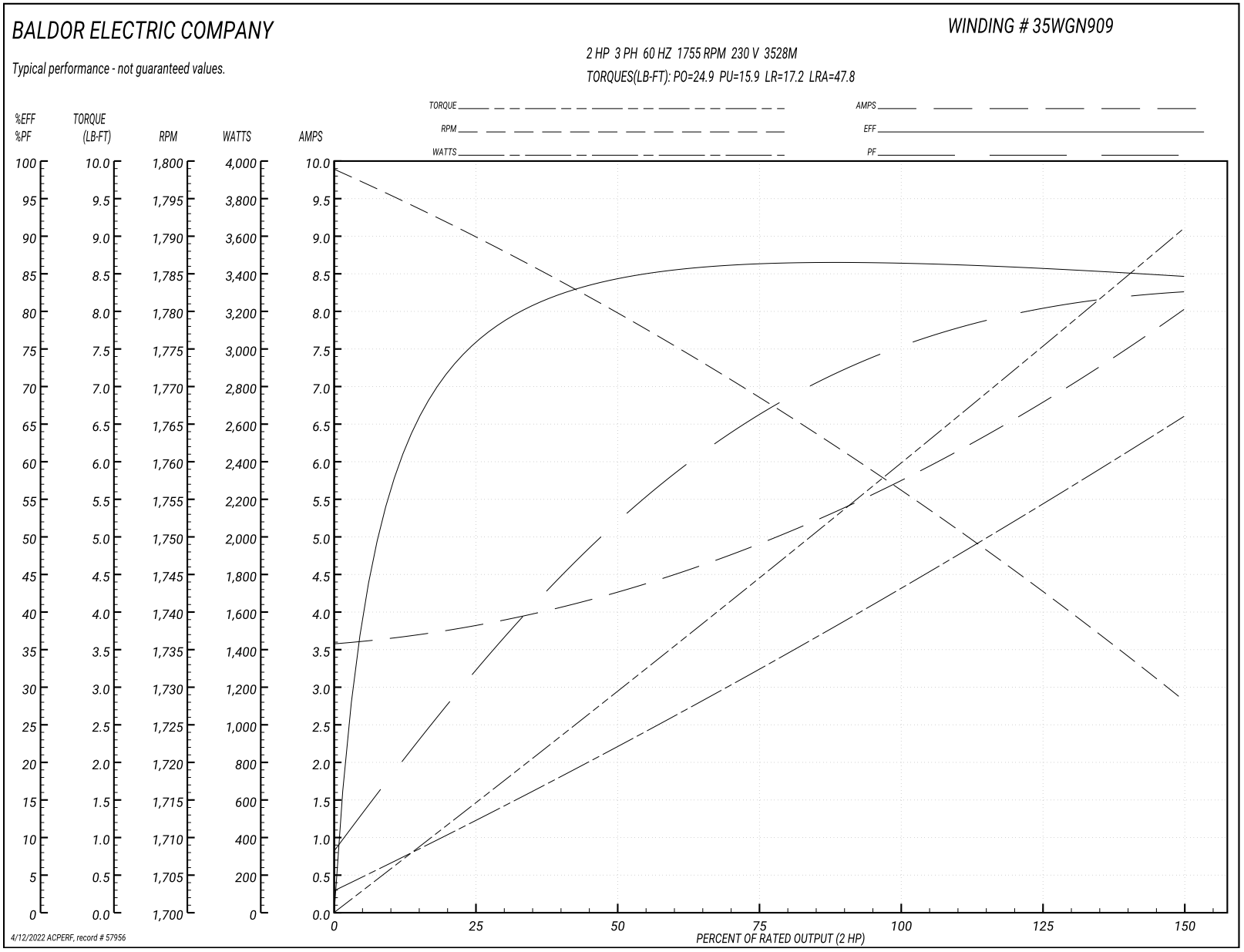
Winding: 35WGN909-R032	**Type:** 3528M	**Enclosure:** TEFC

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. @ 25ºC**	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-FT2

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

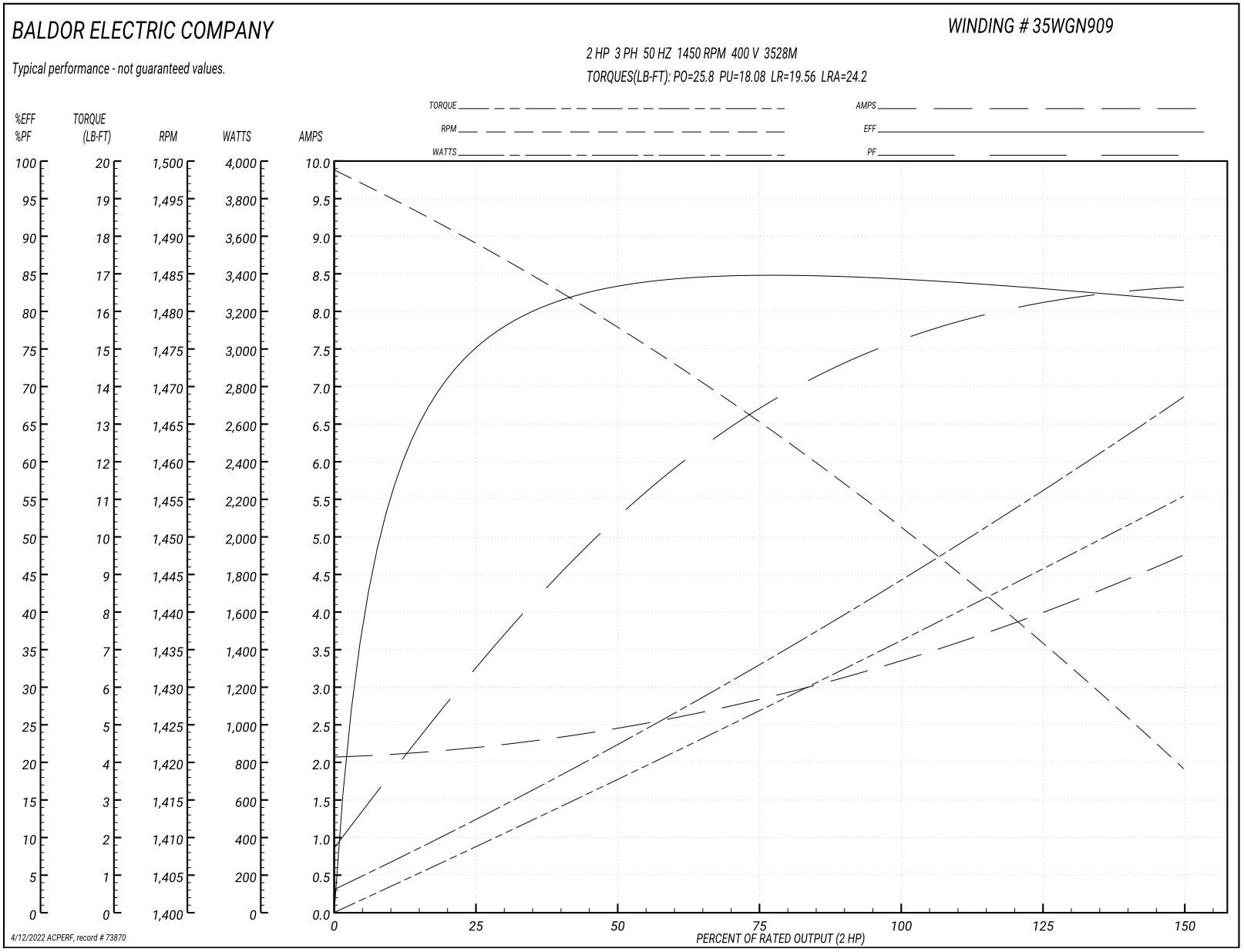
Winding: 35WGN909-R032	**Type:** 3528M	**Enclosure:** TEFC

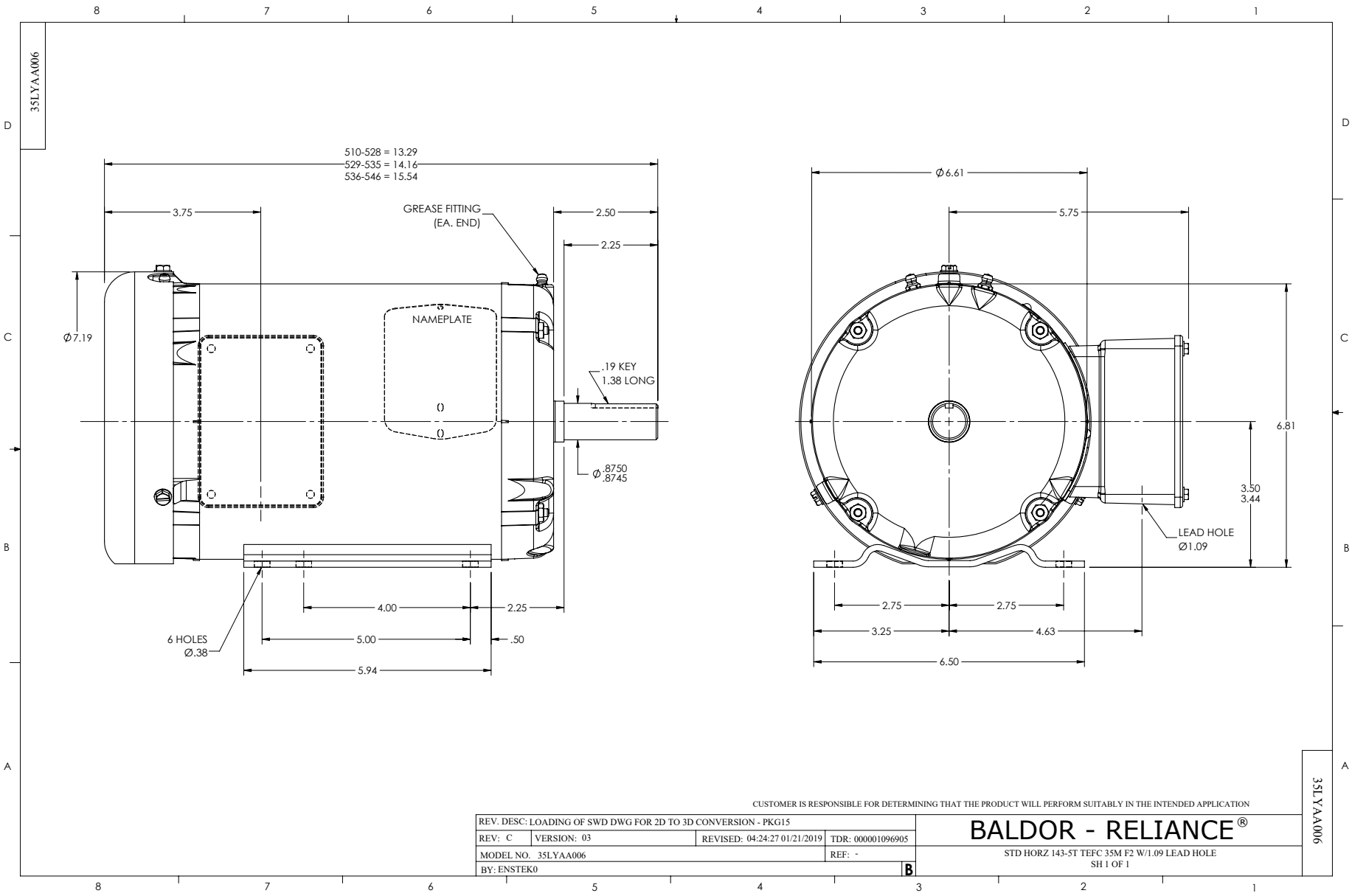
Nameplate Data			**400 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)		2	**Full Load Torque**	7.25 LB-FT
Volts		200/400	**Start Configuration**	direct on line
Full Load Amps		6.8/3.4	**Breakdown Torque**	25.8 LB-FT
R.P.M.		1450	**Pull-up Torque**	18.08 LB-FT
Hz	50 **Phase**	3	**Locked-rotor Torque**	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. @ 25ºC**	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-FT2

Load Characteristics 400 V, 50 Hz, 2 HP

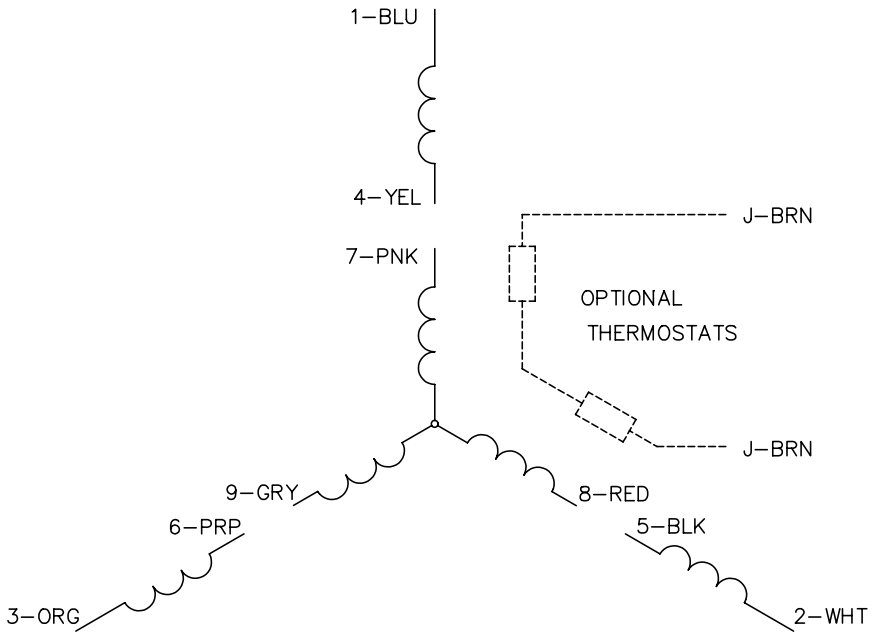
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	33	54	67	75	81	84	79
Efficiency	74.5	82.9	84.7	84.5	83.2	81.2	83.7
Speed	1489	1477	1466	1451	1436	1419	1442
Line amperes	2.18	2.43	2.85	3.39	3.99	4.75	3.75

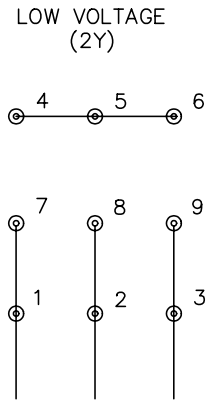
Performance Graph at 400V, 50Hz, 2.0HP Typical performance - Not guaranteed values

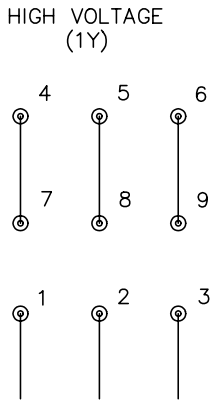



35LYAA006
510-528 = 13.29
529-535 = 14.16
536-546 = 15.54
3.75
GREASE FITTING
(EA. END)
2.50
2.25
NAMEPLATE
Ø7.19
.19 KEY
1.38 LONG
Ø .8750
Ø .8745
4.00
2.25
6 HOLES
Ø.38
5.00
.50
5.94
Ø6.61
5.75
6.81
3.50
3.44
LEAD HOLE
Ø1.09
2.75
2.75
3.25
4.63
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG15
REV: C
VERSION: 03
REVISED: 04:24:27 01/21/2019
TDR: 000001096905
MODEL NO. 35LYAA006
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
STD HORZ 143-5T TEFC 35M F2 W/1.09 LEAD HOLE
SH 1 OF 1
35LYAA006

CD0005







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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS