

BALDOR® • RELIANCE 

Product Information Packet

EM3116T-BG

1HP,1760RPM,3PH,60HZ,143T,3520M,OPSB,F1

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM492	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35E2261	Layout:	35LYE2261	Poles:	04	Created Date:	10-27-2013
Base:	RG	Eff. Date:	08-22-2017	Leads:	9#18		

Specs			
Catalog Number:	EM3116T-BG	Insulation Class:	H
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	143T	KVA Code:	L
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.000 HP @ 60 HZ	Locked Bearing Indicator:	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:	3520M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	71
	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:	1.600 A @ 460.0 V	Shaft Ground Indicator:	Shaft Grounding
	3.000 A @ 230.0 V	Shaft Rotation:	Reversible
	3.100 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 (OLD)
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 NP3553L									
CAT.NO.	EM3116T-BG								
SPEC	35E2261M492G1								
HP	1								
VOLTS	230/460								
AMPS	3/1.6								
RPM	1760								
FRAME	143T			HZ	60			PH	3
SF	1.15		CODE	L		DES	B	CLASS	H
NEMA NOM. EFF	85.5		PF	71					
RATING	40C AMB-CONT								
CC	010A					USABLE AT 208V	3.1		
ENCL	OPSB		SER						
DE	6205		ODE	6203					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									

Parts List		
Part Number	Description	Quantity
SA271666	SA 35E2261M492G1	1.000 EA
RA258291	RA 35E2261M492G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3209G00	MASTER ODE,203 BRG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3210C00	MASTER DE,205 BRG,1.000SH,LCK BRG	1.000 EA
51XN1032A18	10-32 X 1 1/8 HX WS SL SR (ESKAY)	2.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	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
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
35AD2016A01	BAFFLE PLATE,MOD 35 OPSB-INT SHAFT GRD	1.000 EA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS GL.F.	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
NP3553L	ALUM SUPER-E VPWM INVERTER READY UL CSA-	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	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 # 35571 - Typical performance - not guaranteed values

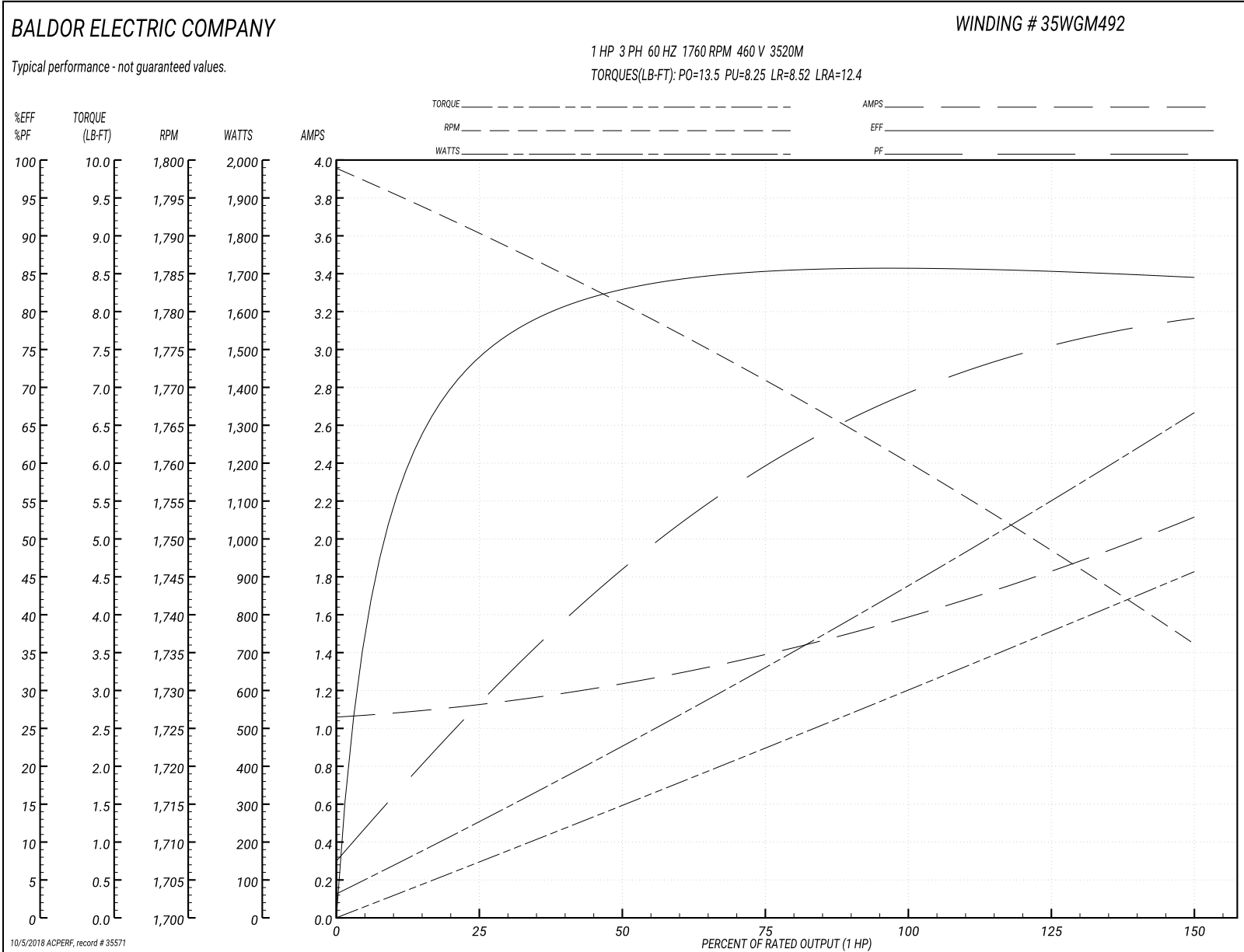
Winding: 35WGM492-R003	Type: 3520M	Enclosure: OPSB
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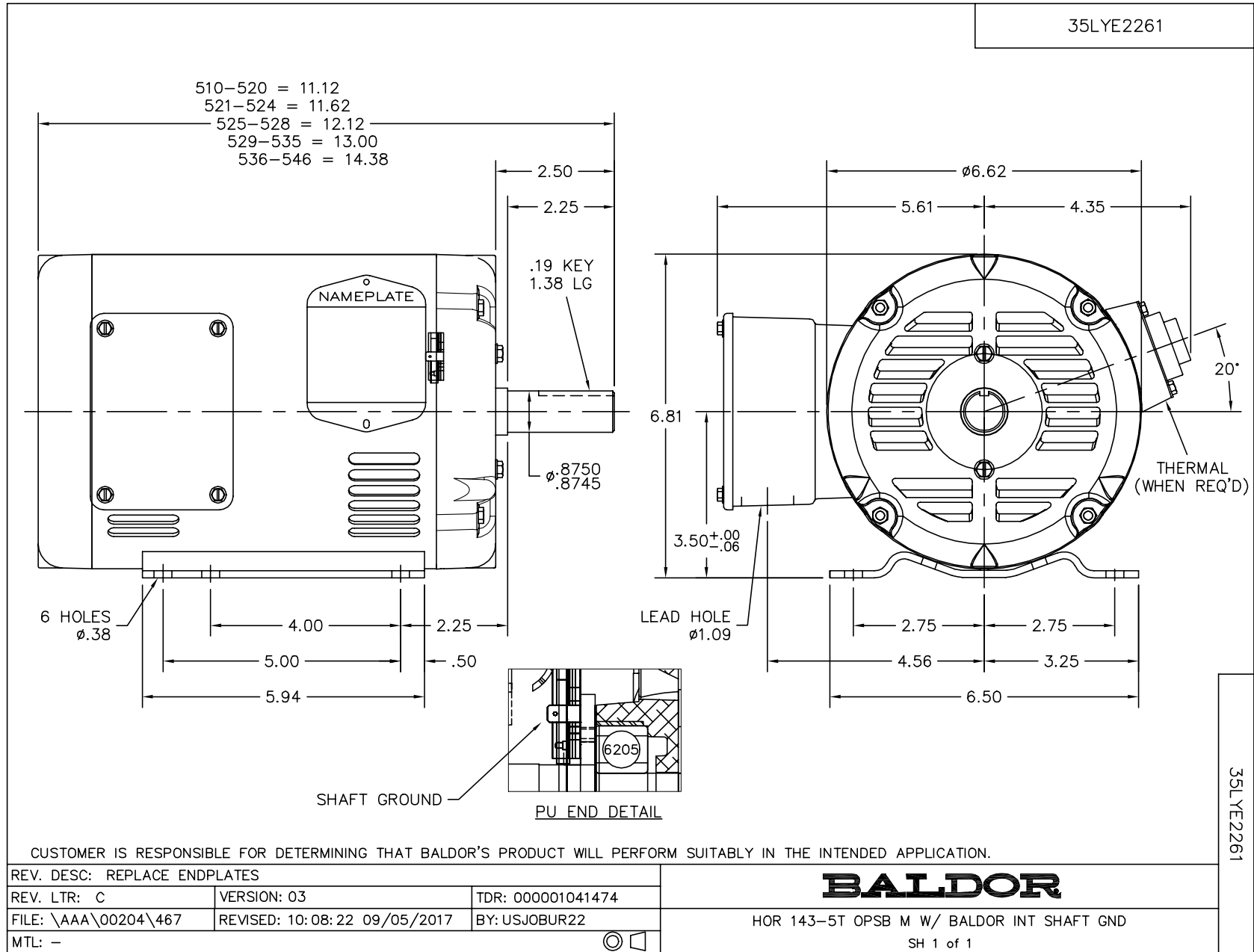
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	2.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	3/1.5			Breakdown Torque	13.5 LB-FT
R.P.M.	1760			Pull-up Torque	8.25 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	8.52 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	12.4 A
Service Factor (S.F.)	1.15			No-load Current	1.07 A
NEMA Nom. Eff.	85.5	Power Factor	71	Line-line Res. @ 25°C	15 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	36°C
S.F. Amps				Temp. Rise @ S.F. Load	42°C
				Locked-rotor Power Factor	53.8
				Rotor inertia	0.118 LB-FT ²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	46	60	69	75	79	74
Efficiency	74.2	82.9	85.4	85.8	85.4	84.5	85.6
Speed	1790	1781	1771	1760	1749	1736	1754
Line amperes	1.11	1.24	1.39	1.59	1.83	2.11	1.69

Performance Graph at 460V, 60Hz, 1.0HP 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