

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3157T-5**

**2HP,1750RPM,3PH,60HZ,145T,3524M,OPSB,F1**

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM957	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	35BB101	Layout:	35LYBB101	Poles:	04	Created Date:	11-24-2010
Base:	RG	Eff. Date:	08-21-2017	Leads:	3#18		

Specs			
Catalog Number:	EM3157T-5	Inverter Code:	Inverter Ready
Enclosure:	OPSB	KVA Code:	K
Frame:	145T	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	2.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3524M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	75
	CSA EEV	Product Family:	General Purpose
	UR	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)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	2.300 A @ 575.0 V	Shaft Rotation:	Reversible

<b>Design Code:</b>	B	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
<b>Insulation Class:</b>	F	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553L</b>										
<b>CAT.NO.</b>	EM3157T-5									
<b>SPEC</b>	35BB101M957G1									
<b>HP</b>	2									
<b>VOLTS</b>	575									
<b>AMPS</b>	2.3									
<b>RPM</b>	1750									
<b>FRAME</b>	145T				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	K	<b>DES</b>	B		<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	86.5		<b>PF</b>	75						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>					
<b>ENCL</b>	OPSB		<b>SER</b>							
<b>DE</b>	6205			<b>ODE</b>	6203					
<b>VPWM INVERTER READY</b>										
<b>CT30-60(2:1) VT3-60(20:1)</b>										

Parts List		
Part Number	Description	Quantity
SA212881	SA 35BB101M957G1	1.000 EA
RA200110	RA 35BB101M957G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 EA
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3209A00	MASTER ODE,203 BRG,GRSR	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3210A00	MASTER DE,205 BRG,1.000SH,GRSR	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 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
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS GL.F.	2.000 EA
HA3100A45	THRUBOLT 10-32 X 8.875	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3553L	ALUM SUPER-E VPWM INVERTER READY UL CSA-	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
35-8764	C FACE KIT	A8
35EP1604A01SP	D-FLANGE KIT	A8

**AC Induction Motor Performance Data**

Record # 32916 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGM957-R001	<b>Type:</b> 3524M	<b>Enclosure:</b> OPSB
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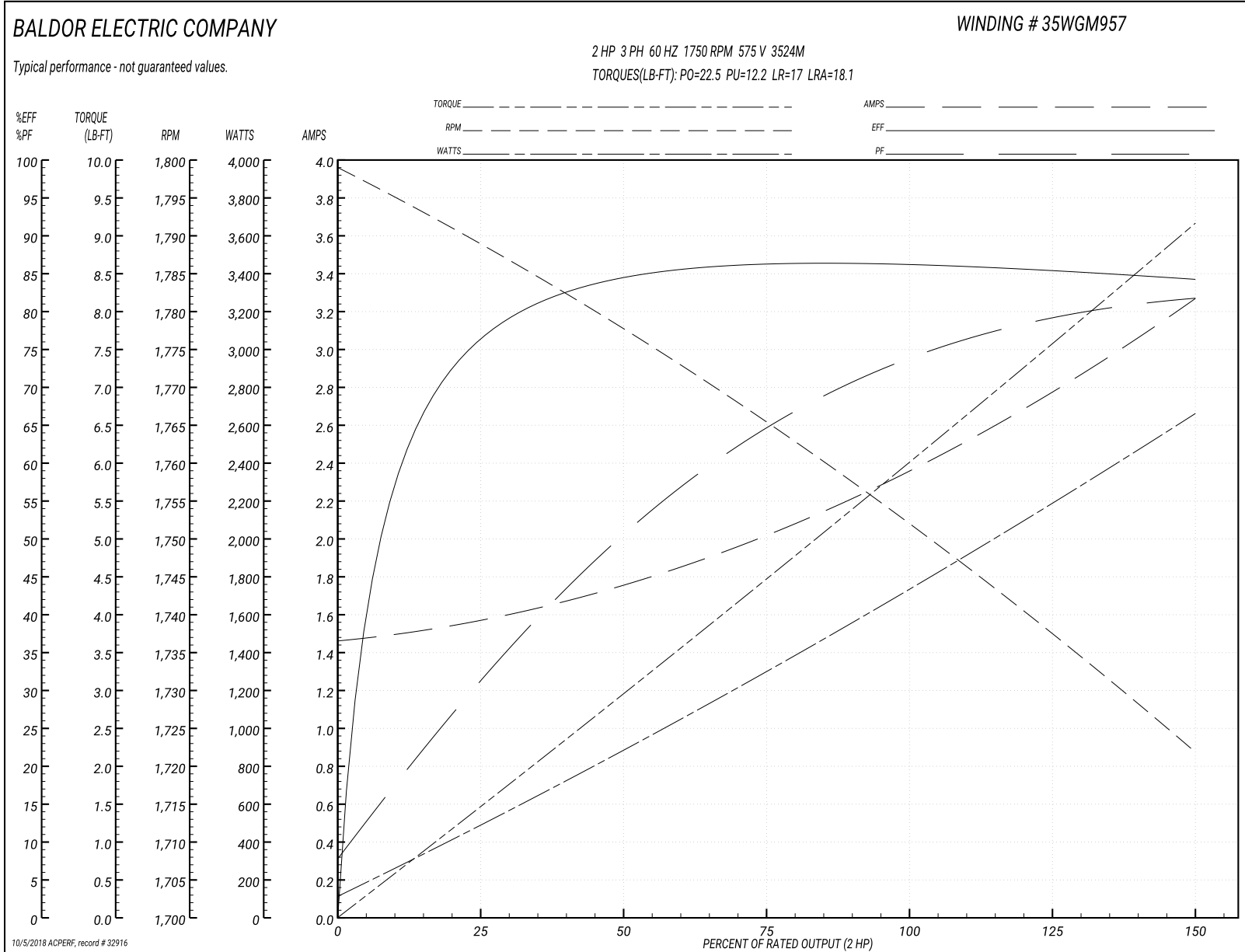
Nameplate Data				575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	2			Full Load Torque	6.02 LB-FT
Volts	575			Start Configuration	direct on line
Full Load Amps	2.3			Breakdown Torque	22.5 LB-FT
R.P.M.	1750			Pull-up Torque	12.2 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	18.1 A
Service Factor (S.F.)	1.15			No-load Current	1.48 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	13 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	37°C
S.F. Amps				Temp. Rise @ S.F. Load	45°C
				Locked-rotor Power Factor	53.2
				Rotor inertia	0.142 LB-FT <sup>2</sup>

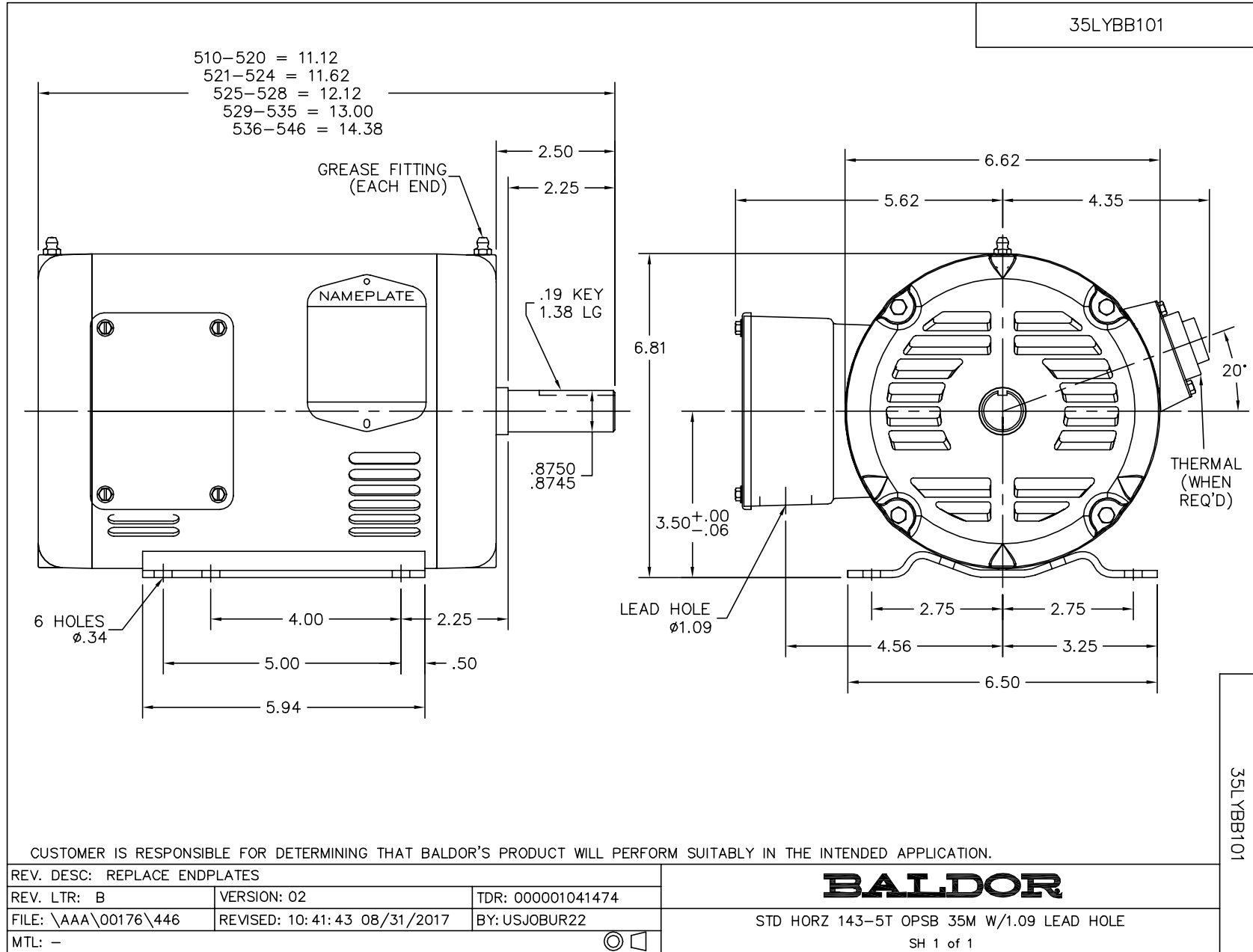
Load Characteristics 575 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	52	64	73	79	82	78
Efficiency	76.4	84.3	86.2	86.4	85.6	84.2	86.1
Speed	1789	1777	1766	1752	1737	1722	1749
Line amperes	1.55	1.74	2.03	2.38	2.78	3.26	2.56

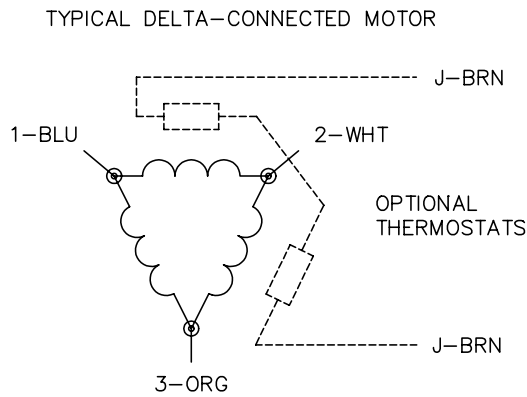
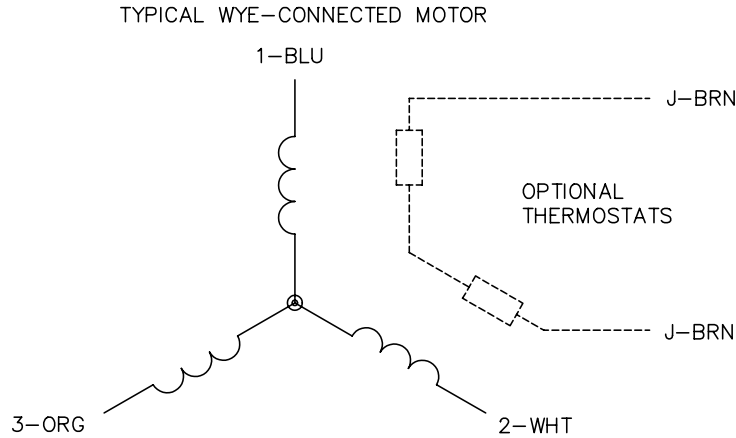


Performance Graph at 575V, 60Hz, 2.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000D		FILE: AAA00005141	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006