

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3154T**

**1.5HP,1755RPM,3PH,60HZ,145T,3522M,OPSB,F**

Part Detail							
Revision:	R	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM495	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35BB101	Layout:	35LYBB101	Poles:	04	Created Date:	10-25-2010
Base:	RG	Eff. Date:	01-30-2018	Leads:	9#18		

Specs			
Catalog Number:	EM3154T	Insulation Class:	F
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	145T	KVA Code:	L
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.500 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:	3522M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	72
	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

<b>Current @ Voltage:</b>	2.200 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	4.400 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	4.500 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553LUA</b>									
<b>CAT.NO.</b>	EM3154T								
<b>SPEC.</b>	35BB101M495G1								
<b>HP</b>	1.5								
<b>VOLTS</b>	230/460								
<b>AMPS</b>	4.4/2.2								
<b>RPM</b>	1755								
<b>FRAME</b>	145T			<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15			<b>CODE</b>	L		<b>DES</b>	B	
<b>NEMA NOM. EFF</b>	86.5			<b>PF</b>	72			<b>CLASS</b>	F
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A						<b>USABLE AT 208V</b>	4.5	
<b>DE</b>	6205			<b>ODE</b>	6203				
<b>ENCL</b>	OPSB			<b>SN</b>					
<b>VPWM INVERTER READY</b>									
<b>CT30-60(2:1) VT3-60(20:1)</b>									
<b>USABLE AT</b>	50HZ 1.5HP 190/380V 5.2/2.6A								SF1.0

Parts List		
Part Number	Description	Quantity
SA205216	SA 35BB101M495G1	1.000 EA
RA192458	RA 35BB101M495G1	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
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
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 # 32593 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGM495-R001	<b>Type:</b> 3522M	<b>Enclosure:</b> OPSB
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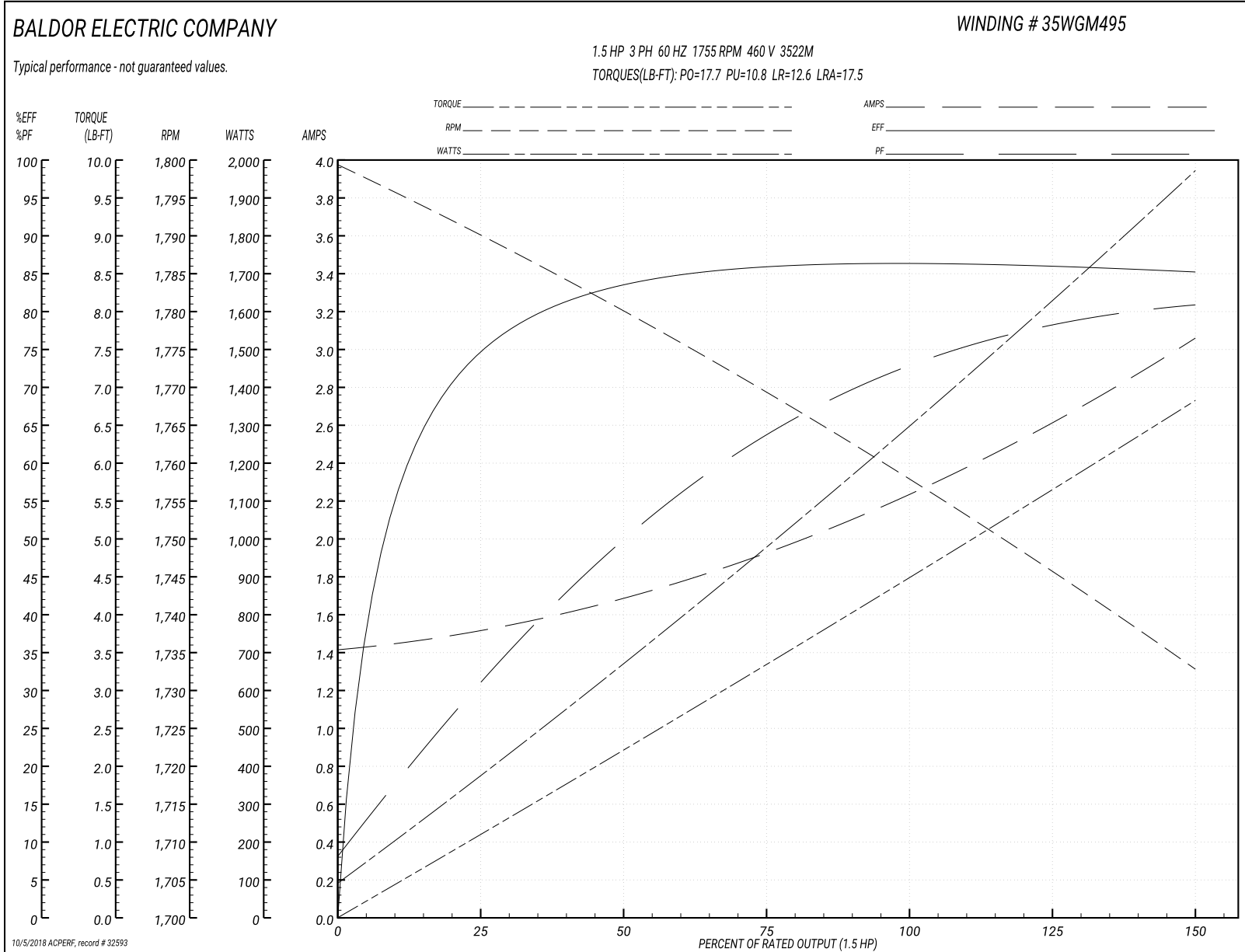
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	4.46 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	4.50/2.25			Breakdown Torque	17.7 LB-FT
R.P.M.	1755			Pull-up Torque	10.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	12.6 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	17.5 A
Service Factor (S.F.)	1.15			No-load Current	1.43 A
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	10.73 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	40°C

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	78	81	76
Efficiency	74.7	83.5	86	86.6	86.3	85.3	86.4
Speed	1789.9	1780.2	1769.2	1758.4	1746.3	1732.6	1751
Line amperes	1.5	1.67	1.93	2.24	2.61	3.05	2.46



Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 60670 - Typical performance - not guaranteed values

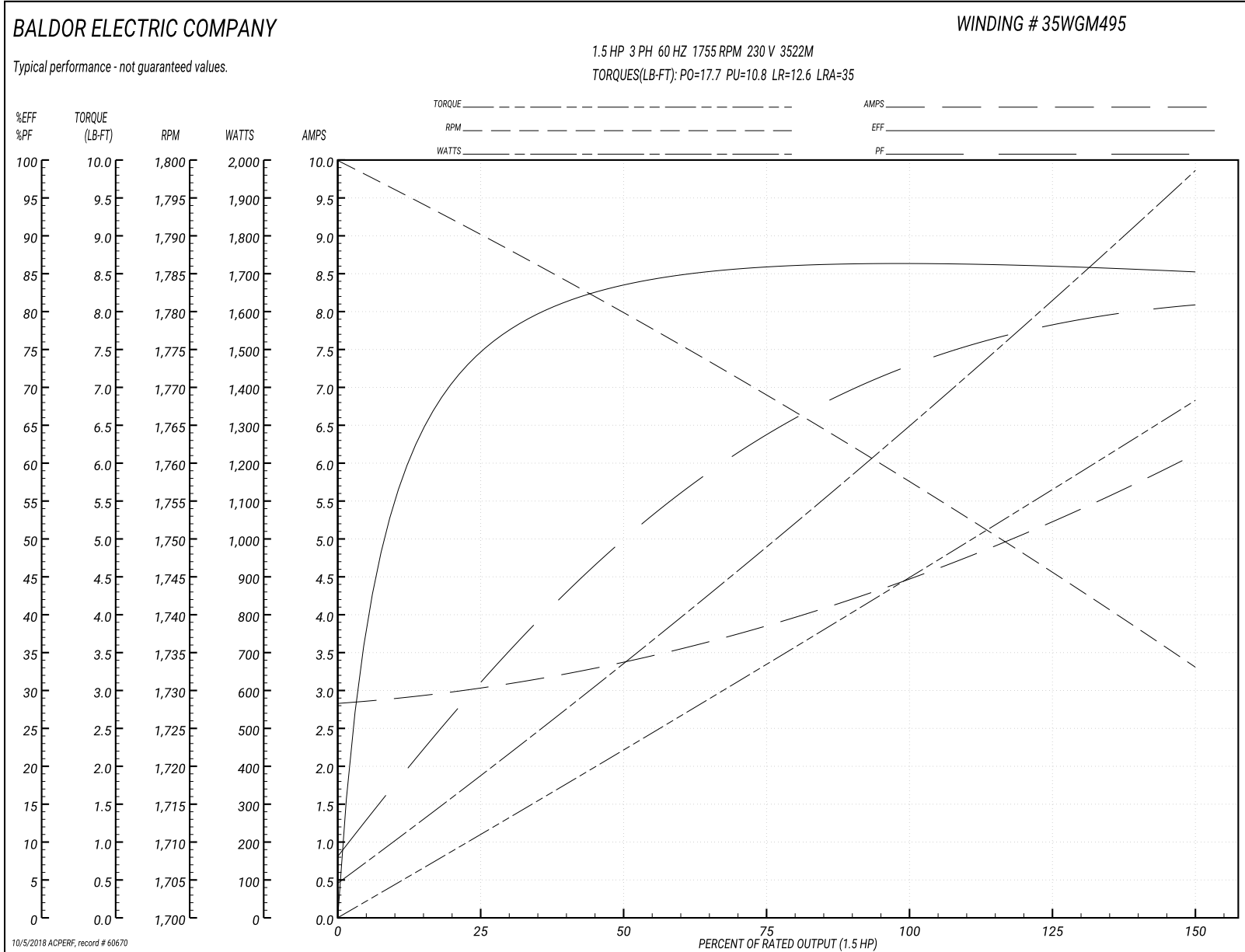
<b>Winding:</b> 35WGM495-R001	<b>Type:</b> 3522M	<b>Enclosure:</b> OPSB
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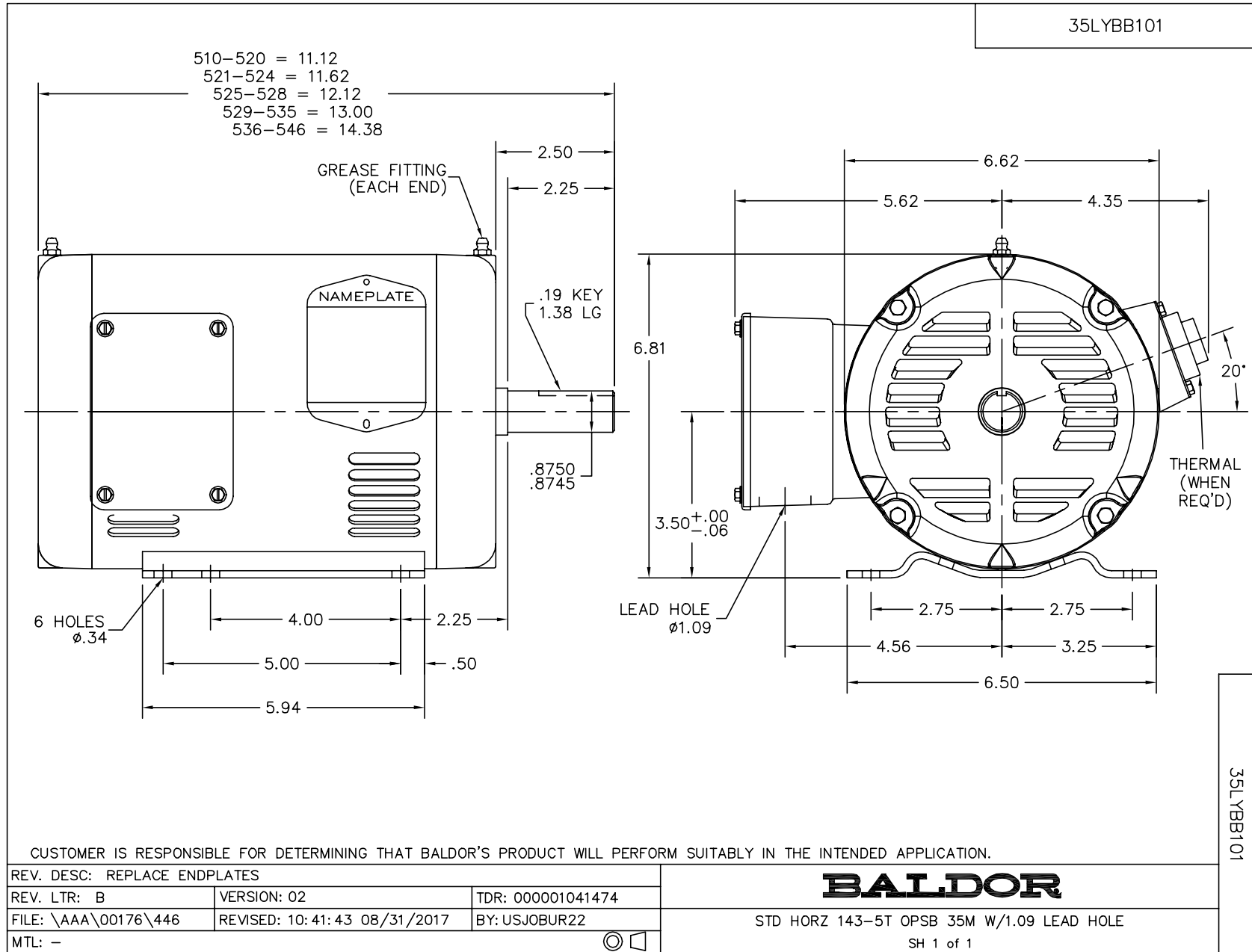
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	4.46 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	4.4/2.2			Breakdown Torque	17.7 LB-FT
R.P.M.	1755			Pull-up Torque	10.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	12.6 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	35 A
Service Factor (S.F.)	1.15			No-load Current	2.86 A
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	2.59 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	40°C
				Locked-rotor Power Factor	52.5
				Rotor inertia	0.13 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 1.5 HP

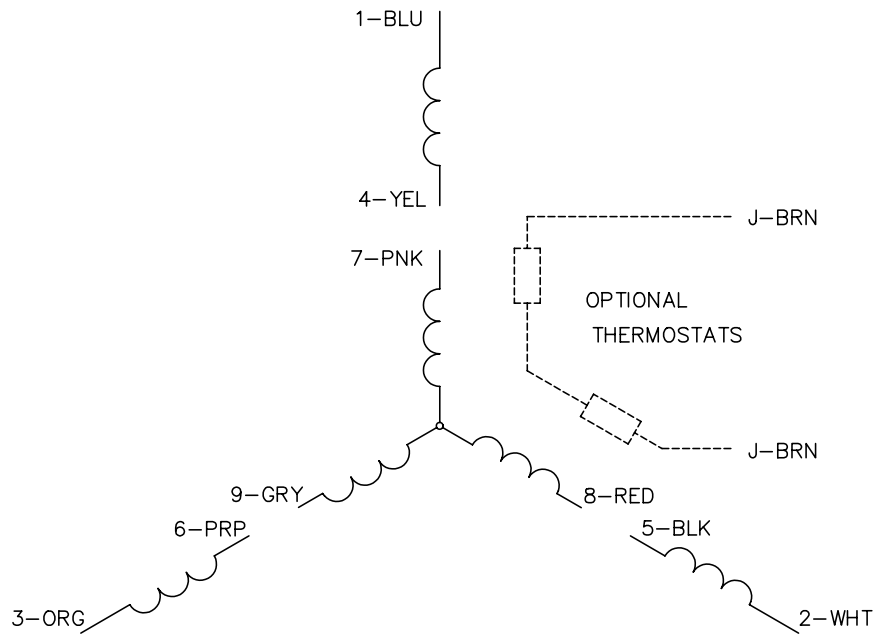
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	78	81	76
Efficiency	74.7	83.3	85.9	86.5	86.1	85.2	86.3
Speed	1790	1780	1769	1758	1746	1733	1751
Line amperes	3	3.34	3.86	4.48	5.22	6.1	4.92

Performance Graph at 230V, 60Hz, 1.5HP Typical performance - Not guaranteed values

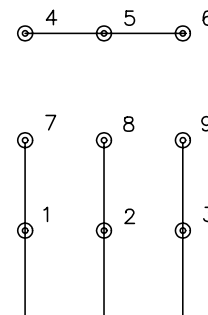




CD0005

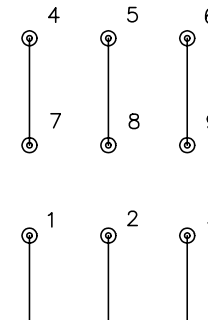


LOW VOLTAGE  
(2Y)



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005