

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3154T**

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

Part Detail							
Revision:	S	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:	06-14-2021	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								<b>SF1.0</b>

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, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	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 (2100/bx) 4/22	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	

**AC Induction Motor Performance Data**

Record # 32593

Typical performance - not guaranteed values

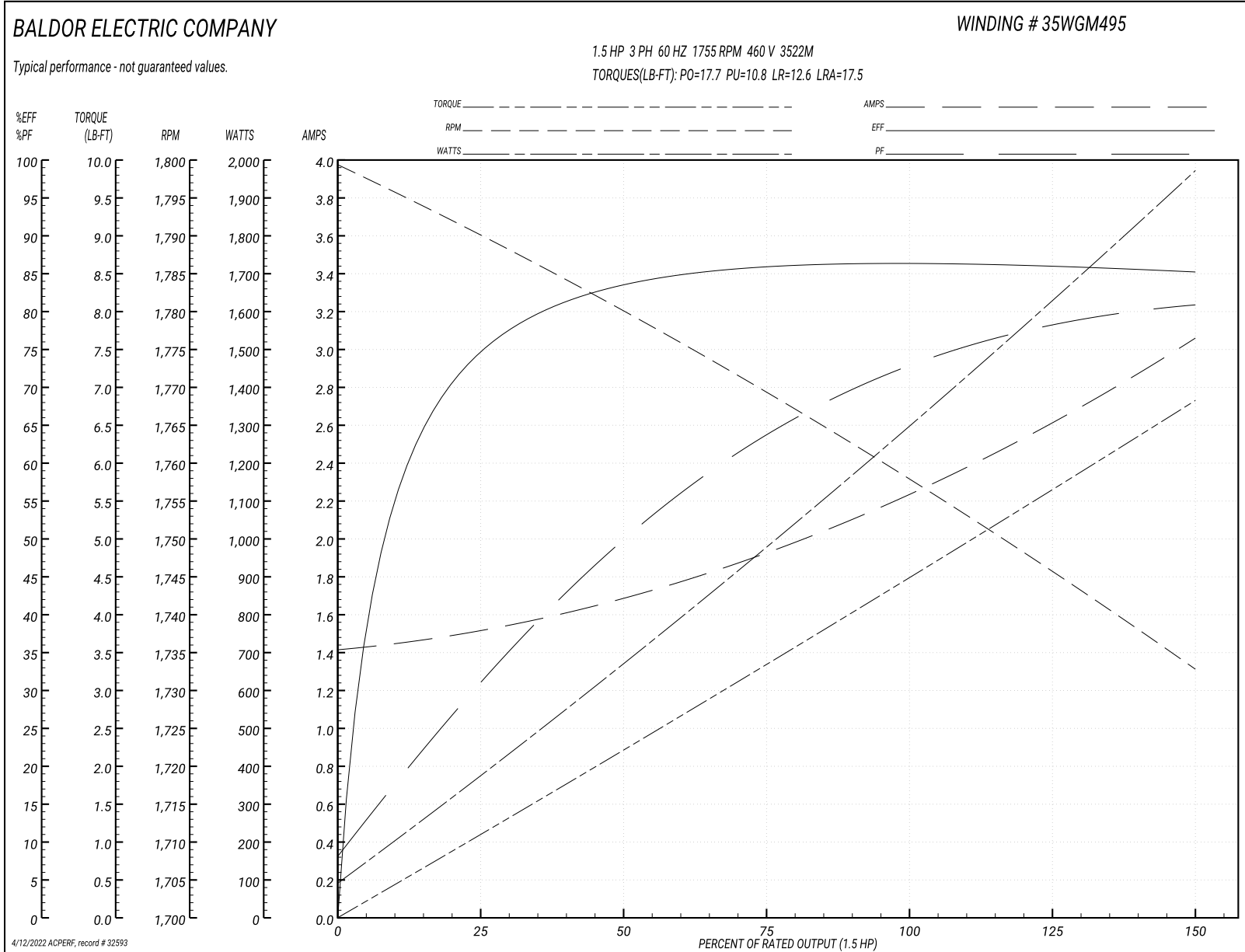
<b>Winding:</b> 35WGM495-R001		<b>Type:</b> 3522M		<b>Enclosure:</b> OPSB		
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>			
<b>Rated Output (HP)</b>	1.5	<b>Full Load Torque</b>	4.46 LB-FT			
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line			
<b>Full Load Amps</b>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

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	32	50	63	72	78	81	76
<b>Efficiency</b>	74.7	83.5	86	86.6	86.3	85.3	86.4
<b>Speed</b>	1789.9	1780.2	1769.2	1758.4	1746.3	1732.6	1751
<b>Line amperes</b>	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

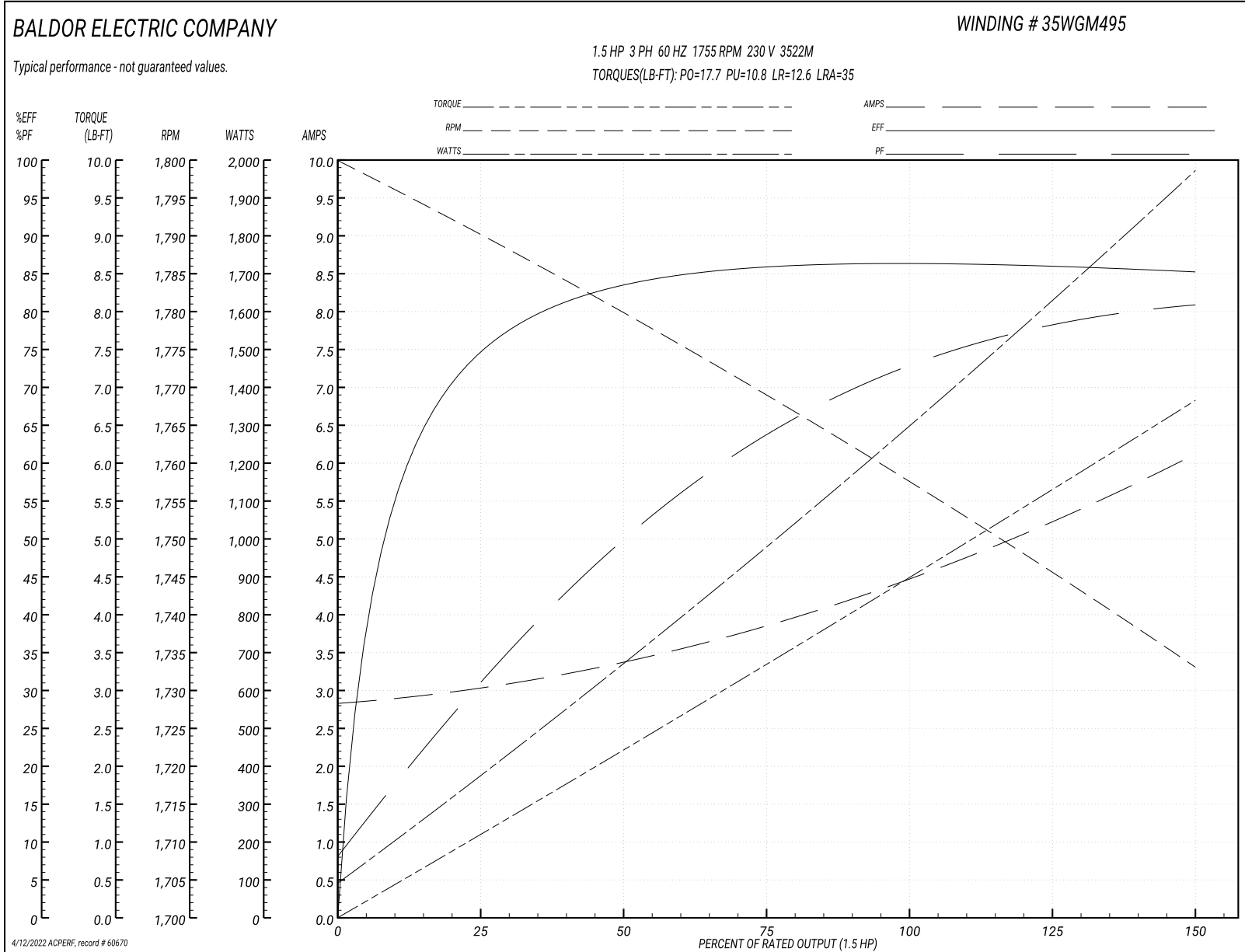
Typical performance - not guaranteed values

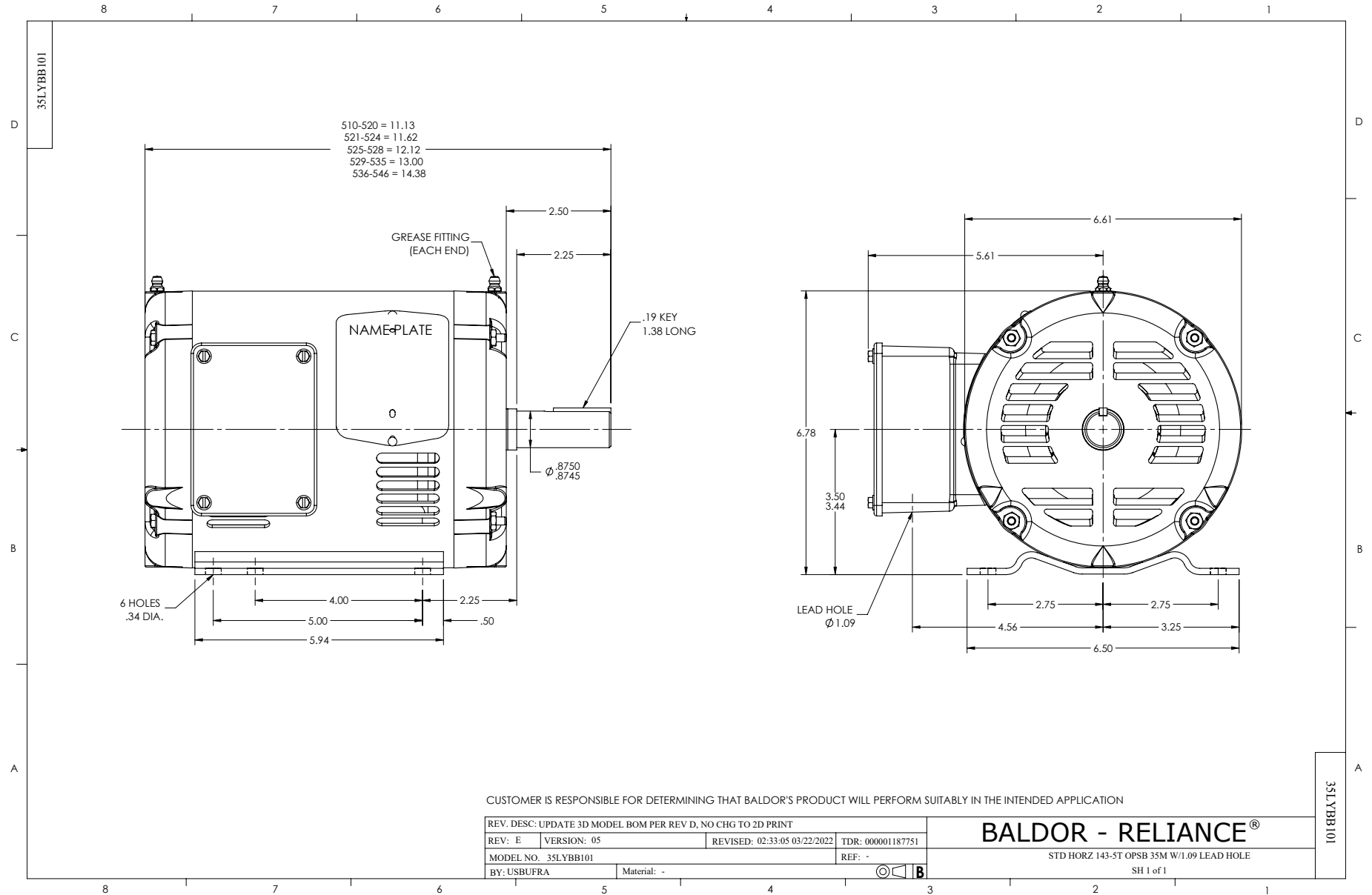
<b>Winding:</b> 35WGM495-R001		<b>Type:</b> 3522M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	1.5	<b>Full Load Torque</b>	4.46 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	4.4/2.2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

**Load Characteristics 230 V, 60 Hz, 1.5 HP**

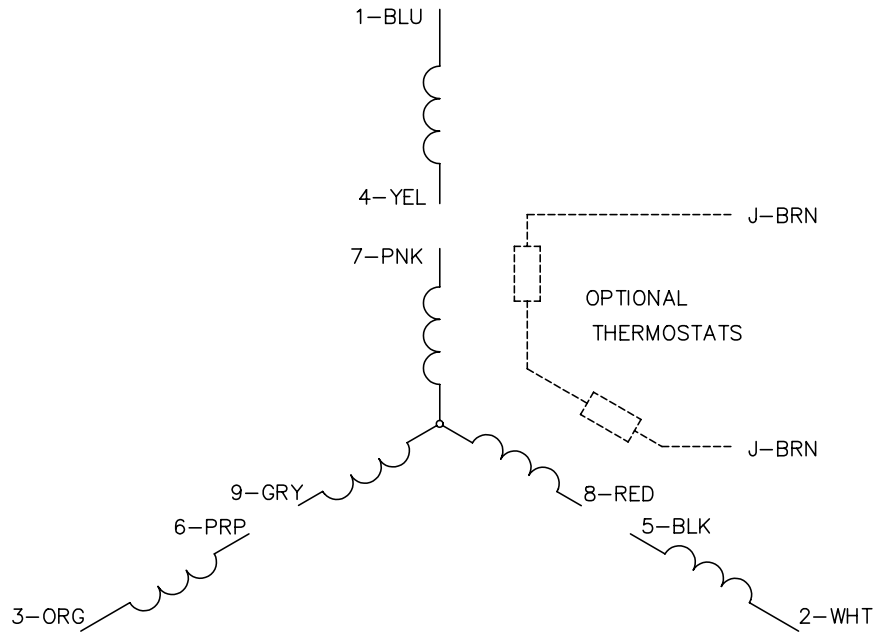
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	32	50	63	72	78	81	76
<b>Efficiency</b>	74.7	83.3	85.9	86.5	86.1	85.2	86.3
<b>Speed</b>	1790	1780	1769	1758	1746	1733	1751
<b>Line amperes</b>	3	3.34	3.86	4.48	5.22	6.1	4.92

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

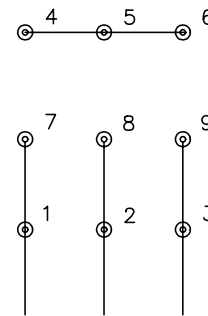




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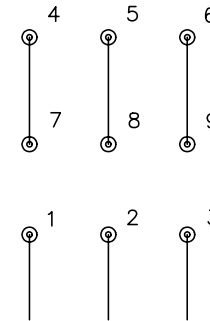


LOW VOLTAGE  
(2Y)



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