

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EFM3546T**

**1HP,1760RPM,3PH,60HZ,143T,3520M,TEFC,F2**

Part Detail							
Revision:	N	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM492	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35AA006	Layout:	35LYAA006	Poles:	04	Created Date:	04-22-2013
Base:	RG	Eff. Date:	10-20-2021	Leads:	9#18		

Specs			
Catalog Number:	EFM3546T	Insulation Class:	F
Enclosure:	TEFC	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:	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:	3520M
XP Division:	Not Applicable	Mounting Arrangement:	F2
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

<b>Current @ Voltage:</b>	1.500 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	3.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	3.100 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 NP3441L</b>										
<b>CAT.NO.</b>	EFM3546T									
<b>SPEC.</b>	35AA006M492G2									
<b>HP</b>	1									
<b>VOLTS</b>	230/460									
<b>AMP</b>	3/1.5									
<b>RPM</b>	1760									
<b>FRAME</b>	143T			<b>HZ</b>	60				<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	L		<b>DES</b>	B		<b>CL</b>	F
<b>NEMA-NOM-EFF</b>	85.5		<b>PF</b>	71						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A					<b>USABLE AT 208V</b>	3.1			
<b>DE</b>	6205			<b>ODE</b>	6203					
<b>ENCL</b>	TEFC		<b>SN</b>							
<b>VPWM INVERTER READY</b> CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA262054	SA 35AA006M492G2	1.000 EA
RA248787	RA 35AA006M492G2	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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
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
35PA1066	PKG GRP, PRINT PK1008A06	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 # 53095

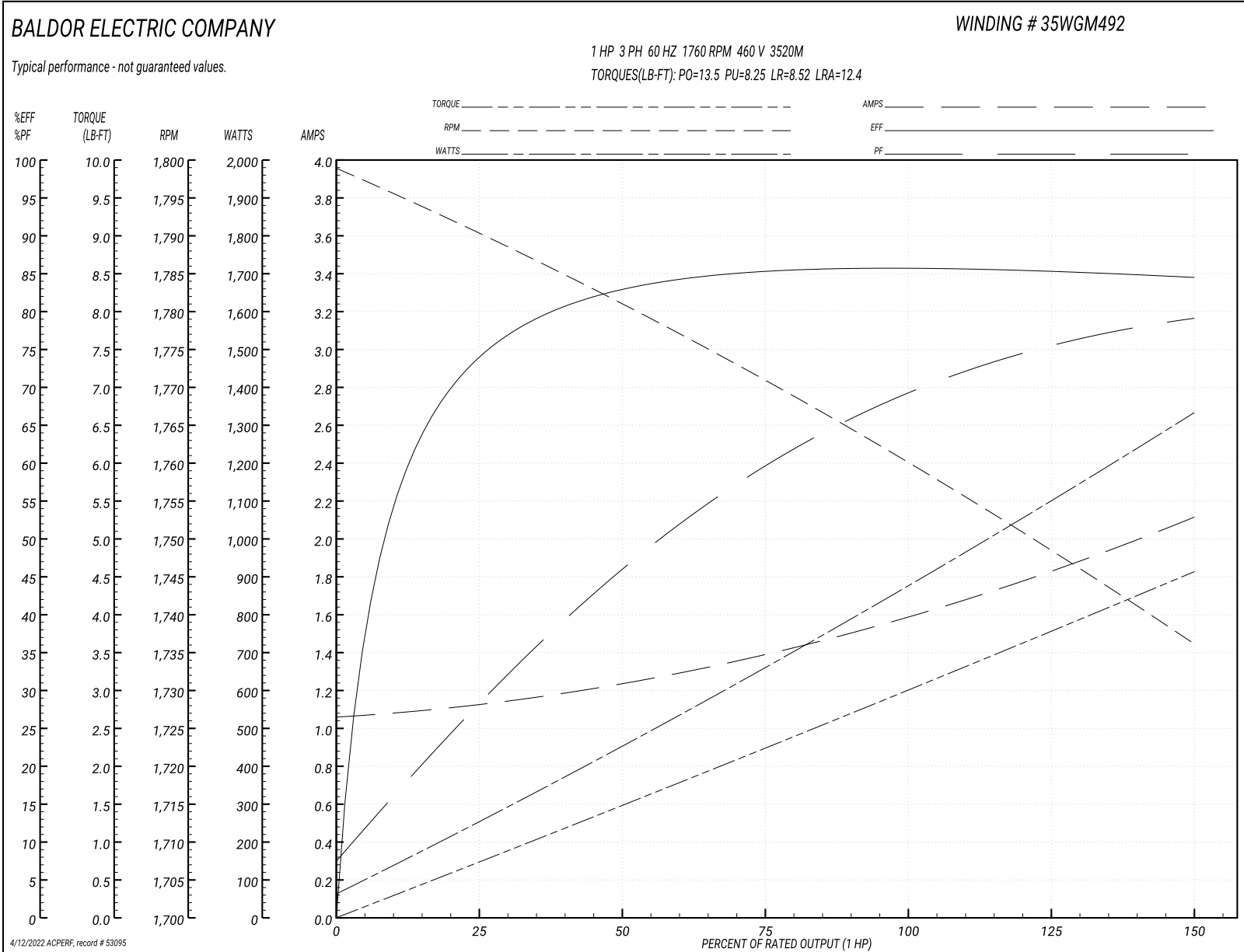
Typical performance - not guaranteed values

<b>Winding: 35WGM492-R050</b>		<b>Type: 3520M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	2.99 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3/1.5	<b>Breakdown Torque</b>	13.5 LB-FT		
<b>R.P.M.</b>	1760	<b>Pull-up Torque</b>	8.25 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	8.52 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	L	<b>Starting Current</b>	12.4 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	1.07 A	
<b>NEMA Nom. Eff.</b>	85.5 <b>Power Factor</b>	71	<b>Line-line Res. @ 25°C</b>	15 Ω	
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	36°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	42°C	
			<b>Locked-rotor Power Factor</b>	53.8	
			<b>Rotor inertia</b>	0.118 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 1 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>	29	46	60	69	75	79	75
<b>Efficiency</b>	74.2	82.9	85.4	85.8	85.4	84.5	85.4
<b>Speed</b>	1790	1781	1771	1760	1749	1736	1754
<b>Line amperes</b>	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





**AC Induction Motor Performance Data**

Record # 57707

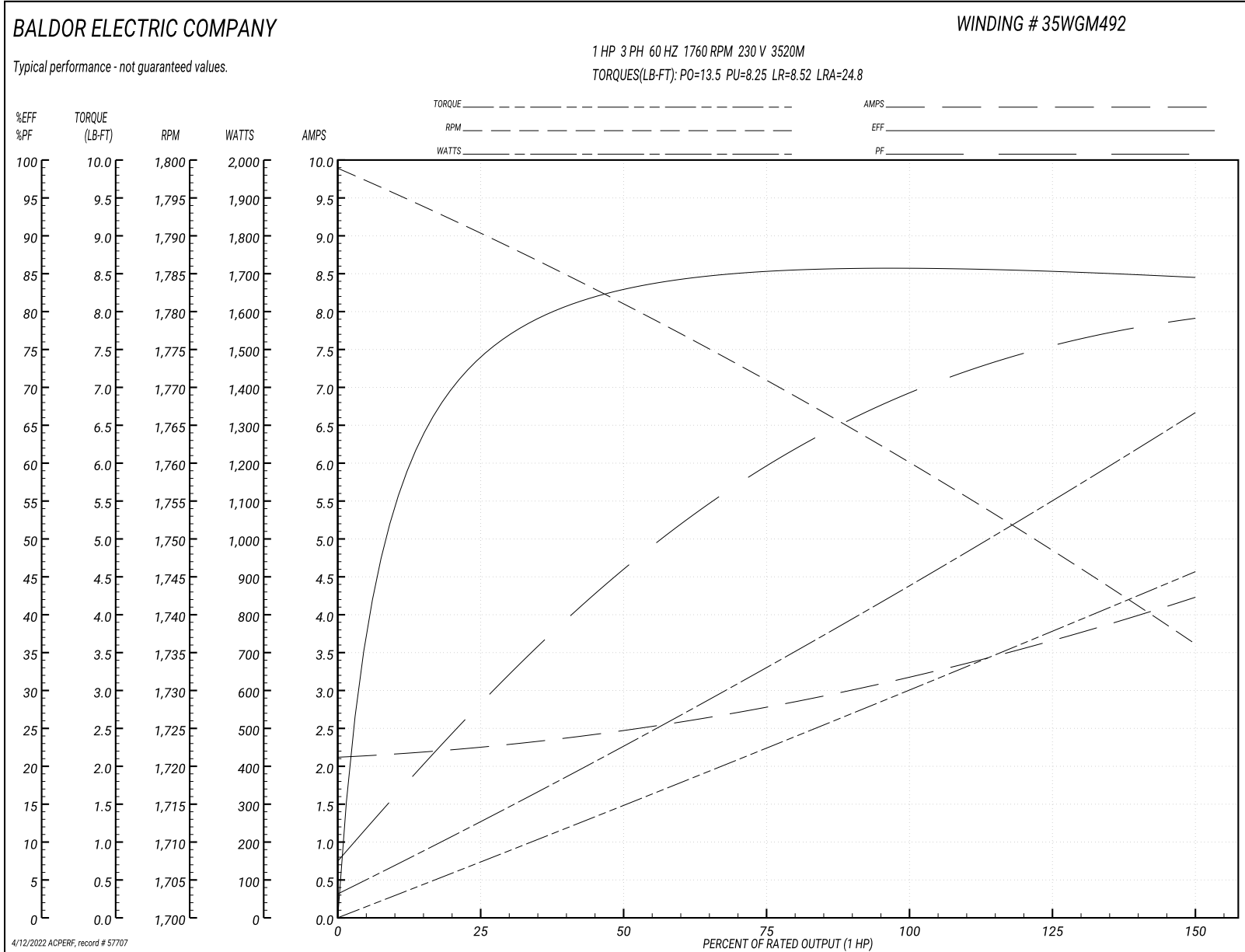
Typical performance - not guaranteed values

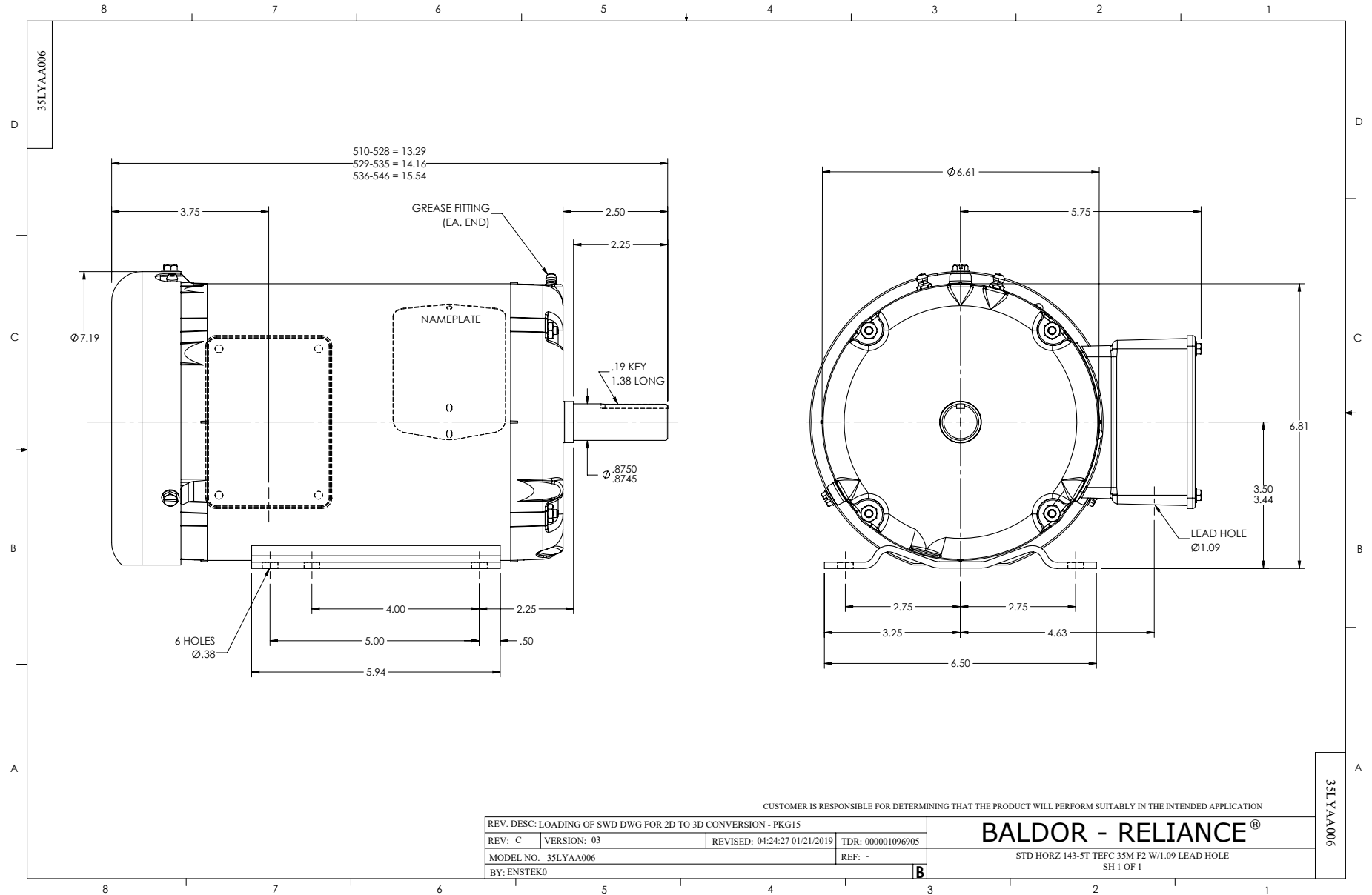
<b>Winding: 35WGM492-R050</b>		<b>Type: 3520M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	2.99 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3/1.5	<b>Breakdown Torque</b>	13.5 LB-FT		
<b>R.P.M.</b>	1760	<b>Pull-up Torque</b>	8.25 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	8.52 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	L	<b>Starting Current</b>	24.8 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	2.14 A	
<b>NEMA Nom. Eff.</b>	85.5	<b>Power Factor</b>	71	<b>Line-line Res. @ 25°C</b>	3.75 Ω
<b>Rating - Duty</b>	40C	<b>AMB-CONT</b>		<b>Temp. Rise @ Rated Load</b>	36°C
<b>S.F. Amps</b>				<b>Temp. Rise @ S.F. Load</b>	42°C
				<b>Locked-rotor Power Factor</b>	53.8
				<b>Rotor inertia</b>	0.118 LB-FT <sup>2</sup>

**Load Characteristics 230 V, 60 Hz, 1 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>	29	46	60	69	75	79	74
<b>Efficiency</b>	74.2	82.9	85.4	85.8	85.4	84.5	85.6
<b>Speed</b>	1790	1781	1771	1760	1749	1736	1754
<b>Line amperes</b>	2.22	2.48	2.78	3.18	3.66	4.22	1.69

Performance Graph at 230V, 60Hz, 1.0HP Typical performance - Not guaranteed values

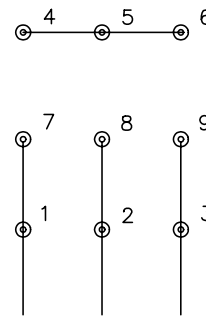




CD0005

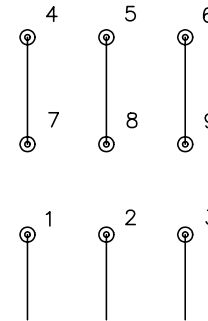


LOW VOLTAGE  
(2Y)



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

90000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005