

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM3558T**

**2HP,1755RPM,3PH,60HZ,145TC,3530M,TEFC,F1**

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM494	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35AA002	Layout:	35LYAA002	Poles:	04	Created Date:	08-04-2010
Base:	RG	Eff. Date:	03-13-2018	Leads:	9#18		

Specs			
Catalog Number:	CEM3558T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	145TC	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	L
Output @ Frequency:	2.000 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3530M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	73
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	2.900 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	5.800 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	6.000 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>Winding Thermal 2:</b>	None

<b>Nameplate NP3441LUA</b>										
<b>CAT.NO.</b>	CEM3558T									
<b>SPEC</b>	35AA002M494G1									
<b>HP</b>	2									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	5.8/2.9									
<b>RPM</b>	1755									
<b>FRAME</b>	145TC				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	L	<b>DES</b>	B		<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	86.5		<b>PF</b>	73						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A			<b>USABLE AT 208V</b>						6
<b>ENCL</b>	TEFC		<b>SER</b>							
<b>DE</b>	6205			<b>ODE</b>	6203					
<b>VPWM INVERTER READY</b>										
<b>CT6-60H(10:1)VT3-60H(20:1)</b>										
									50Hz 2HP 190/380V 6.8/3.4A	
									SF1.0	

Parts List		
Part Number	Description	Quantity
SA201001	SA 35AA002M494G1	1.000 EA
RA188306	RA 35AA002M494G1	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
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 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
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	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

**AC Induction Motor Performance Data**

Record # 53333 - Typical performance - not guaranteed values

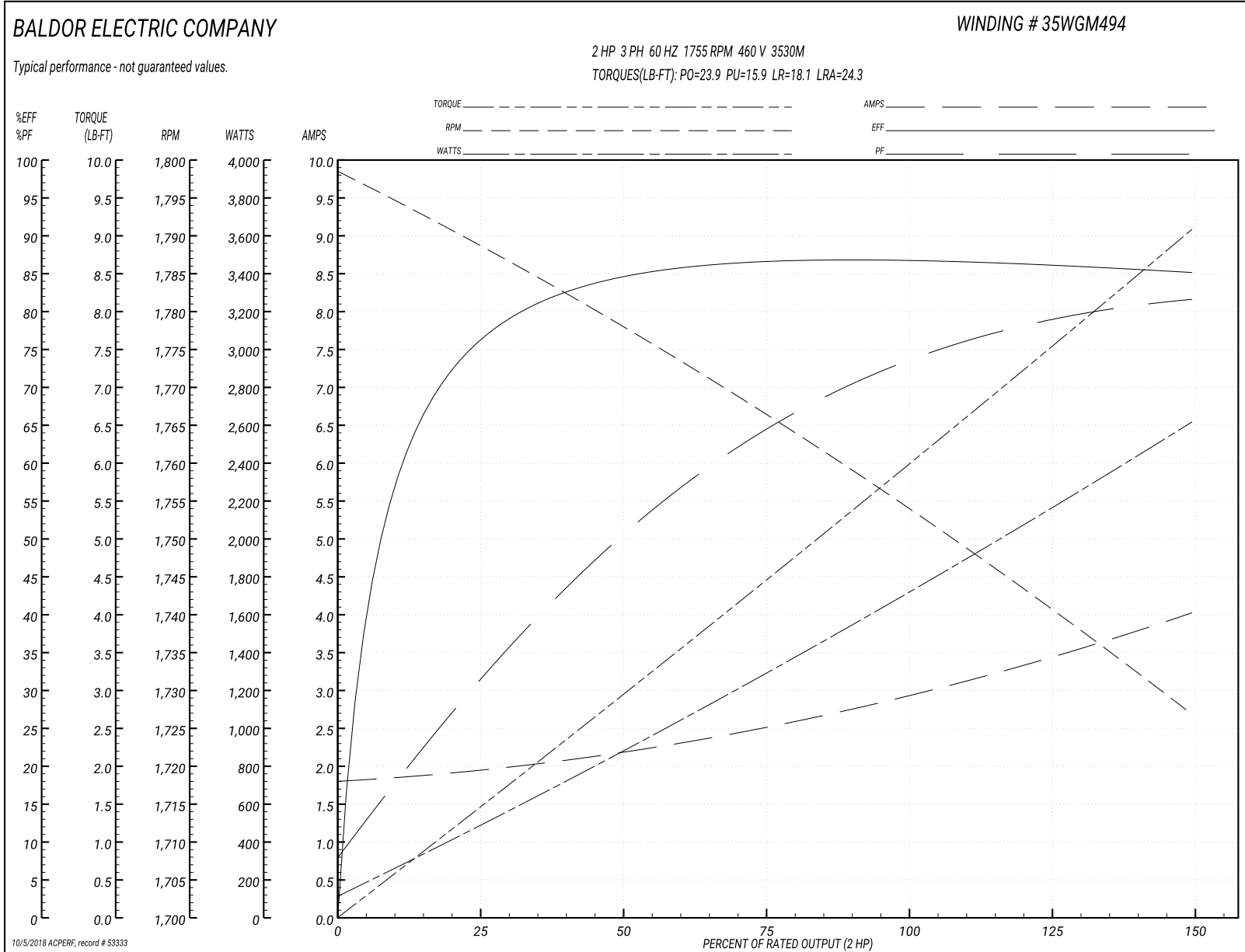
<b>Winding:</b> 35WGM494-R078	<b>Type:</b> 3530M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	23.9 LB-FT
R.P.M.	1755			Pull-up Torque	15.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	18.1 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	24.3 A
Service Factor (S.F.)	1.15			No-load Current	1.82 A
NEMA Nom. Eff.	86.5	Power Factor	73	Line-line Res. @ 25°C	7.46 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	61°C
S.F. Amps				Temp. Rise @ S.F. Load	74°C
				Locked-rotor Power Factor	50
				Rotor inertia	0.177 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	51	64	73	79	82	77
Efficiency	75.7	84.2	86.4	87.3	86.2	85.1	86.4
Speed	1788.5	1778	1766.7	1754.5	1740.8	1726.6	1746
Line amperes	1.92	2.17	2.51	2.94	3.46	4.01	3.25

Performance Graph at 460V, 60Hz, 2.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 64712 - Typical performance - not guaranteed values

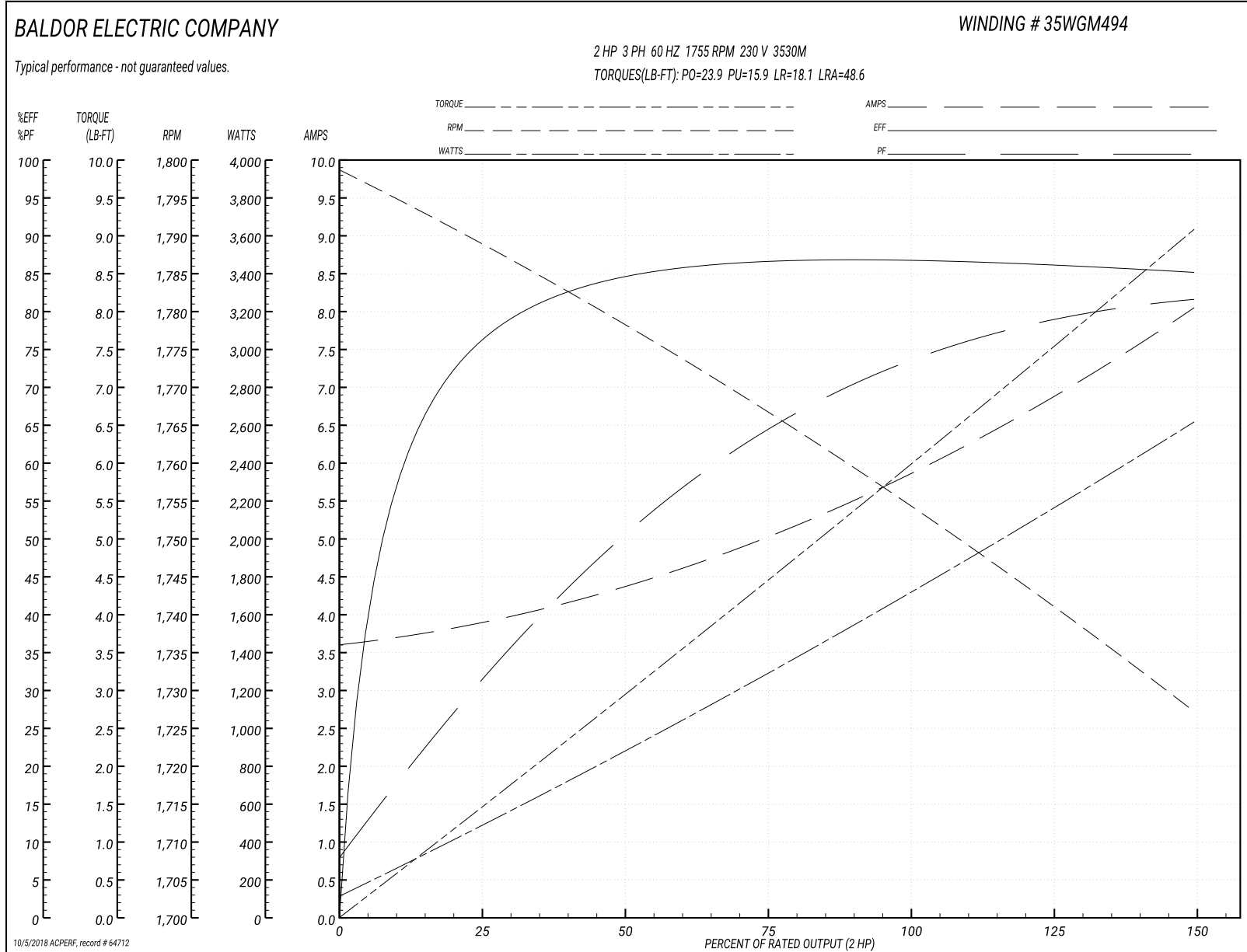
<b>Winding:</b> 35WGM494-R078	<b>Type:</b> 3530M	<b>Enclosure:</b> TEFC
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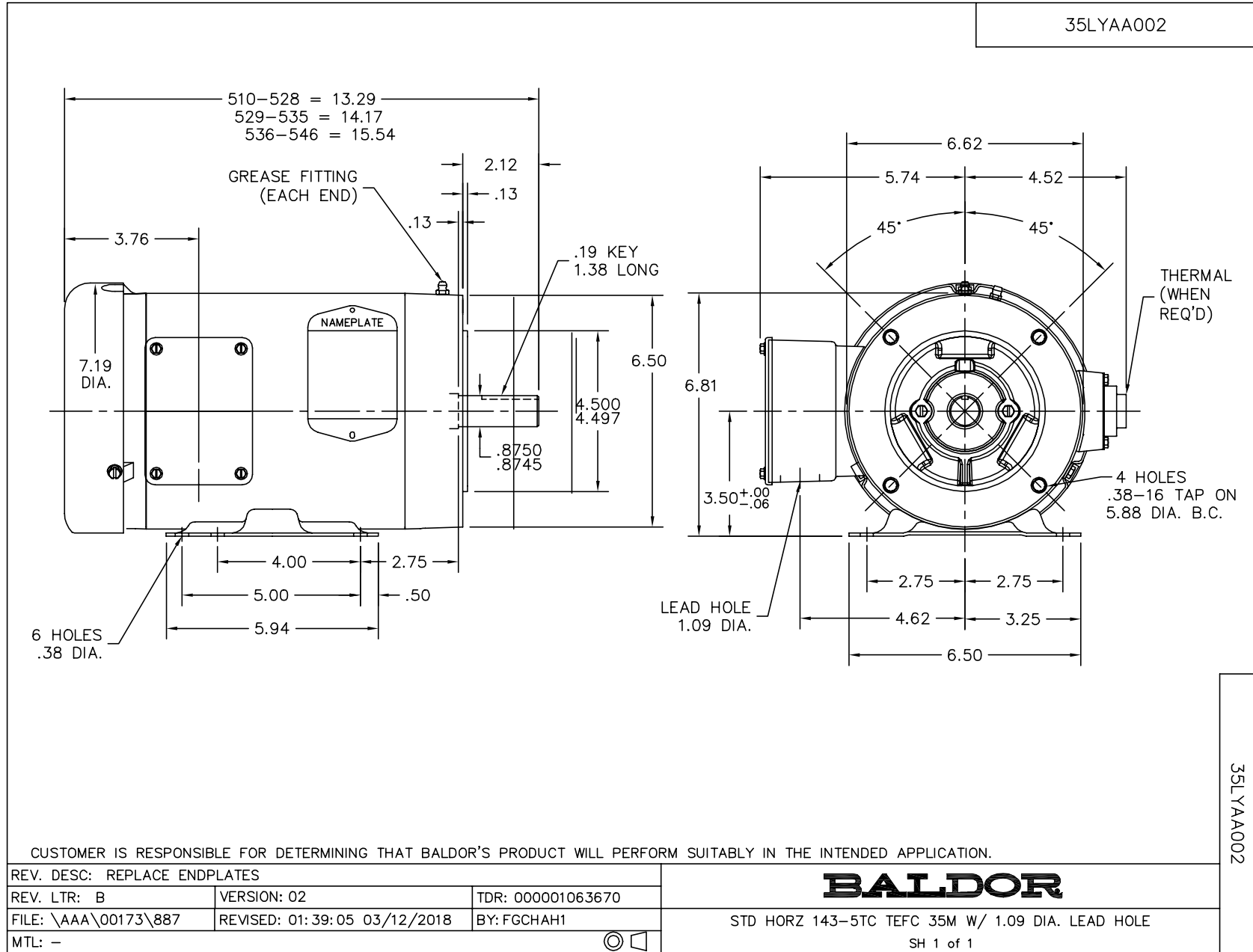
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	23.9 LB-FT
R.P.M.	1755			Pull-up Torque	15.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	18.1 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	48.6 A
Service Factor (S.F.)	1.15			No-load Current	3.64 A
NEMA Nom. Eff.	86.5	Power Factor	73	Line-line Res. @ 25°C	1.75 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	61°C
S.F. Amps				Temp. Rise @ S.F. Load	72°C
				Locked-rotor Power Factor	50.1
				Rotor inertia	0.177 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	51	64	73	79	82	77
Efficiency	75.4	84	86.4	87.2	86.1	85	86.5
Speed	1789	1778	1767	1755	1741	1727	1747
Line amperes	3.84	4.34	5.02	5.88	6.92	8.02	6.5

Performance Graph at 230V, 60Hz, 2.0HP Typical performance - Not guaranteed values





CD0005

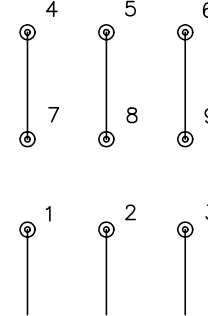


LOW VOLTAGE  
(2Y)



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