

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **EM3116T**

**1HP,1760RPM,3PH,60HZ,143T,3519M,OPSB,F1**

Part Detail							
Revision:	Q	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3520M	Elec. Spec:	35WGM492	CD Diagram:	CD0005
Enclosure:	OPSB	Mfg Plant:		Mech. Spec:	35L405	Layout:	35LYL405
Frame:	143T	Mounting:	F1	Poles:	04	Created Date:	08-02-2010
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	11-16-2016
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

<b>Nameplate NP3553L</b>										
<b>CAT.NO.</b>	EM3116T									
<b>SPEC.</b>	35L405M492G1									
<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>	OPSB		<b>SN</b>							
<b>VPWM INVERTER READY</b>										
CT30-60(2:1) VT3-60(20:1)										

Parts List		
Part Number	Description	Quantity
SA200628	SA 35L405M492G1	1.000 EA
RA187939	RA 35L405M492G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	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
35FE3201A01	FREP ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35PE3200A01	PUEP ASSEMBLY FOR ROUTING PURPOSES	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
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS GL.F.	2.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3553L	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 (1000/bx) 11/14	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 # 53095 - Typical performance - not guaranteed values

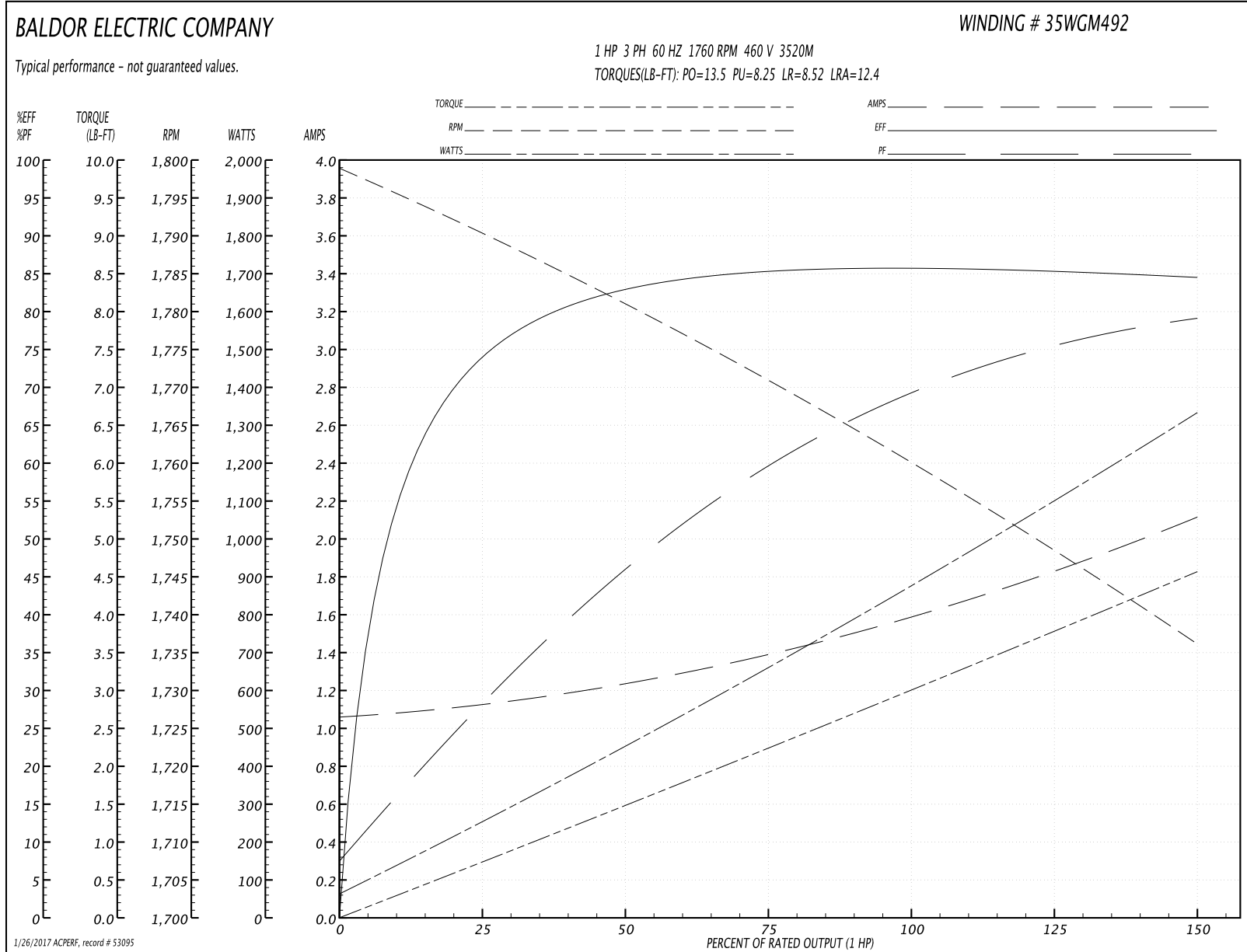
<b>Winding:</b> 35WGM492-R050	<b>Type:</b> 3520M	<b>Enclosure:</b> TEFC
-------------------------------	--------------------	------------------------

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

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	46	60	69	75	79	75
Efficiency	74.2	82.9	85.4	85.8	85.4	84.5	85.4
Speed	1790	1781	1771	1760	1749	1736	1754
Line amperes	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

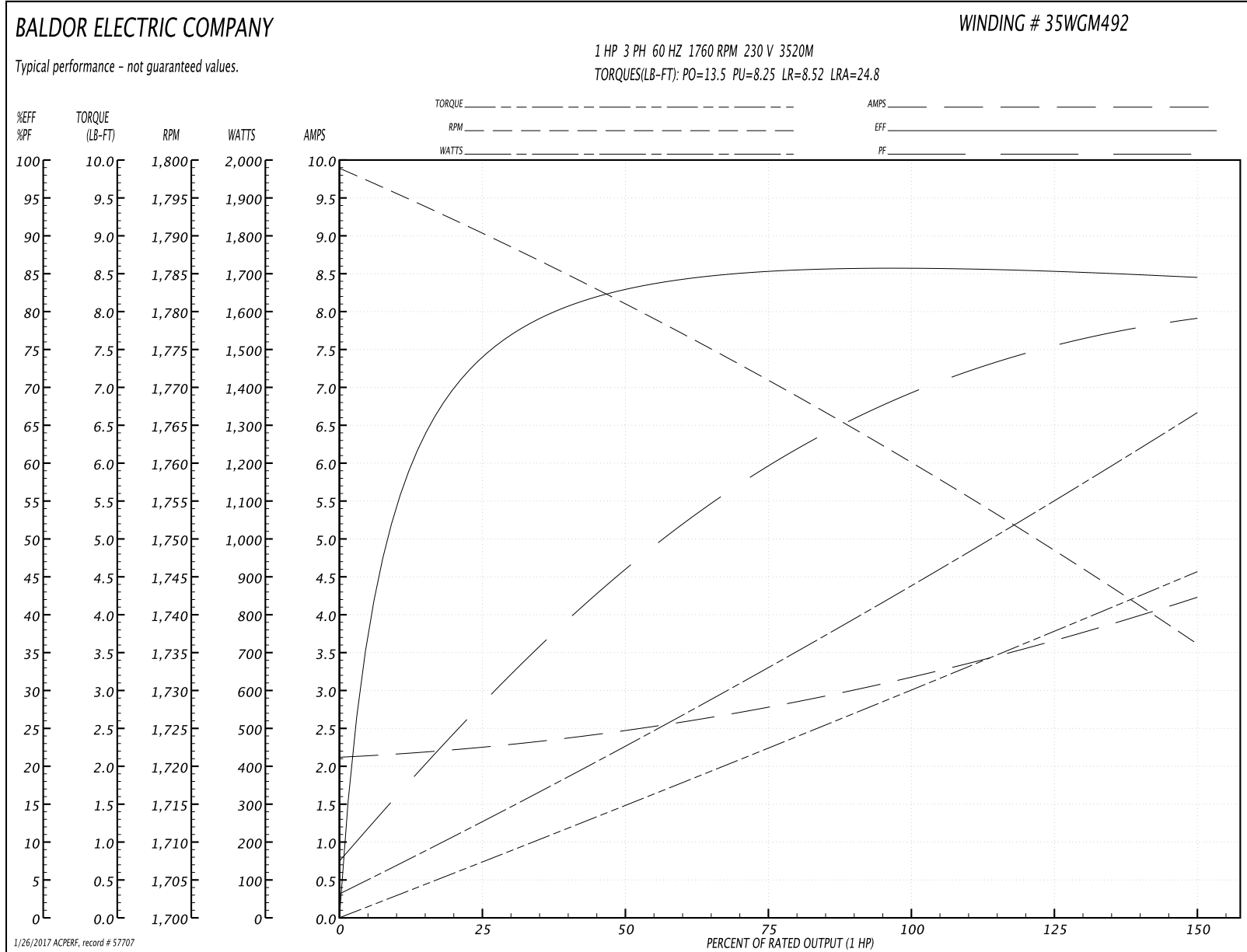
<b>Winding:</b> 35WGM492-R050	<b>Type:</b> 3520M	<b>Enclosure:</b> TEFC
-------------------------------	--------------------	------------------------

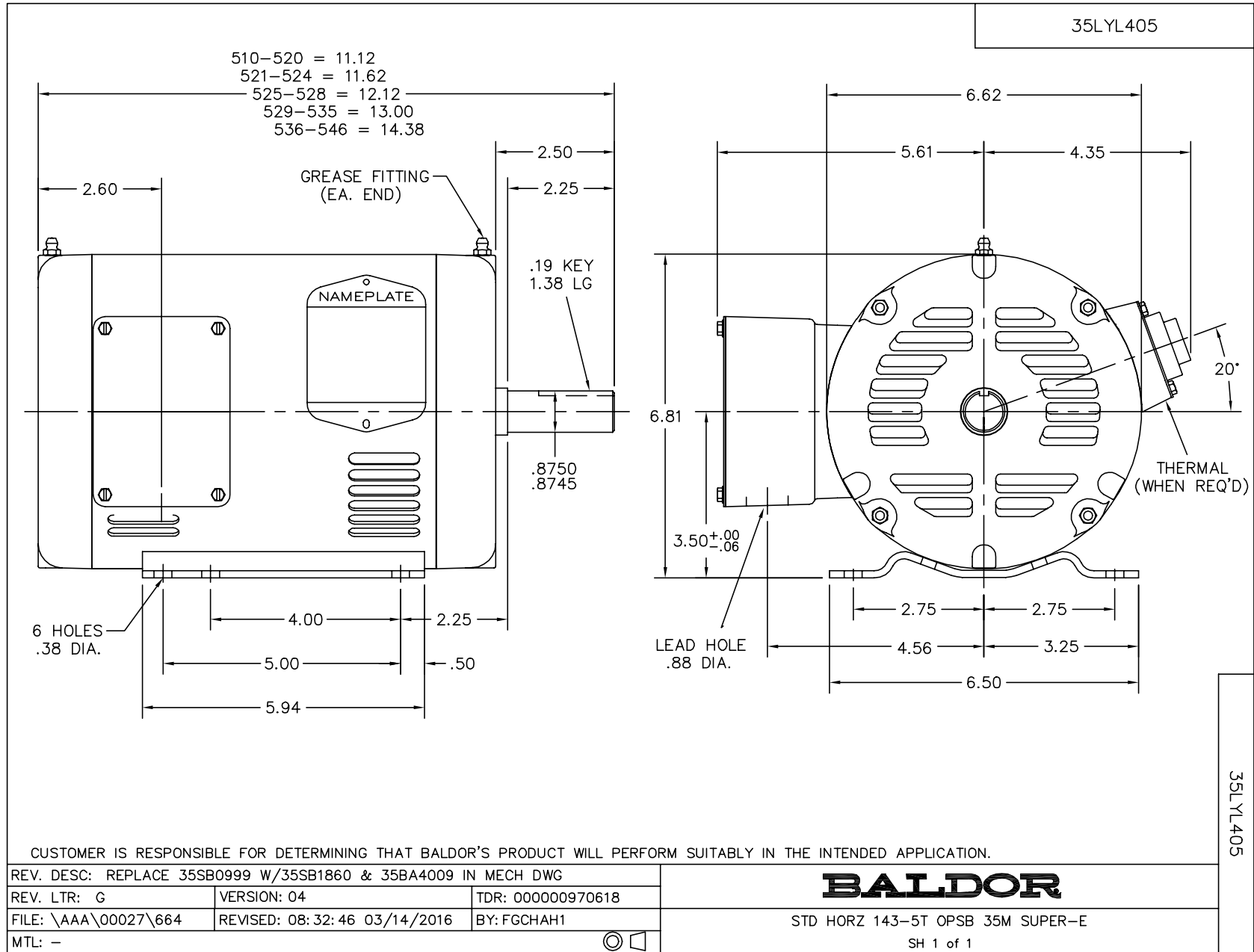
Nameplate Data				230 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	2.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	3/1.5			Breakdown Torque	13.5 LB-FT
R.P.M.	1760			Pull-up Torque	8.25 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	8.52 LB-FT
NEMA Design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

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	46	60	69	75	79	74
Efficiency	74.2	82.9	85.4	85.8	85.4	84.5	85.6
Speed	1790	1781	1771	1760	1749	1736	1754
Line amperes	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

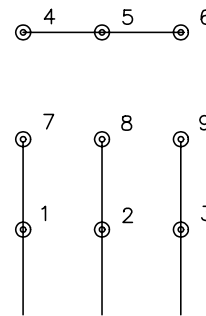




CD0005

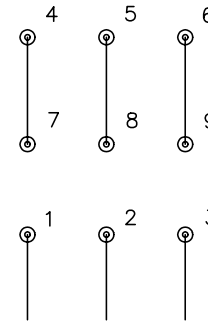


LOW VOLTAGE  
(2Y)



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