

# **BALDOR**® • *RELIANCE*

## Product Information Packet

# CEM3559T

3HP,3450RPM,3PH,60HZ,145TC,3532M,TEFC,F1

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3532M	Elec. Spec:	35WGQ060	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	35TT856	Layout:	35LYTT856
Frame:	145TC	Mounting:	F1	Poles:	02	Created Date:	08-03-2010
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	10-16-2015
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

<b>Nameplate NP3441LUA</b>									
<b>CAT.NO.</b>	CEM3559T								
<b>SPEC.</b>	35TT856Q060G1								
<b>HP</b>	3								
<b>VOLTS</b>	230/460								
<b>AMP</b>	7.2/3.6								
<b>RPM</b>	3450								
<b>FRAME</b>	145TC			<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>	86.5		<b>PF</b>	92					
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A					<b>USABLE AT 208V</b>	7.9		
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>ENCL</b>	TEFC		<b>SN</b>						
<b>VPWM INVERTER READY</b>									
<b>CT6-60H(10:1)VT3-60H(20:1</b>									
50Hz 3HP 190/380V 8.8/4.4A									SF1.0

Parts List		
Part Number	Description	Quantity
SA201301	SA 35TT856Q060G1	1.000 EA
RA188602	RA 35TT856Q060G1	1.000 EA
S/P107-000-001	SUPER E PROC'S-FS, WS & CK PLTS	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 EA
36GS1000	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
HW3001B01	BRASS CUP WASHER, FOR #8 SCREW	1.000 EA
35EP3100M01	FREP TEFC 203 BRG W/GRSR (RAISED FH PADS	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP3300A46	SPL FACE MTD EP-ENCL-145TC-205 BRG	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
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
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 EA
35GS1030	35 GS FOR CB LID - LEXIDE	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
10XF0440S02	04-40 X 1/8 TYPE F HEX HD STAINLESS STIC	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
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	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA

**AC Induction Motor Performance Data**

Record # 50261 - Typical performance - not guaranteed values

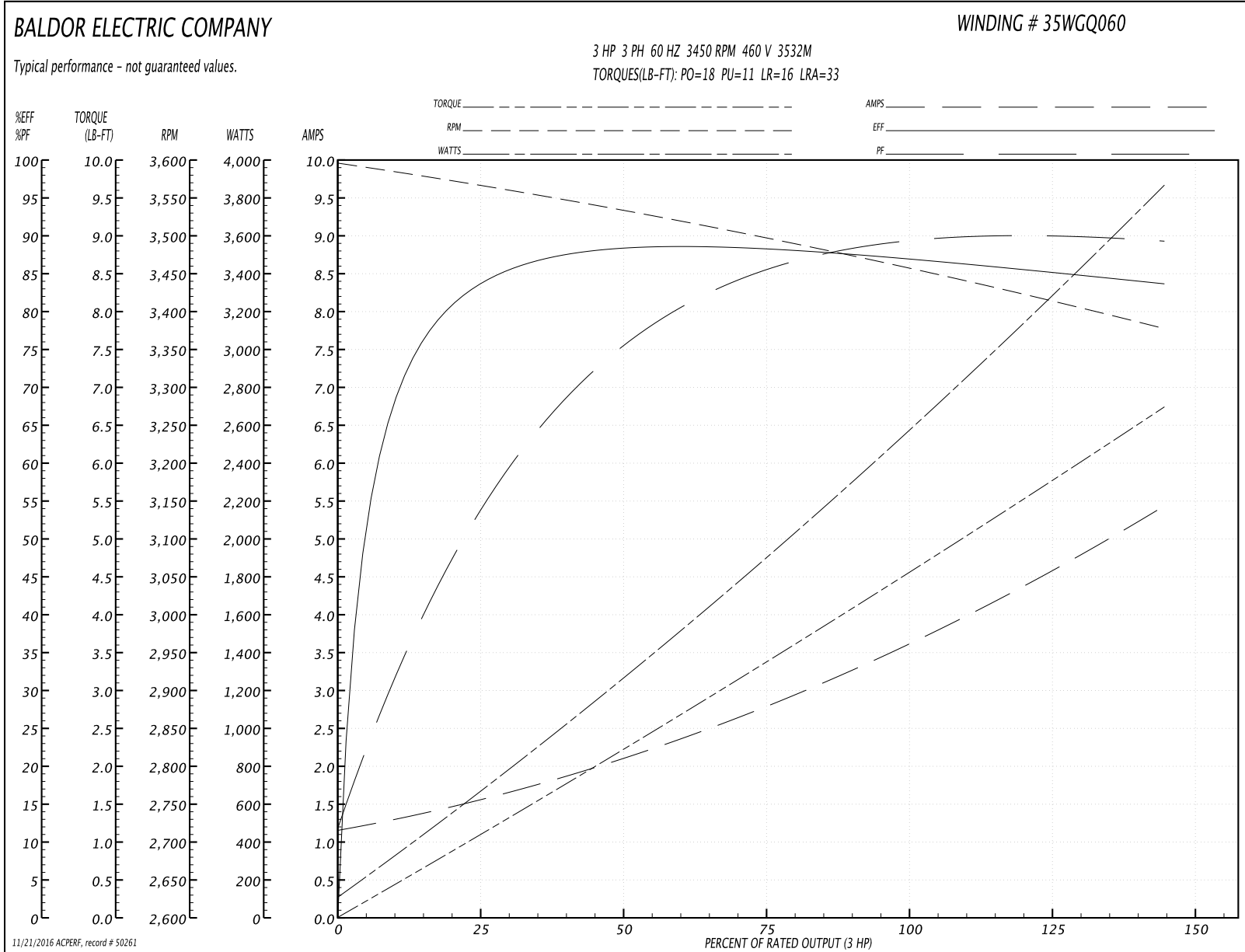
<b>Winding:</b> 35WGQ060-R002	<b>Type:</b> 3532M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	3			Full Load Torque	4.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	7.2/3.6			Breakdown Torque	18 LB-FT
R.P.M.	3450			Pull-up Torque	11 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	16 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	33 A
Service Factor (S.F.)	1.15			No-load Current	1.2 A
NEMA Nom. Eff.	86.5	Power Factor	92	Line-line Res. @ 25°C	4.72 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	61°C
S.F. Amps				Temp. Rise @ S.F. Load	76°C

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	81	88	92	93	94	93
Efficiency	83.7	87.9	88.2	87.2	85.6	83.5	86.2
Speed	3562	3531	3498	3462	3421	3375	3437
Line amperes	1.5	2.1	2.8	3.6	4.5	5.4	4.1

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 59171 - Typical performance - not guaranteed values

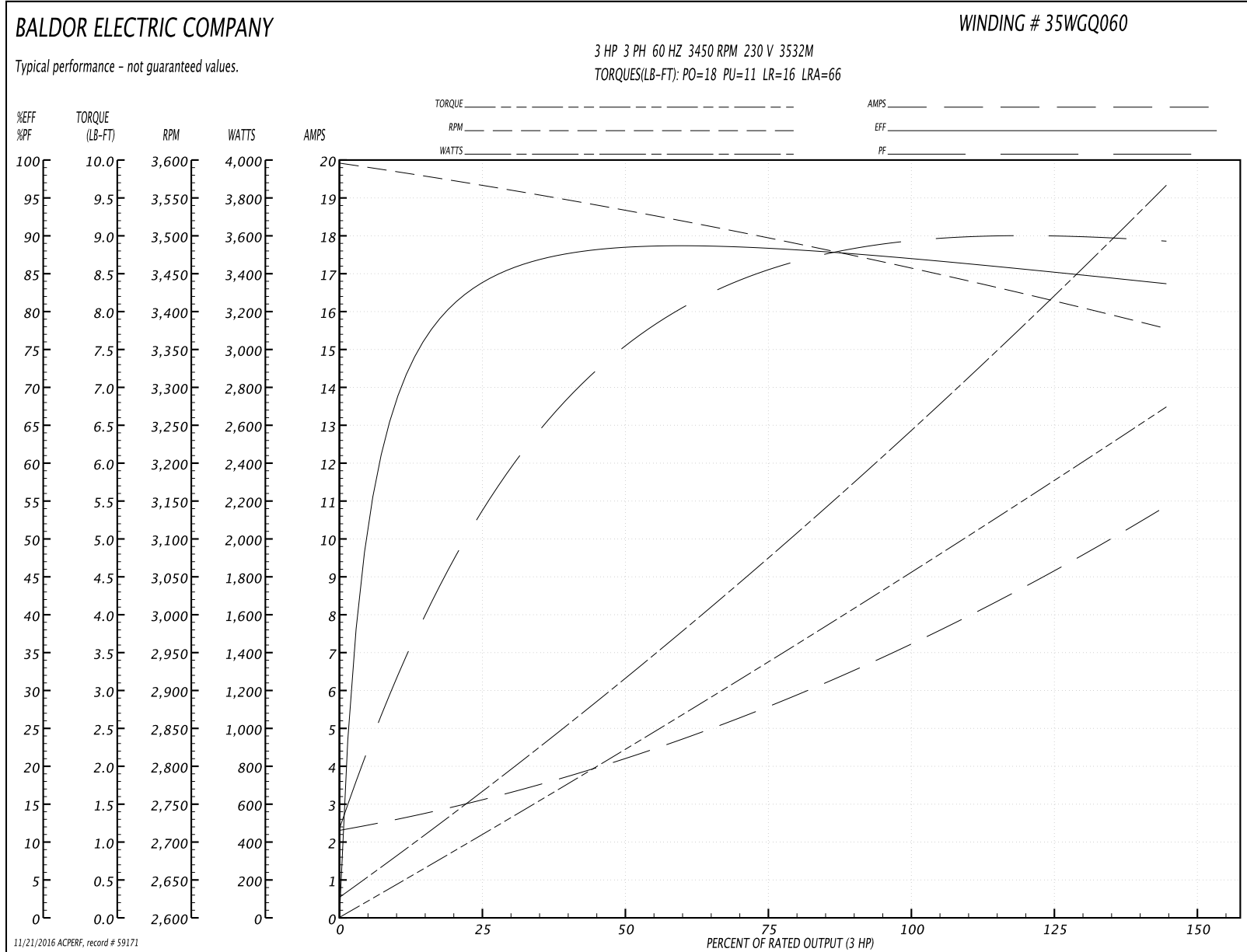
<b>Winding:</b> 35WGQ060-R002	<b>Type:</b> 3532M	<b>Enclosure:</b> TEFC
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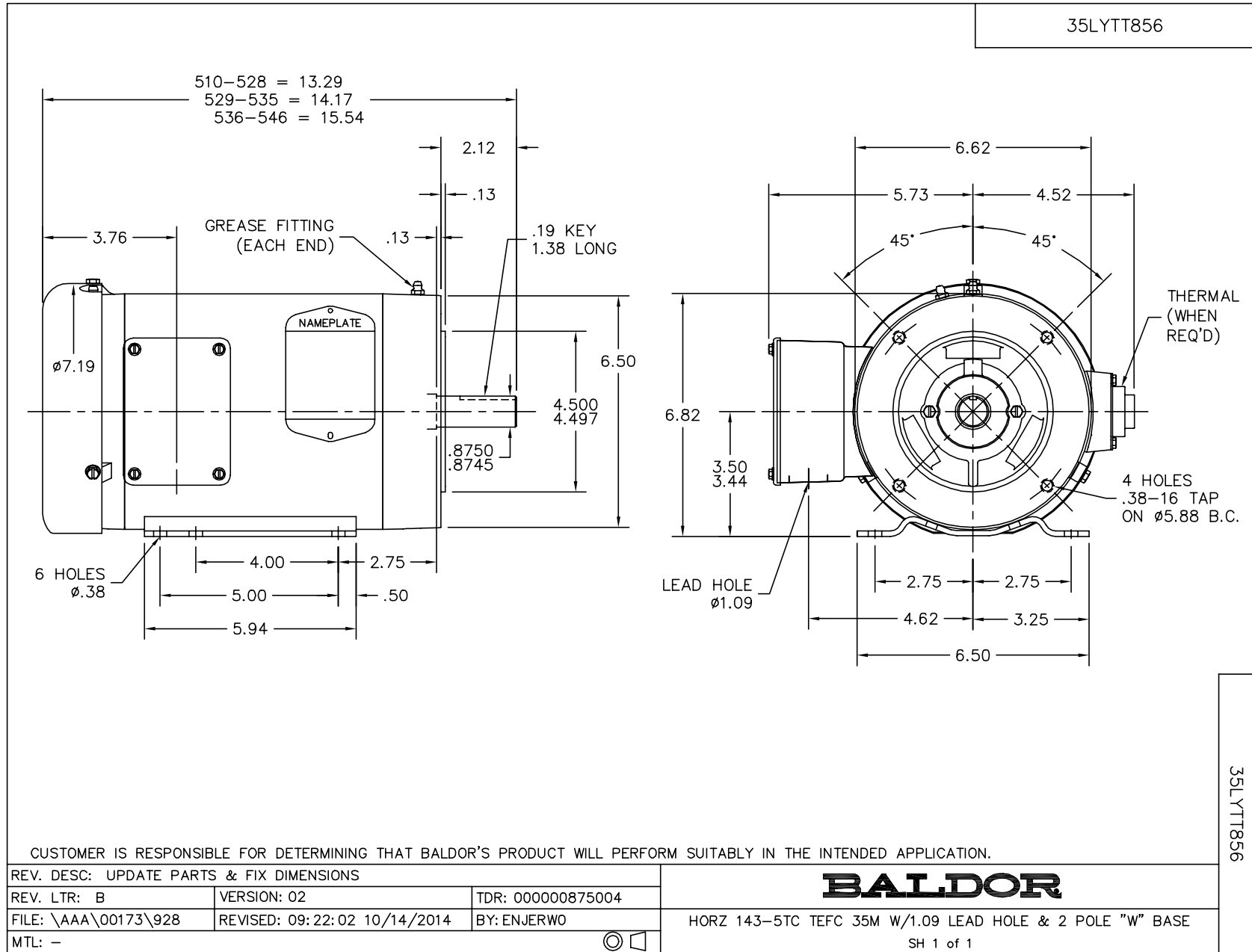
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	3			Full Load Torque	4.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	7.2/3.6			Breakdown Torque	18 LB-FT
R.P.M.	3450			Pull-up Torque	11 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	16 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	66 A
Service Factor (S.F.)	1.15			No-load Current	2.4 A
NEMA Nom. Eff.	86.5	Power Factor	92	Line-line Res. @ 25°C	1.17 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	61°C
S.F. Amps				Temp. Rise @ S.F. Load	73°C
				Locked-rotor Power Factor	47.1
				Rotor inertia	0.0885 LB-FT <sup>2</sup>

Load Characteristics 230 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	77	85	88	89	90	89
Efficiency	84.1	87.9	88.4	87.2	85.7	83.5	86.3
Speed	3562	3531	3498	3462	3421	3375	3437
Line amperes	3	4.2	5.6	7.2	9	10.8	8.28

Performance Graph at 230V, 60Hz, 3.0HP Typical performance - Not guaranteed values





CD0005

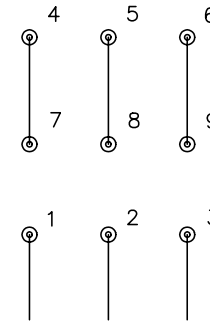


LOW VOLTAGE  
(2Y)



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