

**BALDOR® • RELIANCE** 

**Product Information Packet**

**JL3509A**

**1HP,3450RPM,1PH,60HZ,56J,3524L,TEFC,F1**

Part Detail							
Revision:	BF	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WG0498	CD Diagram:	CD0094	Mfg Plant:	
Mech. Spec:	35F083	Layout:	35LYF083	Poles:	02	Created Date:	06-21-2007
Base:	N	Eff. Date:	05-30-2018	Leads:	4#16 A&J,1#14 #4TH		

Specs			
Catalog Number:	JL3509A	Inverter Code:	Not Inverter
Enclosure:	TEFC	KVA Code:	K
Frame:	56J	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	1.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	4 @ 16 AWG, A&J
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	115.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	230.0 V @ 60 HZ	Motor Type:	3524L
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	81
Agency Approvals:	UR	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Ext Thread
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	12.000 A @ 115.0 V	Shaft Ground Indicator:	No Shaft Grounding

	6.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Fixed Opposite Standard
<b>Design Code:</b>	N	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	Do Not Use Eve-Not Valiid
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	Automatic Thermal Overload
<b>Insulation Class:</b>	B	<b>Winding Thermal 1 Location:</b>	SB
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP1257L</b>	
<b>CAT.NO.</b>	JL3509A
<b>SPEC.</b>	35F83-498
<b>HP</b>	1
<b>VOLTS</b>	115/230
<b>AMP</b>	12/6
<b>RPM</b>	3450
<b>FRAME</b>	56J
<b>HZ</b>	60
<b>PH</b>	1
<b>SER.F.</b>	1.25
<b>CODE</b>	K
<b>DES</b>	N
<b>CL</b>	B
<b>NEMA-NOM-EFF</b>	66
<b>PF</b>	81
<b>RATING</b>	40C AMB-CONT
<b>CC</b>	USABLE AT 208V
<b>DE</b>	6205
<b>ODE</b>	6203
<b>ENCL</b>	TEFC
<b>SN</b>	
	SFA 14.4/7.2

Parts List		
Part Number	Description	Quantity
SA024898	SA 35F83-498	1.000 EA
RA020948	RA 35F83-498	1.000 EA
EC1645A06SP	ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	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
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307G00	MASTER DE,205 BRG,1.232SH,#26 DRN	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
35FH4005A55	IEC FH NO GR SR,3 MTG HOLE NO DIMPLES,	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
WD4100A10	465 NIAGARA PLUG (SO ELEC),FOR 1.093 DIA	1.000 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
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.017 GA
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
SP5051A99	MODEL 34/35 TORQ STA SW LEAD CONFIG	1.000 EA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
LB1118	LABEL,WARNING (ROLL LABEL)	1.000 EA
LB1009N	LABEL,ROTATION DIRECTION (ON ROLLS)	1.000 EA
WD1000A16	2-520128-2 AMP FLAG TERMINAL(4M/RL)	2.000 EA
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 EA
35GS3001A02	GASKET, CA.COVER, 5.38 LONG .06 CS301	1.000 EA
LC0031	CONNECTION LABEL	1.000 EA
NP1257L	ALUM UL CSA CC THERMAL REV MTG	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3083	STYROFOAM PACKING CRADLE	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 8070 - Typical performance - not guaranteed values

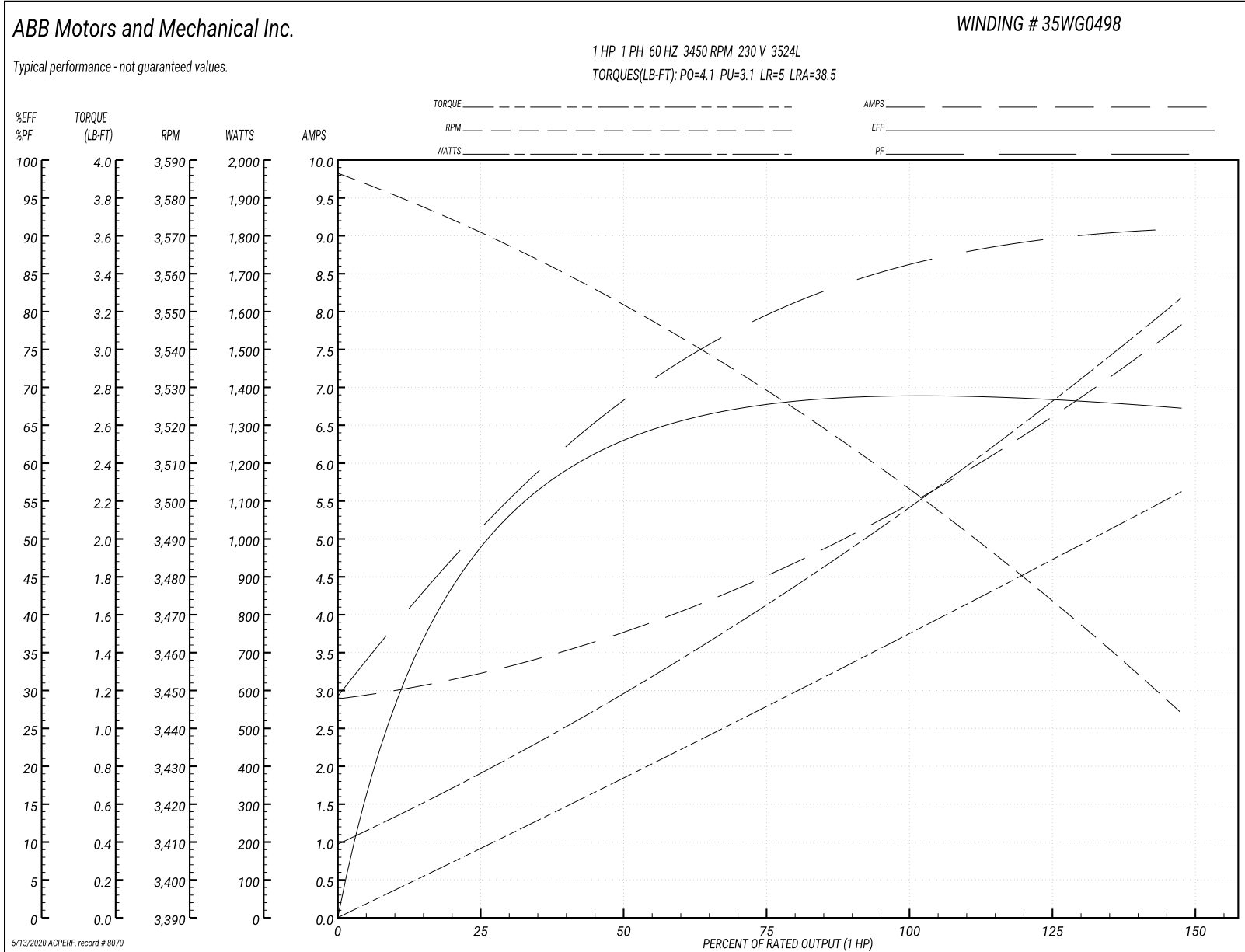
<b>Winding:</b> 35WG0498-R001	<b>Type:</b> 3524L	<b>Enclosure:</b> TEFC
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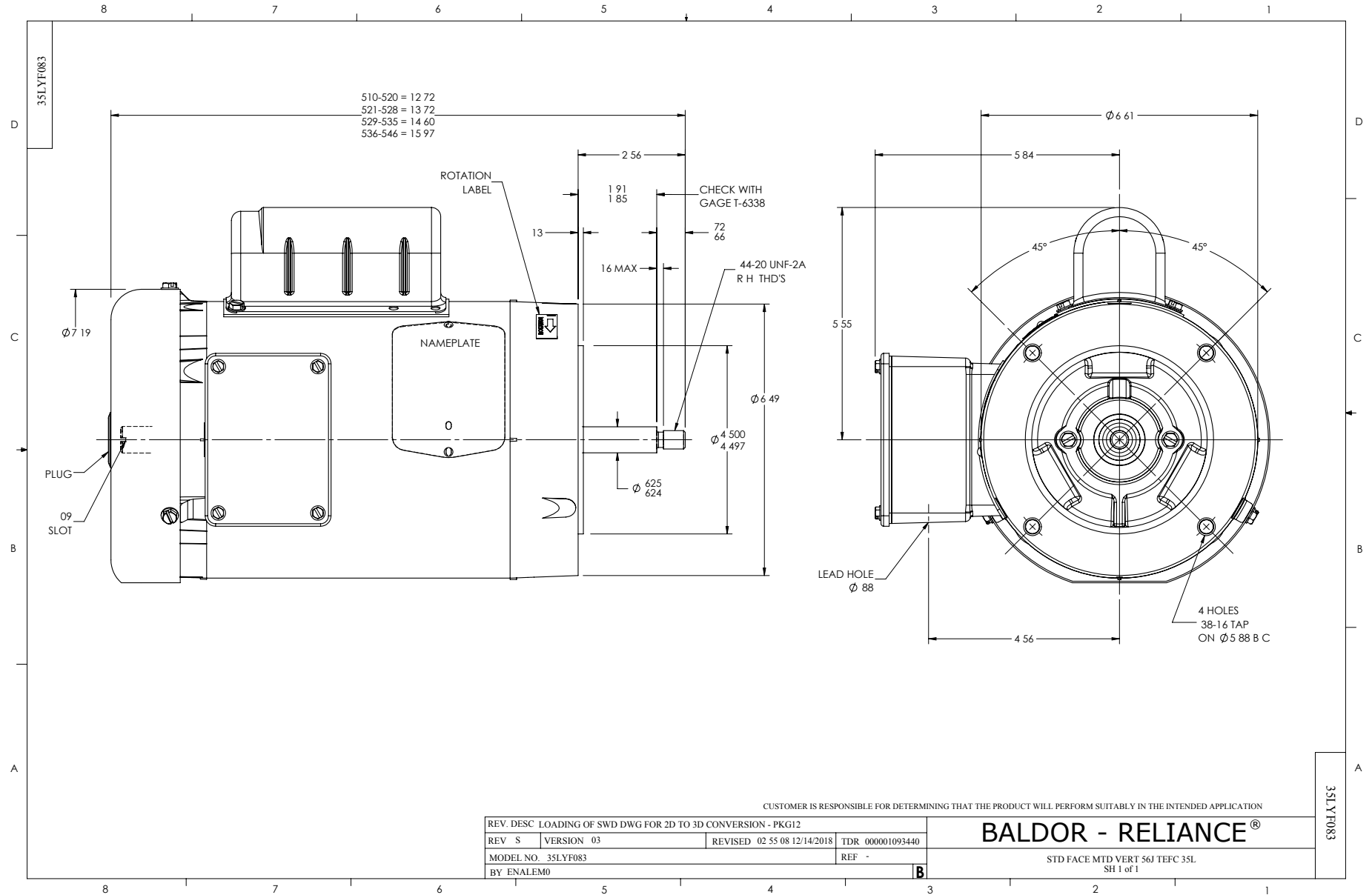
Nameplate Data				230 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	1.5 LB-FT
Volts	115/230			Start Configuration	direct on line
Full Load Amps	12/6			Breakdown Torque	4.1 LB-FT
R.P.M.	3450			Pull-up Torque	3.1 LB-FT
Hz	60	Phase	1	Locked-rotor Torque	5 LB-FT
NEMA Design Code	N	KVA Code	K	Starting Current	38.5 A
Service Factor (S.F.)	1.25			No-load Current	2.95 A
NEMA Nom. Eff.	66	Power Factor	81	Line-line Res. @ 25°C	2.46 Ω A Ph 1.75 Ω B Ph
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	
S.F. Amps	14.4/7.2			Temp. Rise @ S.F. Load	

Load Characteristics 230 V, 60 Hz, 1 HP

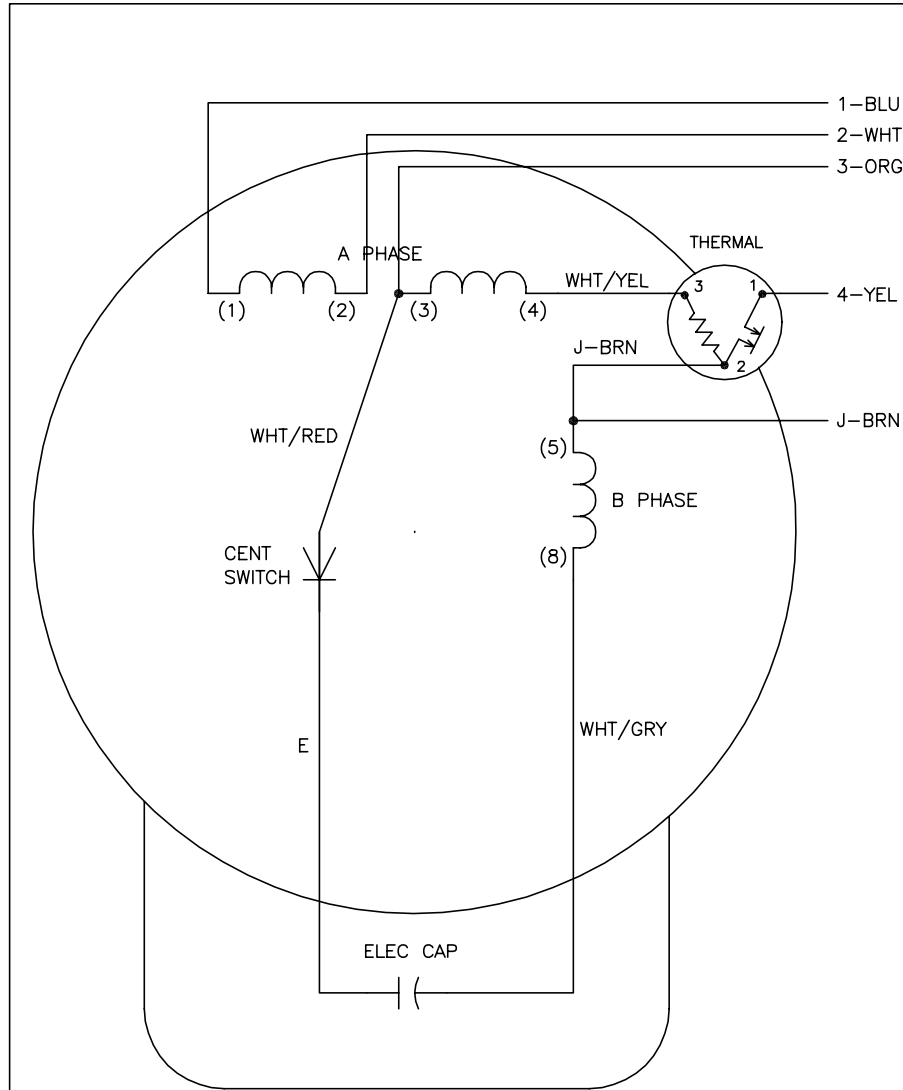
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	64	75	81	84	86	84
Efficiency	49	65	67	69	68	67.5	68
Speed	3570	3550	3530	3505	3472	3445	3472
Line amperes	3.2	3.7	4.5	5.5	6.75	7.7	6.75

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





CD0094



	LINE A	LINE B	JOIN	JOIN
HIGH	1	4	2,3	J
LOW	1,3	4	2,J	-

NOTES:

1. CONNECTIONS ARE SHOWN FOR CCW ROTATION FACING END OPPOSITE SHAFT EXTENSION (STD). FOR CW ROTATION, INTERCHANGE 5 AND 8 INTERNALLY.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REMOVE OPTIONAL THERMAL CONNECTION			
REV. LTR: E	VERSION: 01	TDR: 000000373039	
CD0094	FILE: \AAA\00007\476	REVISED: 11:12:36 08/11/2005	
	MTL: -	BY: ENJOEPO	

**BALDOR ELECTRIC Co.**

TYPE L, DV, FIX, THERMAL, 5 LEAD

CD0094