

ABB BALDOR RELIANCE III

Customer information packet

FDL3504M

.5HP, 1725RPM, 1PH, 60HZ, 56, 3421L, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	UR CSA
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.700 A @ 230.0 V 4.300 A @ 208.0 V 7.400 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	P
Type	AC
Mech. spec.	34M366
Base	
Status	PRD/A
Elec. spec.	34WGW722
Layout	34LYM366
Eff. date	07-25-2024
CD Diagram	CD0008
Poles	04
Leads	6#18,1#16 #4TH
Proprietary	False
Created date	11-22-2013

High Voltage Full Load Amps	3.7 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3421L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.97 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1725 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Manual Thermal Overload

Winding Thermal 1 Location

KO

Nameplate

NP1280L									
CAT.NO.	FDL3504M								
SPEC.	34M366W722								
HP	.5								
VOLTS	115/230								
AMP	7.4/3.7								
RPM	1725								
FRAME	56	HZ		60	PH		1		
SER.F.	1.25	CODE		J	DES		N	CL	B
NEMA-NOM-EFF	68	PF		66					
RATING	40C AMB-CONT								
CC									
DE	6203	ODE		6203					
ENCL	TEFC	SN							
	SFA 8.2/4.1								

Parts List

Part number	Description	Quantity
SA273101	SA 34M366W722	1.000 ea
RA259705	RA 34M366W722	1.000 ea
TPMRD4747SP	THERMAL 1PH 0.75 MAN SPL LOW TEMP	1.000 ea
EC1270A02SP	ELEC CAP, 270-324 MFD, 125V, 1.48D X 3.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3001A39MP	SPL CONDUIT BOX MODEL 34, MACH THEN PAIN	1.000 ea
34GS1013SP	GASKET, CONDUIT BOX LEXIDE	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
RM1014A01SP	BUTYL RUB.THRM COV. (MENA)	1.000 ea
HA6001A01	THERMAL RETAINER (PLATED)	1.000 ea
51XB1214A10	12-14 X 5/8HX WS SL SR TYBX	2.000 ea
34EP3102A01SP	FR ENDPLATE, MACH	1.000 ea
HA1005A05SP	SLINGER, OD 1.50, ID .659, 203 BRG	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
NS2500A02	INSULATOR, MAN THER PROT	1.000 ea
34CB4800SP	CAPACITOR COVER, STAMPED PRIMED	1.000 ea
34GS3000SP	GASKET, CAPACITOR BOX	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3102A99	PU ENDPLATE, MACH FOR SEAL	1.000 ea
HW4600A54	SEAL 0.668 X 1.064 X 0.250 DOUBLE SHIELD	1.000 ea
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01SP	IEC FH NO GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1001SP	GASKET, CONDUIT BOX LID, .06 THICK LEXID	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

HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MG1025C02	WILKOFASST SG, 787.105, TAN	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
WD4006A01	WIRE JOINT,T&B RB-4 OR RB-44	1.000 ea
SP5051B16	MDL 34 TORQ STAT SW,TYPE L , STD F1 & F2	1.000 ea
HA3100A44	THRUBOLT 10-32 X 8.000	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1087	LABEL,MANUAL RESET (ROLL LABEL)	1.000 ea
LC0008	CONNECTION LABEL	1.000 ea
NP1280L	ALUM FARM DUTY UL CC THERMAL	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

Accessories

Part number	Description	Multiplier
34-3300FD	C FACE KIT FARM DUTY 56C, ENCL 6203 BRG	A8

AC Induction Motor Performance Data

Record # 7082

Typical performance - not guaranteed values

Winding: 34WGW722-R001			Type: 3421L	Enclosure: TEFC			
Nameplate Data			230 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.5 LB-FT		
Volts		115/230	Start Configuration		direct on line		
Full Load Amps		7.4/3.7	Breakdown Torque		4.13 LB-FT		
R.P.M.		1725	Pull-up Torque		3.6 LB-FT		
Hz	60	Phase	1	Locked-rotor Torque		4.65 LB-FT	
NEMA Design Code		N	KVA Code	J	Starting Current		16.5 A
Service Factor (S.F.)		1.25		No-load Current		2.8 A	
NEMA Nom. Eff.		68	Power Factor	66	Line-line Res. @ 25°C		4.44 Ω A Ph 3.19 Ω B Ph
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps		8.2/4.1		Temp. Rise @ S.F. Load		77°C	

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	46	59	66	72	80	72
Efficiency	42	58	65	68	69	68	69
Speed	1783	1765	1750	1730	1710	1680	1710
Line amperes	2.8	3	3.3	3.7	4.1	4.8	4.1

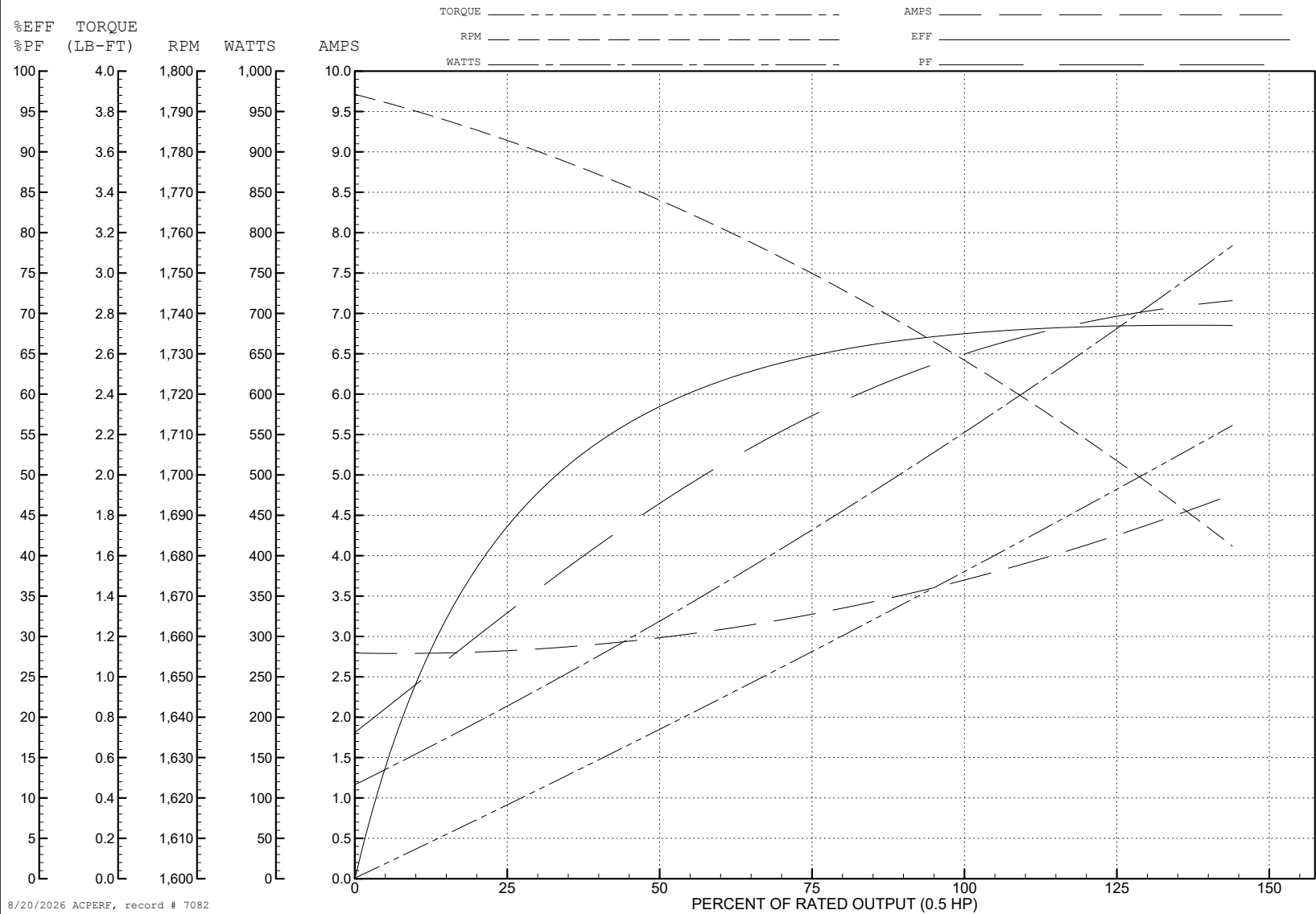
ABB Motors and Mechanical Inc.

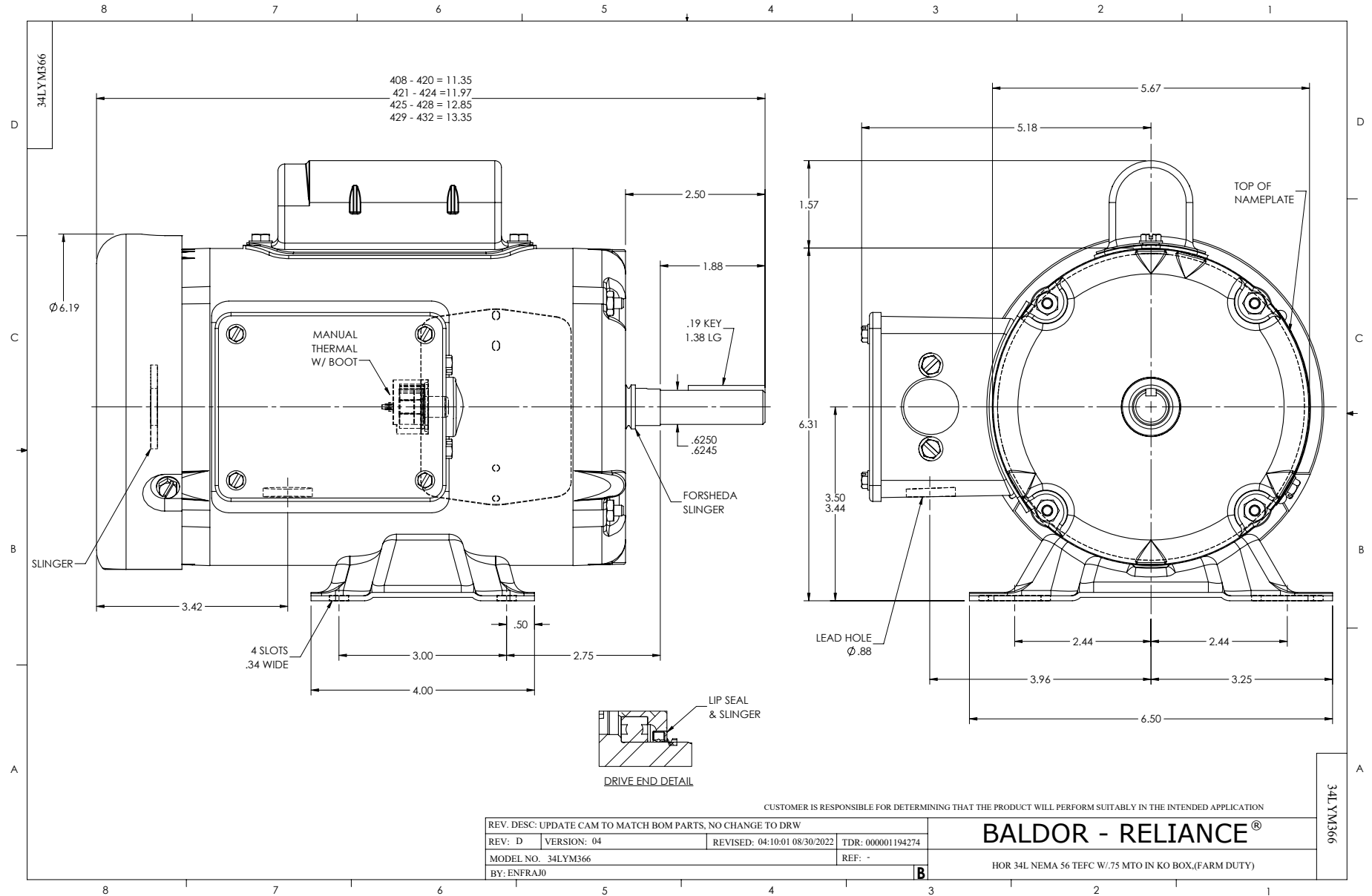
WINDING # 34WG722

Typical performance - not guaranteed values.

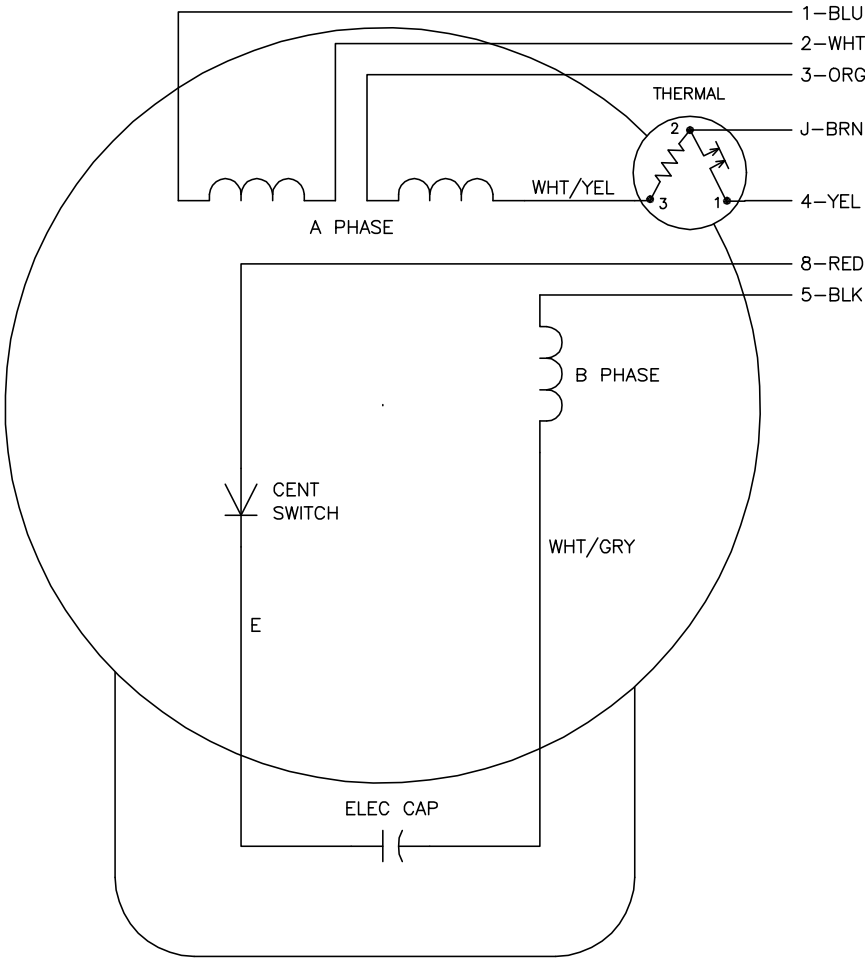
0.5 HP 1 PH 60 HZ 1725 RPM 230 V 3421L

TORQUES (LB-FT): PO=4.13 PU=3.6 LR=4.65 LRA=16.5





CD0008



	LINE A	LINE B	JOIN	JOIN
HIGH STD	1	4	2,3,8	J,5
HIGH OPP	1	4	2,3,5	J,8
LOW STD	1,3,8	4	—	2,J,5
LOW OPP	1,3,5	4	—	2,J,8

- NOTES:
1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
 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 2-TERMINAL THERMAL DETAIL, SEE CD0008A02		
REV. LTR: F	VERSION: 01	TDR: 000000360649
800000	FILE: \AAA\00007\408	REVISED: 10:56:54 04/18/2005
	MTL: —	BY: ENJOEPO

BALDOR ELECTRIC Co.

TYPE L, DV, REV, THERMAL, 7 LEADS

CD0008