

ABB BALDOR RELIANCE III

Customer information packet

FDL3516TM

2HP, 1740RPM, 1PH, 60HZ, 56HZ, 3534LC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56HZ
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Cap Run
Output @ Frequency	2.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
Agency Approvals	CURUS
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	8.200 A @ 230.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs

Part Detail

Revision	A
Type	AC
Mech. spec.	35E2347
Base	
Status	PRD/A
Elec. spec.	35WGG819
Layout	35LYE2347
Eff. date	01-07-2025
CD Diagram	CD0002A02
Poles	04
Leads	2#16 A PH,3#18 B&J
Proprietary	False
Created date	12-13-2024

Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	2 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3534LC
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.16 IN
Power Factor	99
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1740 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Manual Thermal Overload
Winding Thermal 1 Location	KO
Winding Thermal 2	None

Nameplate

NP1280L									
CAT.NO.	FDL3516TM								
SPEC.	35E2347G819G1								
HP	2								
VOLTS	230								
AMP	8.2								
RPM	1740								
FRAME	56HZ		HZ	60		PH		1	
SER.F.	1.15		CODE	J		DES	L	CL	F
NEMA-NOM-EFF	78		PF	99					
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	TEFC		SN						
	SFA 9.46								

Parts List

Part number	Description	Quantity
SA433096	SA 35E2347G819G1	1.000 ea
RA425362	RA 35E2347G819G1	1.000 ea
OC3030F11SP	CAPACITOR 30 MFD 370 VAC	1.000 ea
TPCRD4757SP	THERMAL 1PH 1.0 MAN REF CRD4707 TD	1.000 ea
EC1216C06SP	ELEC CAP, 216-259 MFD, 250V, 2.06D X 4.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007A58	35 CB .88 DIA @ 6, 1.00 MTO W/BOOT @ 3 (	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
HA6015A11	EARED 1" THERMAL RETAINER (PLATED)	1.000 ea
RM1014A01SP	BUTYL RUB.THRM COV. (MENA)	1.000 ea
51XB1214A10	12-14 X 5/8HX WS SL SR TYBX	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 ea
35CB3801	CAPACITOR COVER, CAST	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
HA7010	CAPACITOR RETENTION CLAMP	1.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123H00	MASTER DE,205 BRG,1.498SH,#26 DRN	1.000 ea
HW4600B60	CR#9686 .984 X 1.499 X .25 SINGLE LIP	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A32	IEC FH NO GRSR W/3 HOLES - 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
HA1005A05SP	SLINGER, OD 1.50, ID .659, 203 BRG	1.000 ea
HW4600B32SP	V-RING SLINGER 1.000 X 1.540 X .24 VITON	1.000 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
LB1087	LABEL,MANUAL RESET (ROLL LABEL)	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	4.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
MG1025C02	WILKOFASST SG, 787.105, TAN	0.017 ga
HA3100A22	THRUBOLT 10-32 X 10.125	4.000 ea
TP5059	GENERIC WELDED THERMAL, 7" LEAD KIT	1.000 ea
SP5181A01	MODEL 35 LC TORQ STAT SWITCH LEAD ASSY	1.000 ea
NS2500A02	INSULATOR, MAN THER PROT	1.000 ea
LC0002	CONNECTION LABEL	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP1280L	ALUM FARM DUTY UL CC THERMAL	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000002	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
35-3300FD	C FACE KIT FARM DUTY 143-5TC ENCL, 6205	A8
35EP1506A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 108862

Preliminary Data Sheet

Winding: A36WG1831-R016			Type: A36070M		Enclosure: TENV			
Nameplate Data			460 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		75	Full Load Torque		220 LB-FT			
Volts		460	Start Configuration		direct on line			
Full Load Amps		87.1	Breakdown Torque		643 LB-FT			
R.P.M.		1785	Pull-up Torque		387 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		499 LB-FT		
NEMA Design Code		-	KVA Code	H	Starting Current		627 A	
Service Factor (S.F.)		1	No-load Current		30.83 A			
NEMA Nom. Eff.		94.5	Power Factor		85	Line-line Res. @ 25°C		0.0843 Ω
Rating - Duty		40C AMB - 60 MIN		Temp. Rise @ Rated Load		62°C		
				Locked-rotor Power Factor		33.9		
				Rotor inertia		16.2 lb-ft²		

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	52	73	82	85	86	86
Efficiency	89.6	93.9	94.4	94.5	94.4	93.7
Speed	1796	1792	1788	1783	1779	1773
Line amperes	37.34	50.94	68.16	87.08	108	130

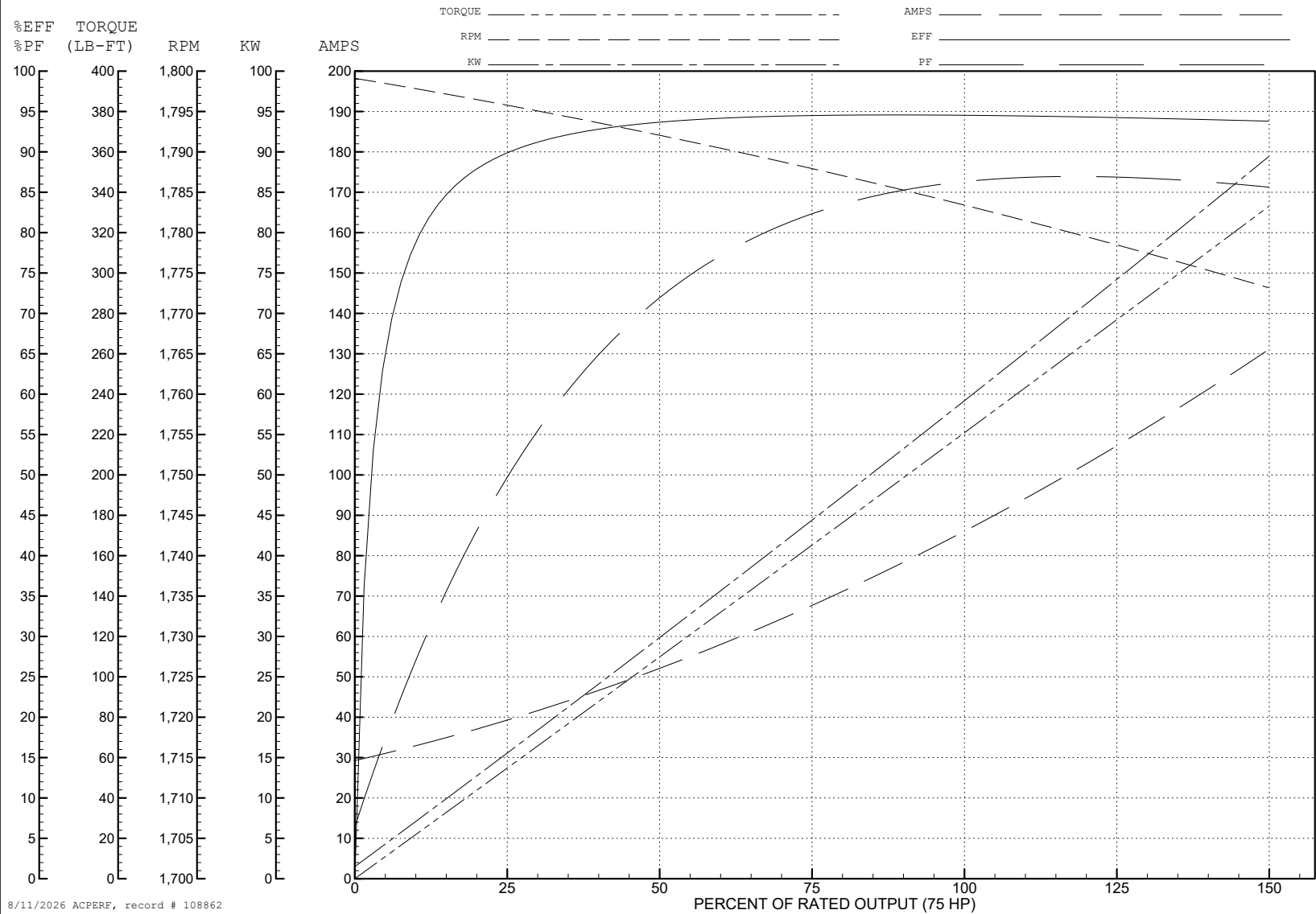
ABB Motors and Mechanical Inc.

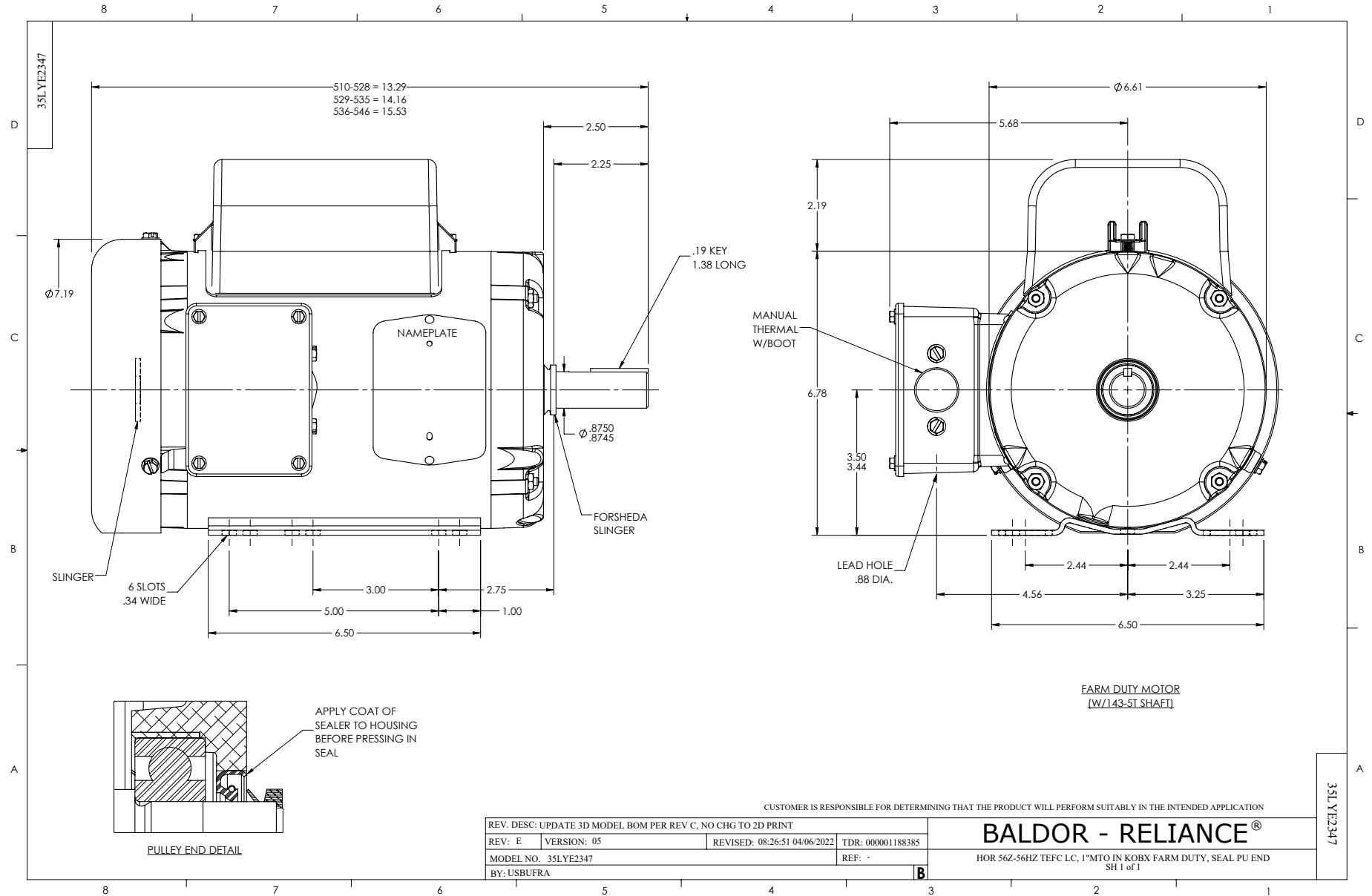
WINDING # A36WG1831-R01

Typical performance - not guaranteed values.

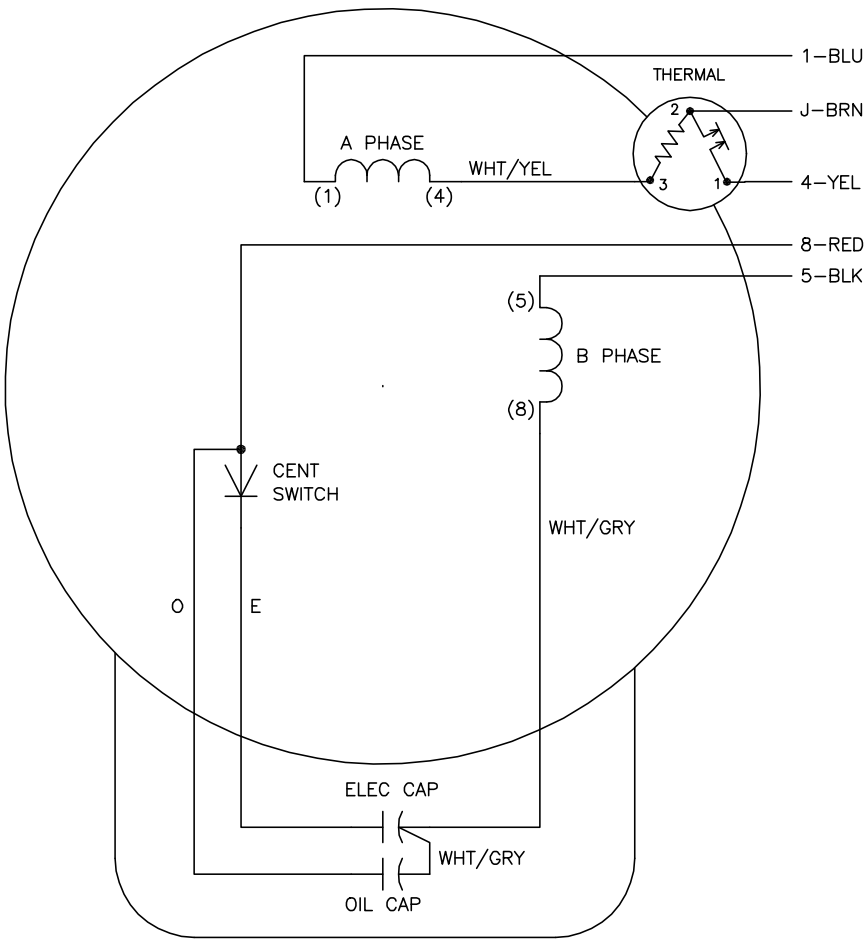
75 HP 3 PH 60 HZ 1785 RPM 460 V A36070M

TORQUES (LB-FT): PO=643 PU=387 LR=499 LRA=627





CD0002A02



	LINE A	LINE B	JOIN
STD	1,8	4	J,5
OPP	1,5	4	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 CD0002A04		
REV. LTR: D	VERSION: 01	TDR: 000000360649
CD0002A02	FILE: \AAA\00007\520	REVISED: 17:11:40 04/15/2005
	MTL: -	BY: ENJOEPO

BALDOR ELECTRIC Co.

TYPE LC, SV, REV, THERMAL, 5 LEADS

CD0002A02