

ABB BALDOR RELIANCE III

Customer information packet

PL3515M

2HP, 3450RPM, 1PH, 60HZ, 56, 3524LC, TEFC, F1

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, Cap Run
Output @ Frequency	2.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 115.0 V @ 60 HZ
Agency Approvals	CSA UR
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	8.800 A @ 230.0 V 17.600 A @ 115.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.8 a

Part Detail

Revision	AD
Type	AC
Mech. spec.	35T962
Base	
Status	PRD/A
Elec. spec.	35WGY691
Layout	35LYT962
Eff. date	05-07-2024
CD Diagram	CD0320
Poles	02
Leads	4#14 A&J,2#18 B PH,1#12 4-YEL
Proprietary	False
Created date	06-22-2007

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A&J
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524LC
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.25 IN
Power Factor	95
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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

NP1257L									
CAT.NO.	PL3515M								
SPEC.	35T962Y691								
HP	2								
VOLTS	115/230								
AMP	17.6/8.8								
RPM	3450								
FRAME	56		HZ	60		PH	1		
SER.F.	1.15	CODE	F	DES	L	CL	F		
NEMA-NOM-EFF	77	PF	95						
RATING	40C AMB-CONT								
CC									
DE	6205	ODE	6203						
ENCL	TEFC	SN							

Parts List

Part number	Description	Quantity
SA111047	SA 35T962Y691	1.000 ea
RA102426	RA 35T962Y691	1.000 ea
OC3060C09SP	CAPACITOR 60 MFD 240 VAC	1.000 ea
TPCRT51CB	THERMAL 1PH 1.00 MAN 120CWELDED	1.000 ea
EC1400A03SP	ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.	1.000 ea
WD3006A01	RSS-2-103JT 2W 10K RES. METAL OXIDE 5%	1.000 ea
TP5059	GENERIC WELDED THERMAL, 7" LEAD KIT	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007A17	35 CB .88 DIA @ 6:00, 1.00 MTO @ 3:00	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
HA6015A02	THERMAL RETAINER (PLATED)	1.000 ea
51XB1214A10	12-14 X 5/8HX WS SL SR TYBX	2.000 ea
NS2500A02	INSULATOR, MAN THER PROT	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
35CB3801	CAPACITOR COVER, CAST	1.000 ea
HA7010	CAPACITOR RETENTION CLAMP	1.000 ea
34GS3002	GASKET, CAPACITOR BOX	1.000 ea
NS2501A02	INSULATOR, CAPACITOR BOX	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
35EP3123A00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
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

HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1087	LABEL,MANUAL RESET (ROLL LABEL)	1.000 ea
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
SP5181A28	MODEL 35 LC TORQ STAT SWITCH LEAD ASSY	1.000 ea
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0269	1PH,DV,REV,THERMAL,7 LD,L.AMP THRU HTR H	1.000 ea
NP1257L	ALUM UL CC THERMAL REV MTG	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
WD4006A04	T&B RC-6,WIRE JOINT (BULK PACK)	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 10291

Typical performance - not guaranteed values

Winding: 35WGY691-R001			Type: 3524LC		Enclosure: TEFC			
Nameplate Data			230 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		2	Full Load Torque		3 LB-FT			
Volts		115/230	Start Configuration		direct on line			
Full Load Amps		17.6/8.8	Breakdown Torque		6 LB-FT			
R.P.M.		3450	Pull-up Torque		5 LB-FT			
Hz		60	Phase		1	Locked-rotor Torque	7 LB-FT	
NEMA Design Code		L	KVA Code		F	Starting Current		48 A
Service Factor (S.F.)		1.15	No-load Current		1.35 A			
NEMA Nom. Eff.		77	Power Factor		95	Line-line Res. @ 25°C		1.33 Ω A Ph 1.27 Ω B Ph
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		66°C	
S.F. Amps			Temp. Rise @ S.F. Load		88°C			

Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	93	93	96	95	95	93	95
Efficiency	57	72	76	77	72.5	73	74.3
Speed	3560	3539	3508	3473	3431	3380	3448
Line amperes	3.1	4.9	6.7	8.8	11.6	13.8	10.5

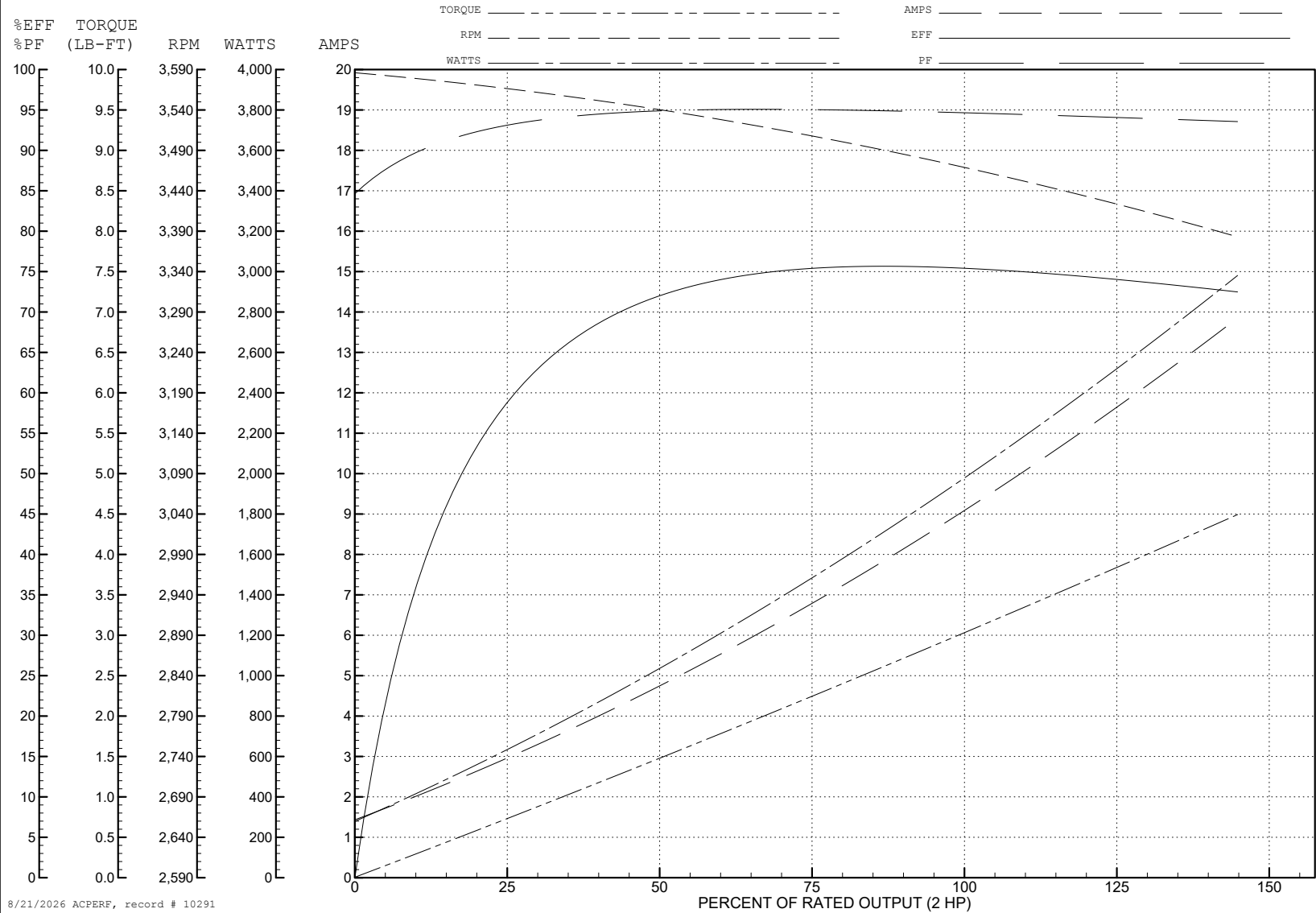
ABB Motors and Mechanical Inc.

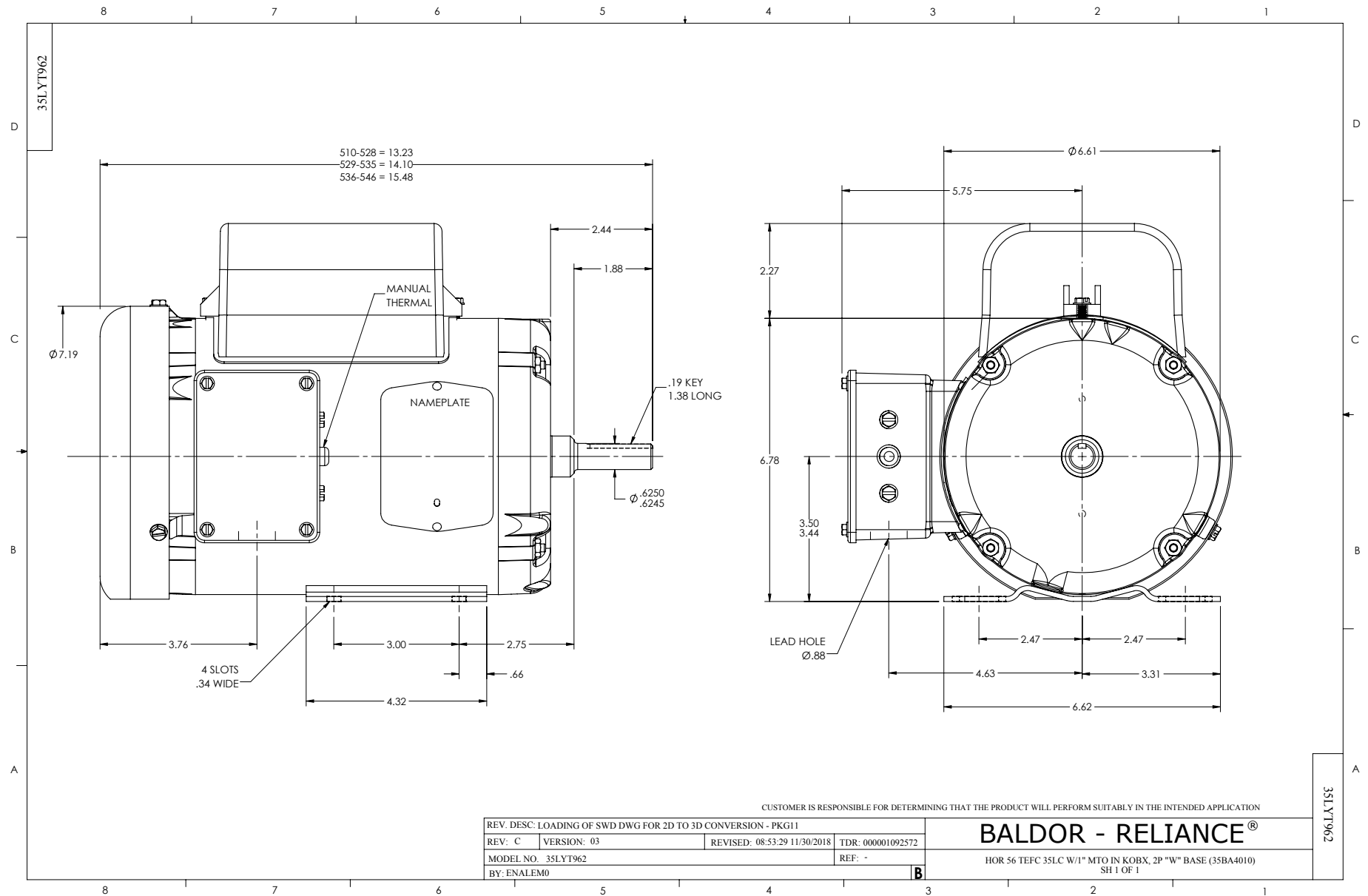
WINDING # 35WGY691

Typical performance - not guaranteed values.

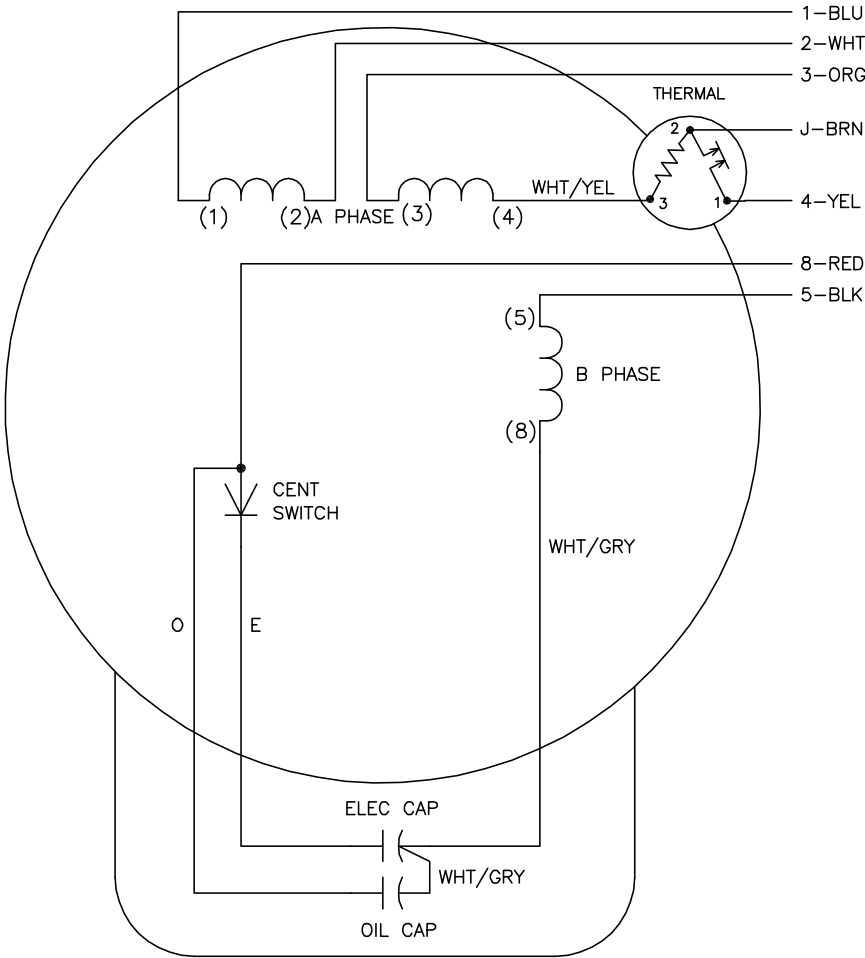
2 HP 1 PH 60 HZ 3450 RPM 230 V 3524LC

TORQUES (LB-FT): PO=6 PU=5 LR=7 LRA=48





CD0320



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

CD0320

REV. DESC: ADD INTERNAL CONNECTION TO HELP MANUFACTURING		
REV. LTR: G	VERSION: 01	TDR: 000000941594
FILE: \AAA\00007\422	REVISED: 02: 21: 00 08/28/2015	BY: ENALEMO
MTL: —	© □	

BALDOR

TYPE LC, DV, REV, THERMAL, B PH AMPS THRU HTR HVC, 7 LEAD
SH 1 of 1