ABB BALDOR RELIANCE

Customer information packet

VL5001A

.33HP, 1725RPM, 1PH, 60HZ, 56C, X3414L, XPFC
Class - CLI GP D; CLII GP F,G
Division - Division I

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Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	.330 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ
	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	UL
	CSA
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.000 A @ 230.0 V
	3.200 A @ 208.0 V
	6.000 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	60.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AS
Type	AC
Mech. spec.	34-5335
Base	
Status	PRD/A
Elec. spec.	34WG5597
Layout	34LY5335
Eff. date	09-10-2024
CD Diagram	CD0565
Poles	04
Leads	7#18
Proprietary	False
Created date	01-01-0001

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	3.0 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	7 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3414L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.22 IN
Power Factor	60
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
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	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	Automatic Thermal Overload
Winding Thermal 1 Location	ES

Nameplate

NP0016XPSL							
NO.			**CC**				
SER. #							
SPEC	34-5335-5597						
CAT.NO.	VL5001A						
H.P.	.33	**T. CODE**		T3C			
VOLTS	115/208-230						
AMPS	6/3.2-3						
R.P.M.	1725						
HZ	60	**PH**	1		**CLASS**	B	
SER.F.	1.00	**DES**	N		**CODE**	L	
RATING	40C AMB-CONT						
FRAME	56C				**NEMA NOM. EFF**	60	
		PF	60				
BLANK							

AC Induction Motor Performance Data
Record # 6785
Typical performance - not guaranteed values

Winding: 34WG5597-R002	**Type:** 3414L	**Enclosure:** XPFC

Nameplate Data				**230 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.33	**Full Load Torque**	1 LB-FT
Volts			115/208-230	**Start Configuration**	direct on line
Full Load Amps			6/3.2-3	**Breakdown Torque**	2.95 LB-FT
R.P.M.			1725	**Pull-up Torque**	2.55 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	3.6 LB-FT
NEMA Design Code	N	**KVA Code**	L	**Starting Current**	13 A
Service Factor (S.F.)			1	**No-load Current**	2.6 A
NEMA Nom. Eff.	60	**Power Factor**	60	**Line-line Res. @ 25ºC**	6.32 Ω A Ph 4.93 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	59°C

Load Characteristics 230 V, 60 Hz, 0.33 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	31	41	52	60	67	73
Efficiency	33	41	52	60	61.5	61.5
Speed	1780	1760	1745	1725	1705	1680
Line amperes	2.6	2.7	2.8	3	3.3	3.7

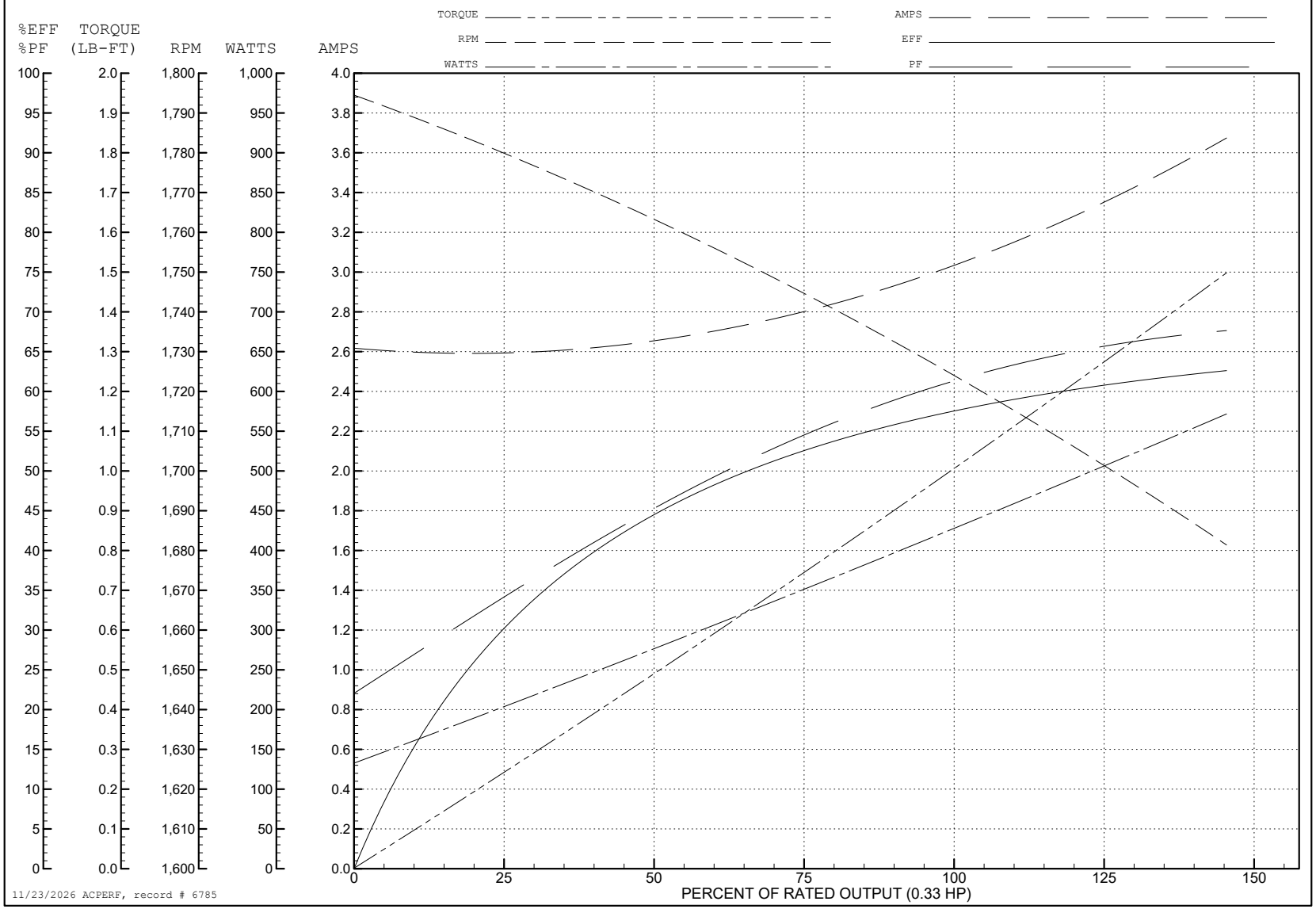
ABB Motors and Mechanical Inc.

WINDING # 34WG5597

0.33 HP 1 PH 60 HZ 1725 RPM 230 V 3414L

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=2.95 PU=2.55 LR=3.6 LRA=13



11/23/2026 ACPERF, record # 6785

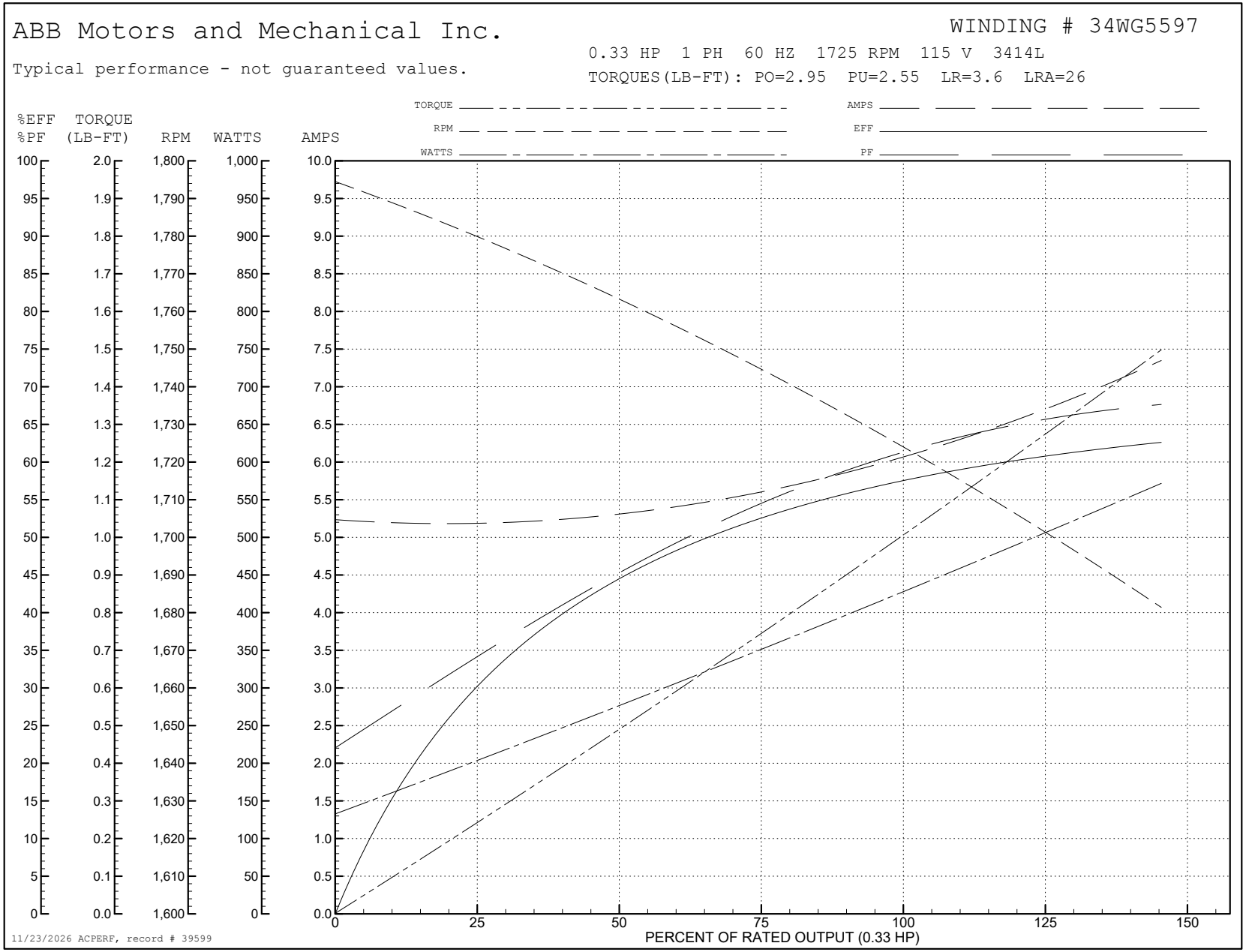
AC Induction Motor Performance Data
Record # 39599
Typical performance - not guaranteed values

Winding: 34WG5597-R002	**Type:** 3414L	**Enclosure:** XPFC

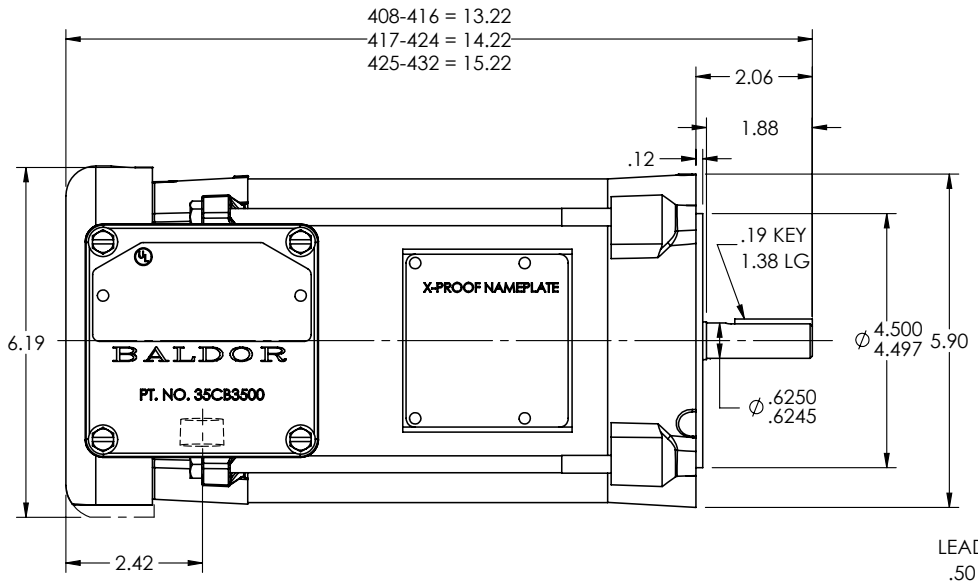
Nameplate Data				**115 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.33	**Full Load Torque**	1 LB-FT
Volts			115/208-230	**Start Configuration**	direct on line
Full Load Amps			6/3.2-3	**Breakdown Torque**	2.95 LB-FT
R.P.M.			1725	**Pull-up Torque**	2.55 LB-FT
Hz	60	**Phase**	1	**Locked-rotor Torque**	3.6 LB-FT
NEMA Design Code	N	**KVA Code**	L	**Starting Current**	26 A
Service Factor (S.F.)			1	**No-load Current**	5.2 A
NEMA Nom. Eff.	60	**Power Factor**	60	**Line-line Res. @ 25ºC**	1.5 Ω A Ph 4.81 Ω B Ph
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	59°C

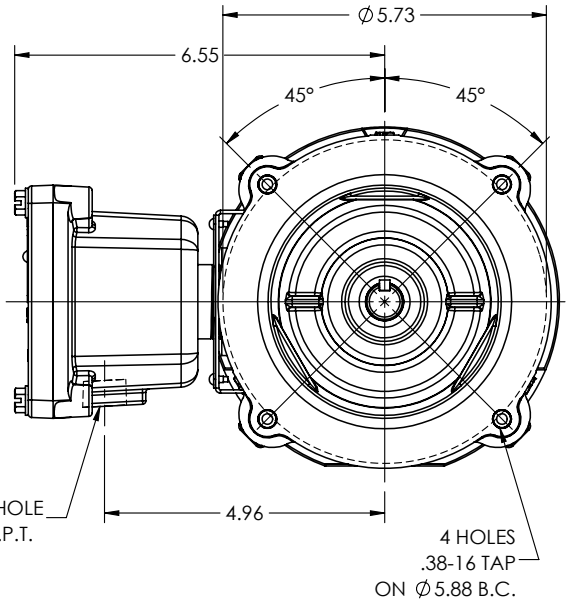
Load Characteristics 115 V, 60 Hz, 0.33 HP

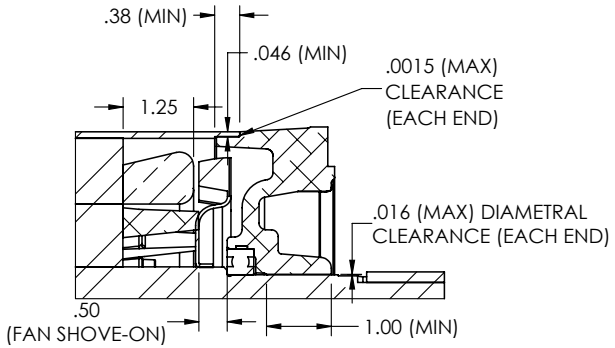
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	32	49	55	59	65	68
Efficiency	32.9	41	52.1	60.1	61.6	61.5
Speed	1780	1760	1745	1725	1705	1680
Line amperes	5.2	5.4	5.6	6	6.6	7.4


ABB Motors and Mechanical Inc.
WINDING # 34WG5597
Typical performance - not guaranteed values.
0.33 HP 1 PH 60 HZ 1725 RPM 115 V 3414L
TORQUES(LB-FT): PO=2.95 PU=2.55 LR=3.6 LRA=26
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.33 HP)
11/23/2026 ACPERF, record # 39599

34LY5335







PULLEY END DETAIL

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

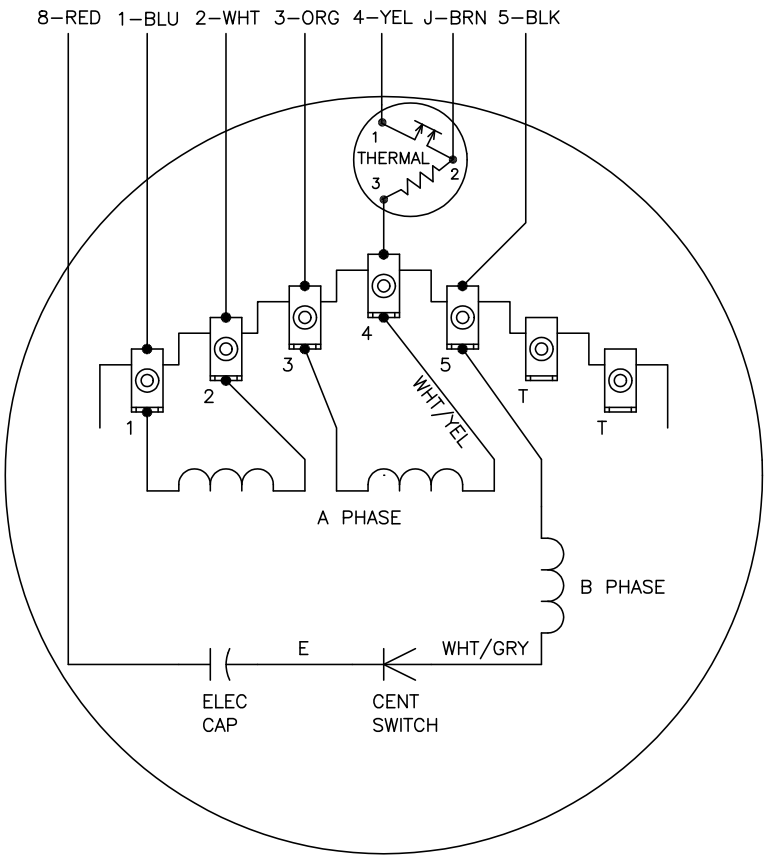
REV. DESC: LOAD TO SOLIDWORKS - REV L			
REV: M	VERSION: 09	REVISED: 03:40:28 03/17/2023	TDR: 000001201165
34LY5335	MODEL NO. 34LY5335		REF: -
	BY: ENFRAJ0		

BALDOR - RELIANCE®

VERT X34L 56C XPFC CL-I GP-D, CL-II GP-F&G, .50 NPT LEAD

34LY5335

CD0565

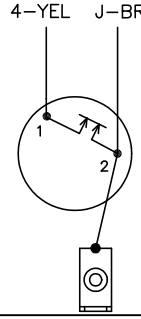


	LINE A	LINE B	JOIN	JOIN
HIGH STD	1	4	2,3,8	J,5
HIGH OPP	1	4	2,3,5	J.8
LOW STD	1,3,8	4	–	2,J,5
LOW OPP	1,3,5	4	–	2,J,8

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.

CONNECTIONS FOR TWO–TERMINAL THERMAL



CD0565

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 04/08/99 3:25	TDR: 0178636
CD0565		FILE: AAA00014311	MDL: –
		MTL: –	

BALDOR ELECTRIC Co.

TYPE L, DV, REV, THERMAL, 7 LD, 34XP