

**BALDOR® • RELIANCE** 

**Product Information Packet**

**L3503-50**

**.5HP,2850RPM,1PH,50HZ,56,3420L,TEFC,F1**

| Part Detail |        |             |            |             |        |               |    |
|-------------|--------|-------------|------------|-------------|--------|---------------|----|
| Revision:   | AB     | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No |
| Type:       | AC     | Elec. Spec: | 34WGW633   | CD Diagram: | CD0001 | Mfg Plant:    |    |
| Mech. Spec: | 34K042 | Layout:     | 34LYK042   | Poles:      | 02     | Created Date: |    |
| Base:       | RG     | Eff. Date:  | 07-17-2018 | Leads:      | 6#18   |               |    |

| Specs                           |                         |                                |                   |
|---------------------------------|-------------------------|--------------------------------|-------------------|
| Catalog Number:                 | L3503-50                | Insulation Class:              | B                 |
| Enclosure:                      | TEFC                    | Inverter Code:                 | Not Inverter      |
| Frame:                          | 56                      | KVA Code:                      | J                 |
| Frame Material:                 | Steel                   | Lifting Lugs:                  | No Lifting Lugs   |
| Output @ Frequency:             | .500 HP @ 50 HZ         | Locked Bearing Indicator:      | No Locked Bearing |
| Synchronous Speed @ Frequency:  | 3000 RPM @ 50 HZ        | Motor Lead Quantity/Wire Size: | 6 @ 18 AWG        |
| Voltage @ Frequency:            | 220.0 V @ 50 HZ         | Motor Lead Exit:               | Ko Box            |
|                                 | 110.0 V @ 50 HZ         | Motor Lead Termination:        | Flying Leads      |
| XP Class and Group:             | None                    | Motor Type:                    | 3420L             |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1                |
| Agency Approvals:               | UR                      | Power Factor:                  | 77                |
|                                 | WEEE                    | Product Family:                | General Purpose   |
|                                 | CSA                     | Pulley End Bearing Type:       | Ball              |
|                                 | CE                      | Pulley Face Code:              | Standard          |
| Auxillary Box:                  | No Auxillary Box        | Pulley Shaft Indicator:        | Standard          |
| Auxillary Box Lead Termination: | None                    | Rodent Screen:                 | None              |
| Base Indicator:                 | Rigid                   | RoHS Status:                   | ROHS COMPLIANT    |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Extension Location:      | Pulley End        |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Blower:</b>                        | None                      | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
| <b>Current @ Voltage:</b>             | 3.300 A @ 220.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 6.600 A @ 110.0 V         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | N                         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Motor Standards:</b>            | NEMA                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Starting Method:</b>            | Direct on line      |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Bearing:</b>   | NONE (OLD)          |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 2:</b>          | None                |

| Nameplate NP1372L |              |  |      |    |     |      |  |    |                |   |
|-------------------|--------------|--|------|----|-----|------|--|----|----------------|---|
| CAT.NO.           | L3503-50     |  |      |    |     |      |  |    |                |   |
| SPEC.             | 34K42W633    |  |      |    |     |      |  |    |                |   |
| HP                | .5           |  |      |    |     |      |  |    |                |   |
| VOLTS             | 110/220      |  |      |    |     |      |  |    |                |   |
| AMP               | 6.6/3.3      |  |      |    |     |      |  |    |                |   |
| RPM               | 2850 IP54    |  |      |    |     |      |  |    |                |   |
| FRAME             | 56           |  |      |    | HZ  | 50   |  |    | PH             | 1 |
| SER.F.            | 1.25         |  | CODE | J  | DES | N    |  | CL | B              |   |
| NEMA-NOM-EFF      | 68           |  | PF   | 77 |     |      |  |    |                |   |
| RATING            | 40C AMB-CONT |  |      |    |     |      |  |    |                |   |
| CC                |              |  |      |    |     |      |  |    | USABLE AT 208V |   |
| DE                | 6203         |  |      |    | ODE | 6203 |  |    |                |   |
| ENCL              | TEFC         |  | SN   |    |     |      |  |    |                |   |
|                   | SFA 7.4/3.7  |  |      |    |     |      |  |    |                |   |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA008170      | SA 34K42W633                             | 1.000 EA |
| RA004617      | RA 34K42W633                             | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 34CB3002A     | CB CAST W/.88 DIA HOLE                   | 1.000 EA |
| 34GS1029A01   | GASKET, CONDUIT BOX                      | 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 |
| 34EP3102A01SP | FR ENDPLATE, MACH                        | 1.000 EA |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 EA |
| 51XB1016A05   | 10-16X5/16HX WA SL SR TYB (F/S)          | 2.000 EA |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 34EP3102A02SP | FR/PU ENDPLATE, MACH                     | 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 |
| 34CB4517      | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 EA |
| 34GS1031A01   | GASKET, FLAT CONDUIT BOX LID (LEXIDE)    | 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 |
| MG1000G27     | MED CHARCOAL METALLIC GREY 400-0096      | 0.014 GA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| EC1324A03     | ELEC CAP, 324-389 MFD, 125V, 1.81D X 3.  | 1.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| 33CB4800A01                   | CAPACITOR COVER, STAMPED                 | 1.000 EA        |
| 35GS3001A01                   | GASKET, CAPACITOR COVER                  | 1.000 EA        |
| SP5051B16                     | MDL 34 TORQ STAT SW,TYPE L , STD F1 & F2 | 1.000 EA        |
| HA3100A12                     | THRUBOLT 10-32 X 7.375                   | 4.000 EA        |
| HA4067A01                     | PUSH IN DRAIN FITTING (BLACK)            | 1.000 EA        |
| HA4067A01                     | PUSH IN DRAIN FITTING (BLACK)            | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 5/18  | 1.000 EA        |
| LC0001                        | CONN LABEL TYPE L, 6 LEAD, DUAL VOLTS, R | 1.000 EA        |
| LB1119N                       | WARNING LABEL                            | 1.000 EA        |
| NP1372L                       | ALUM UL CSA CE CC                        | 1.000 EA        |
| 35PA1000                      | PKG GRP, PRINT PK1008A06                 | 1.000 EA        |

| <b>Accessories</b> |                    |                   |
|--------------------|--------------------|-------------------|
| <b>Part Number</b> | <b>Description</b> | <b>Multiplier</b> |
| 34-171             | C FACE KIT         | A8                |

**AC Induction Motor Performance Data**  
Record # 7038 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 34WGW633-R001 | <b>Type:</b> 3420L | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

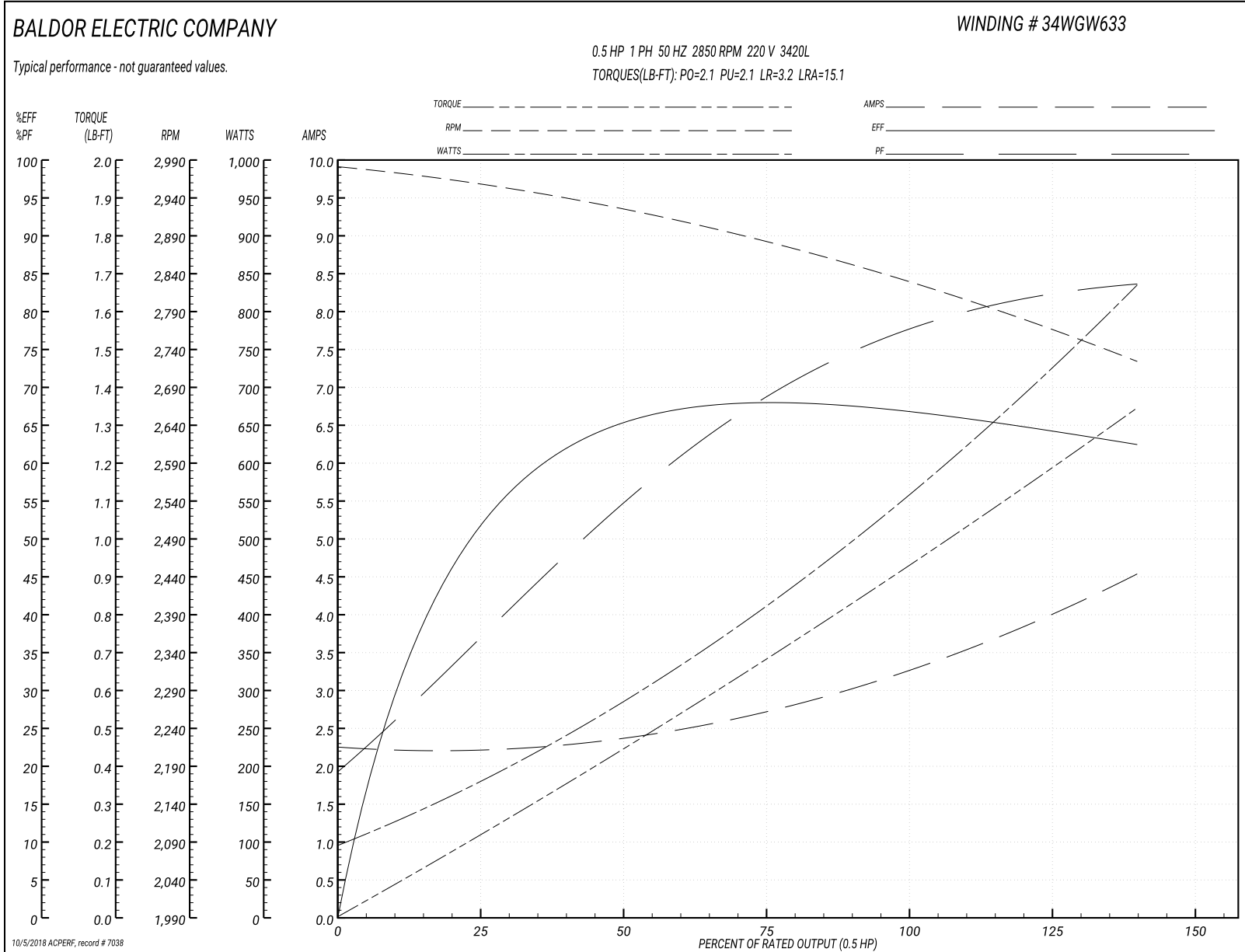
| Nameplate Data        |              |              |    | 220 V, 50 Hz:<br>High Voltage Connection |                           |
|-----------------------|--------------|--------------|----|--|---------------------------|
| Rated Output (HP)     | .5           |              |    | Full Load Torque                         | 0.9 LB-FT                 |
| Volts                 | 110/220      |              |    | Start Configuration                      | direct on line            |
| Full Load Amps        | 6.6/3.3      |              |    | Breakdown Torque                         | 2.1 LB-FT                 |
| R.P.M.                | 2850         |              |    | Pull-up Torque                           | 2.1 LB-FT                 |
| Hz                    | 50           | Phase        | 1  | Locked-rotor Torque                      | 3.2 LB-FT                 |
| NEMA Design Code      | N            | KVA Code     | J  | Starting Current                         | 15.1 A                    |
| Service Factor (S.F.) | 1.25         |              |    | No-load Current                          | 2.2 A                     |
| NEMA Nom. Eff.        | 68           | Power Factor | 77 | Line-line Res. @ 25°C                    | 4.2 Ω A Ph<br>3.18 Ω B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 67°C                      |
| S.F. Amps             | 7.4/3.7      |              |    | Temp. Rise @ S.F. Load                   | 92°C                      |

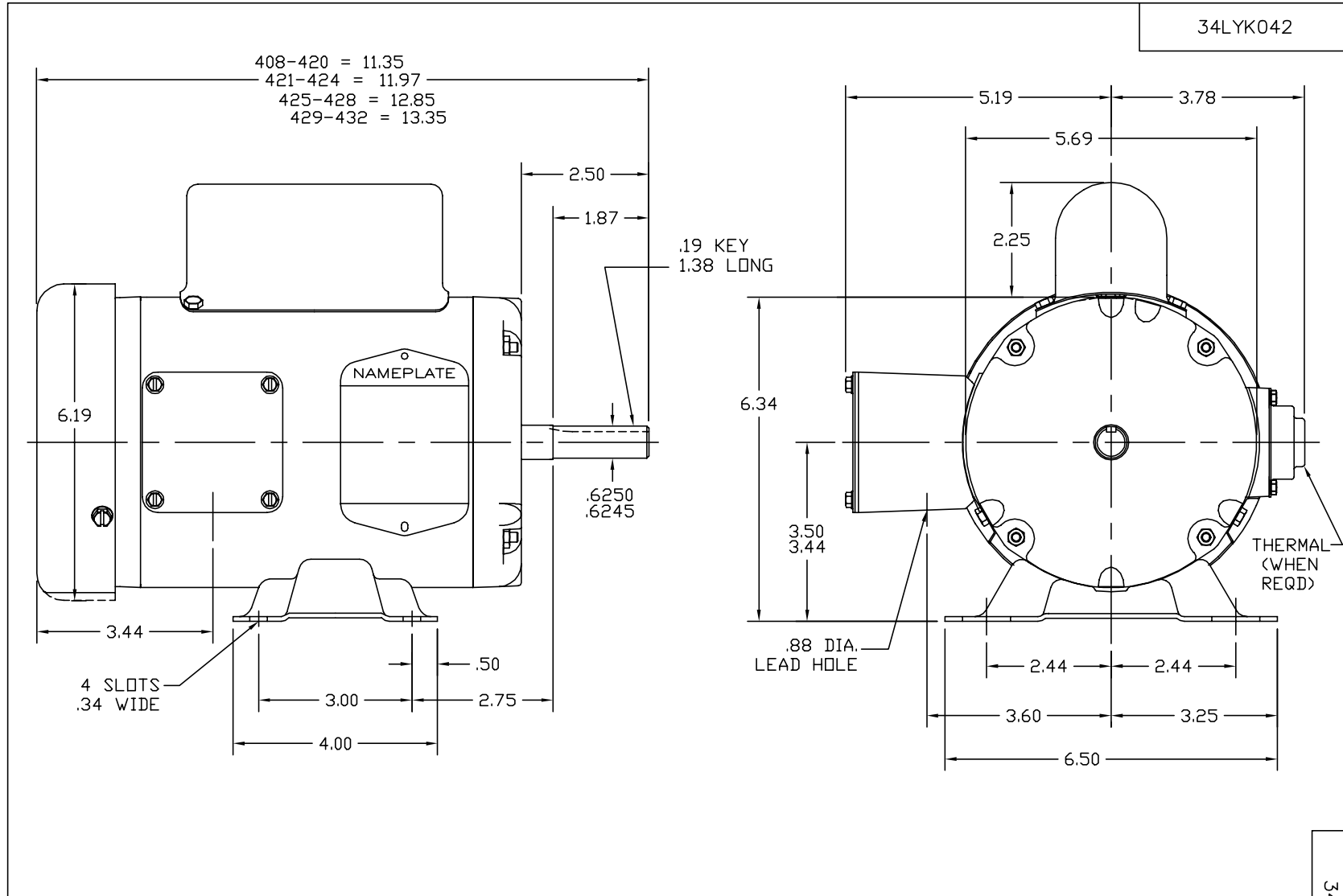
Load Characteristics 220 V, 50 Hz, 0.5 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 46   | 56   | 66   | 77   | 81   | 85   | 0    |
| Efficiency      | 56.1 | 61.8 | 66.6 | 68.1 | 66.4 | 61.6 | 0    |
| Speed           | 2954 | 2921 | 2885 | 2840 | 2785 | 2720 | 0    |
| Line amperes    | 2.3  | 2.4  | 2.6  | 3.3  | 3.7  | 4.6  | 3.7  |



Performance Graph at 220V, 50Hz, 0.5HP Typical performance - Not guaranteed values





CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

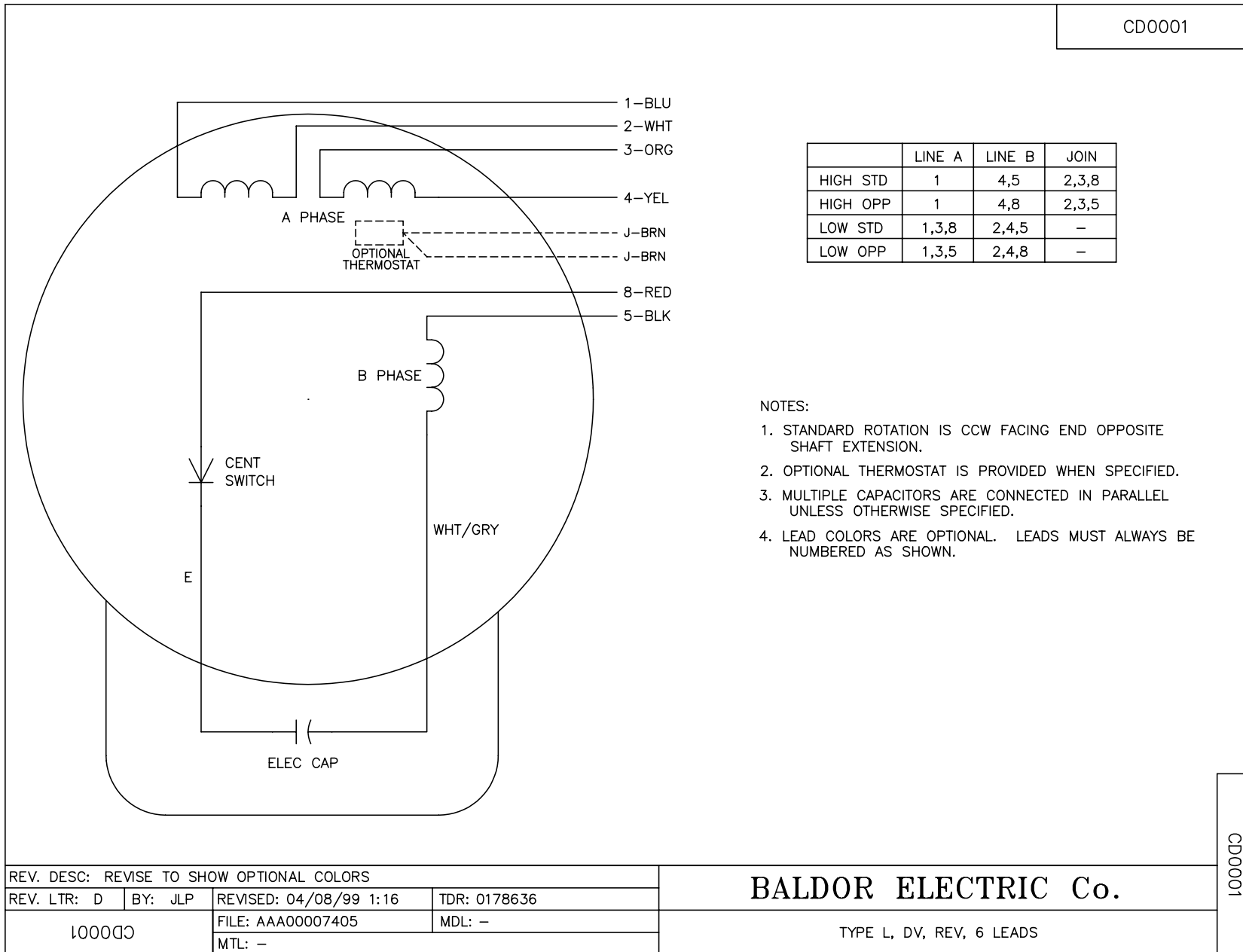
|   |                      |                              |
|---|----------------------|------------------------------|
| REV. DESC: UPDATE GRAPHIC TO MATCH WITH BOM |                      |                              |
| REV. LTR: C                                 | VERSION: 01          | TDR: 000000410146            |
| 34LYK042                                    | FILE: \AAA\00025\615 | REVISED: 14:09:45 10/04/2006 |
|   | MTL: -               | BY: ENRSTO                   |

**BALDOR ELECTRIC Co.**

STD HORZ 34L NEMA 56 TEFC W/35 CAPAC BOX

34LYK042

CD0001



|   |         |                        |              |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                        |              |
| REV. LTR: D                               | BY: JLP | REVISED: 04/08/99 1:16 | TDR: 0178636 |
| 100000                                    |         | FILE: AAA00007405      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

TYPE L, DV, REV, 6 LEADS

CD0001