

**BALDOR • RELIANCE**

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# Customer information packet

## VFSWDL3510

1HP, 1725RPM, 1PH, 60HZ, 56C, 3538L, TEFC, F1, N

Class - None

Division - Not Applicable

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## Specifications

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Enclosure                      | TEFC                                    |
| Frame                          | 56C                                     |
| Frame Material                 | Stainless Steel                         |
| Frequency                      | 60.00 Hz                                |
| Motor Letter Type              | Cap Start, Induction Run                |
| Output @ Frequency             | 1.000 HP @ 60 HZ                        |
| Phase                          | 1                                       |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                        |
| Voltage @ Frequency            | 115.0 V @ 60 HZ<br>230.0 V @ 60 HZ      |
| XP Class and Group             | None                                    |
| XP Division                    | Not Applicable                          |
| Agency Approvals               | UR<br>CSA                               |
| Ambient Temperature            | 40 °C                                   |
| Auxillary Box                  | No Auxillary Box                        |
| Auxillary Box Lead Termination | None                                    |
| Base Indicator                 | No Mounting                             |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                 |
| Blower                         | None                                    |
| Current @ Voltage              | 11.100 A @ 115.0 V<br>5.500 A @ 230.0 V |
| Design Code                    | L                                       |
| Drip Cover                     | No Drip Cover                           |
| Duty Rating                    | CONT                                    |
| Efficiency @ 100% Load         | 74.0 %                                  |
| Electrically Isolated Bearing  | Not Electrically Isolated               |
| Feedback Device                | NO FEEDBACK                             |
| Front Shaft Indicator          | None                                    |
| Heater Indicator               | No Heater                               |
| High Voltage Full Load Amps    | 5.5 a                                   |
| Insulation Class               | F                                       |

## Part detail

|              |            |
|--------------|------------|
| Revision     | B          |
| Type         | AC         |
| Mech. spec.  | 35E4628    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGG402   |
| Layout       | 35LYE4628  |
| Eff. date    | 11-10-2023 |
| CD Diagram   | CD0648     |
| Poles        | 04         |
| Leads        | 7#18       |
| Proprietary  | False      |
| Created date | 08-01-2022 |

|                               |                            |
|-------------------------------|----------------------------|
| Inverter Code                 | Not Inverter               |
| KVA Code                      | K                          |
| Lifting Lugs                  | No Lifting Lugs            |
| Locked Bearing Indicator      | Locked Bearing             |
| Motor Finish                  | UNPAINTED                  |
| Motor Lead Quantity/Wire Size | 6 @ 18 AWG                 |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 3538L                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 4                          |
| Overall Length                | 16.26 IN                   |
| Power Factor                  | 79                         |
| Product Family                | WD All SD Non-Encapsulated |
| Pulley End Bearing Type       | Sealed Bearing             |
| Pulley Face Code              | C-Face                     |
| Pulley Shaft Indicator        | Standard                   |
| Rodent Screen                 | None                       |
| Service Factor                | 1.15                       |
| Shaft Diameter                | 0.625 IN                   |
| 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             | None                       |
| Winding Thermal 2             | None                       |

**Nameplate**

**NP4427ALG30**

|                    |              |                      |      |             |    |
|--------------------|--------------|----------------------|------|-------------|----|
| <b>CAT #</b>       | VFSWDL3510   | <b>WT</b>            | 41   | <b>LBS</b>  |    |
| <b>SPEC</b>        | 35E4628G402  | <b>ENCL</b>          | TEFC |             |    |
| <b>SER #</b>       |              | <b>CC</b>            |      | <b>IP</b>   | 69 |
| <b>HP</b>          | 1            | <b>NEMA NOM. EFF</b> |      | 74          |    |
| <b>VOLTS</b>       | 115/230      |                      |      |             |    |
| <b>AMPS</b>        | 11.3/5.65    | <b>PF</b>            | 75   |             |    |
| <b>RATING</b>      | 40C AMB-CONT |                      |      |             |    |
| <b>RPM</b>         | 1735         |                      |      |             |    |
| <b>FRAME</b>       | 56C          | <b>HZ</b>            | 60   | <b>CODE</b> | K  |
|                    |              | <b>CLASS</b>         | F    |             |    |
| <b>SER.F.</b>      | 1.15         | <b>SF AMP</b>        |      | <b>PH</b>   | 1  |
|                    |              | <b>DES</b>           | L    |             |    |
| <b>DE</b>          | 6205         | <b>ODE</b>           | 6205 |             |    |
| <b>LUBRICATION</b> | POLYREX EM   |                      |      |             |    |
|                    |              |                      |      |             |    |
|                    |              |                      |      |             |    |
|                    |              |                      |      |             |    |
|                    |              |                      |      |             |    |
|                    |              |                      |      |             |    |
|                    |              |                      |      |             |    |
|                    |              |                      |      |             |    |
|                    |              |                      |      | <b>QR</b>   |    |
| <b>YR</b>          |              |                      |      |             |    |

## Parts list

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA407295      | SA 35E4628G402                           | 1.000 ea |
| RA398794      | RA 35E4628G402                           | 1.000 ea |
| EC1645B06     | ELEC CAP 165V 2.0 X 4.3                  | 1.000 ea |
| ES5502        | 115/40A,L ,CV ,165CO,.8*2.2*1.4,4-7-21   | 1.000 ea |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| 35EP1940A05   | FRONT TEFC 205 BRG (STAINLESS)           | 1.000 ea |
| RM1070A25     | O-RING, VITON/FKM .070CS X 6.190ID       | 1.000 ea |
| HW4600G01     | .984X1.499X.25 VITON SLICK SERIES LIP    | 1.000 ea |
| HW4600E99     | 25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V | 1.000 ea |
| HW4500S33     | 1/8 NPT STAINLESS #304 SS PLUG           | 4.000 ea |
| HW4500S33     | 1/8 NPT STAINLESS #304 SS PLUG           | 4.000 ea |
| HW5100A05     | WVY WSHR F/205 & 304 BRGS                | 1.000 ea |
| 35EP1935A02   | PULLEY 56C/143-5TC ENCL 205 BRG          | 1.000 ea |
| RM1070A25     | O-RING, VITON/FKM .070CS X 6.190ID       | 1.000 ea |
| HW4600G01     | .984X1.499X.25 VITON SLICK SERIES LIP    | 1.000 ea |
| HW4600E99     | 25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V | 1.000 ea |
| RM1070A26     | O-RING,4.5MM I.D.X1.5MM C.S. (VITON)     | 4.000 ea |
| 35FH4005A39   | IEC FH NO GREASER DEBURR/CLEAN - SS      | 1.000 ea |
| 10XN1032FS06  | HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF | 3.000 ea |
| 35CB1510A01G  | 35 CB LID SINGLE PHASE MACHINED W/ FIPG  | 1.000 ea |
| 10XN1032FS08  | HEX HD CAP SCREW 10-32 X 1/2 SS FOOD SAF | 6.000 ea |
| HW2502D13     | SS 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  | 0.005 qt |
| MJ5004A93     | FOOD GRADE (H1 RATED) ANTISEIZE THRD COM | 0.005 ea |
| HA5027A09     | DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL    | 1.000 ea |
| MJ1000A02     | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| WD1000A15     | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 2.000 ea |
| 35FN3002A05SP | EXFN, PLASTIC, 6.376 OD, .638 ID         | 1.000 ea |
| 11XB1214S16   | 12-14X1.00 HXWSSLD TYP B STAINLESS       | 1.000 ea |
| WD5603A04     | KIT, CLOSED-END LEAD SPLICE (18-14GA)    | 1.000 ea |

|             |                                       |          |
|-------------|---------------------------------------|----------|
| 34GS5003A01 | FOAM SLEEVE, ID = 2 1/16" X 4 3/8"    | 1.000 ea |
| HA3100FS61  | THRUBOLT, 10-32 X 11.750 SS FOOD SAFE | 4.000 ea |
| MN416A01    | TAG-INSTAL-MAINT no wire (2100bx)4/22 | 1.000 ea |
| PK3082      | STYROFOAM CRADLE                      | 1.000 ea |
| PK3088      | MICROFOAM, 8"X"8 PERF. SHEETS         | 1.000 ea |
| 36PA1000    | PKG GRP, PRINT PK1016A06              | 1.000 ea |
| FE-0000016  | ZTRG FE ASSEMBLY                      | 1.000 ea |
| PE-0000016  | ZRTG PE ASSEMBLY                      | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 91187

Preliminary Data Sheet

| Winding: 35WGG402-R001 |                 | Type: 3538L               | Enclosure: TEFC                                 |  |
|------------------------|-----------------|---------------------------|-------------------------------------------------|--|
| <b>Nameplate Data</b>  |                 |                           | <b>115 V, 60 Hz:<br/>Low Voltage Connection</b> |  |
| Rated Output (HP)      | 1               | Full Load Torque          | 3.06 LB-FT                                      |  |
| Volts                  | 115/230         | Start Configuration       | direct on line                                  |  |
| Full Load Amps         | 11.1/5.5        | Breakdown Torque          | 9.56 LB-FT                                      |  |
| R.P.M.                 | 1725            | Pull-up Torque            | 5.55 LB-FT                                      |  |
| Hz                     | 60 Phase        | Locked-rotor Torque       | 8.58 LB-FT                                      |  |
| NEMA Design Code       | L KVA Code      | Starting Current          | 76.9 A                                          |  |
| Service Factor (S.F.)  | 1.15            | No-load Current           | 6.33 A                                          |  |
| NEMA Nom. Eff.         | 74 Power Factor | Line-line Res. @ 25°C     | 0.44 Ω A Ph<br>0.977 Ω B Ph                     |  |
| Rating - Duty          | 40C AMB-CONT    | Temp. Rise @ Rated Load   | 62°C                                            |  |
| S.F. Amps              |                 | Temp. Rise @ S.F. Load    | 71°C                                            |  |
|                        |                 | Locked-rotor Power Factor | 94.2                                            |  |
|                        |                 | Rotor inertia             | 0.275 lb-ft <sup>2</sup>                        |  |

**Load Characteristics 115 V, 60 Hz, 1 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125   | 150   | S.F. |
|-----------------|------|------|------|------|-------|-------|------|
| Power Factor    | 36   | 55   | 68   | 76   | 81    | 79    | 79   |
| Efficiency      | 68.8 | 76.9 | 77.4 | 75.2 | 69.7  | 1.2   | 71.9 |
| Speed           | 1785 | 1769 | 1751 | 1725 | 1683  | 65.1  | 1700 |
| Line amperes    | 6.74 | 7.76 | 9.32 | 11.4 | 14.27 | 34.96 | 13.1 |

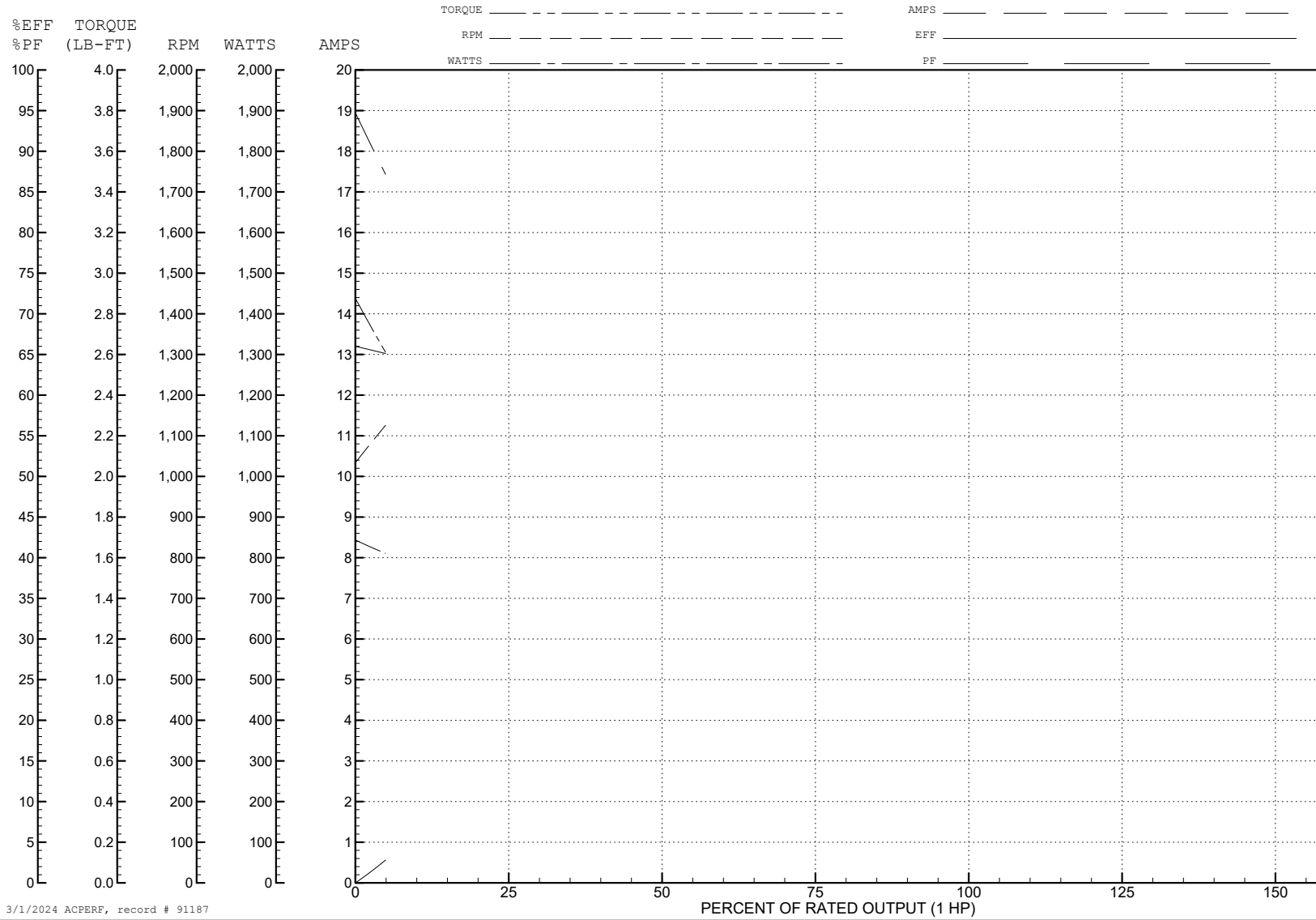
ABB Motors and Mechanical Inc.

WINDING # 35WGG402

Typical performance - not guaranteed values.

1 HP 1 PH 60 HZ 1725 RPM 115 V 3538L

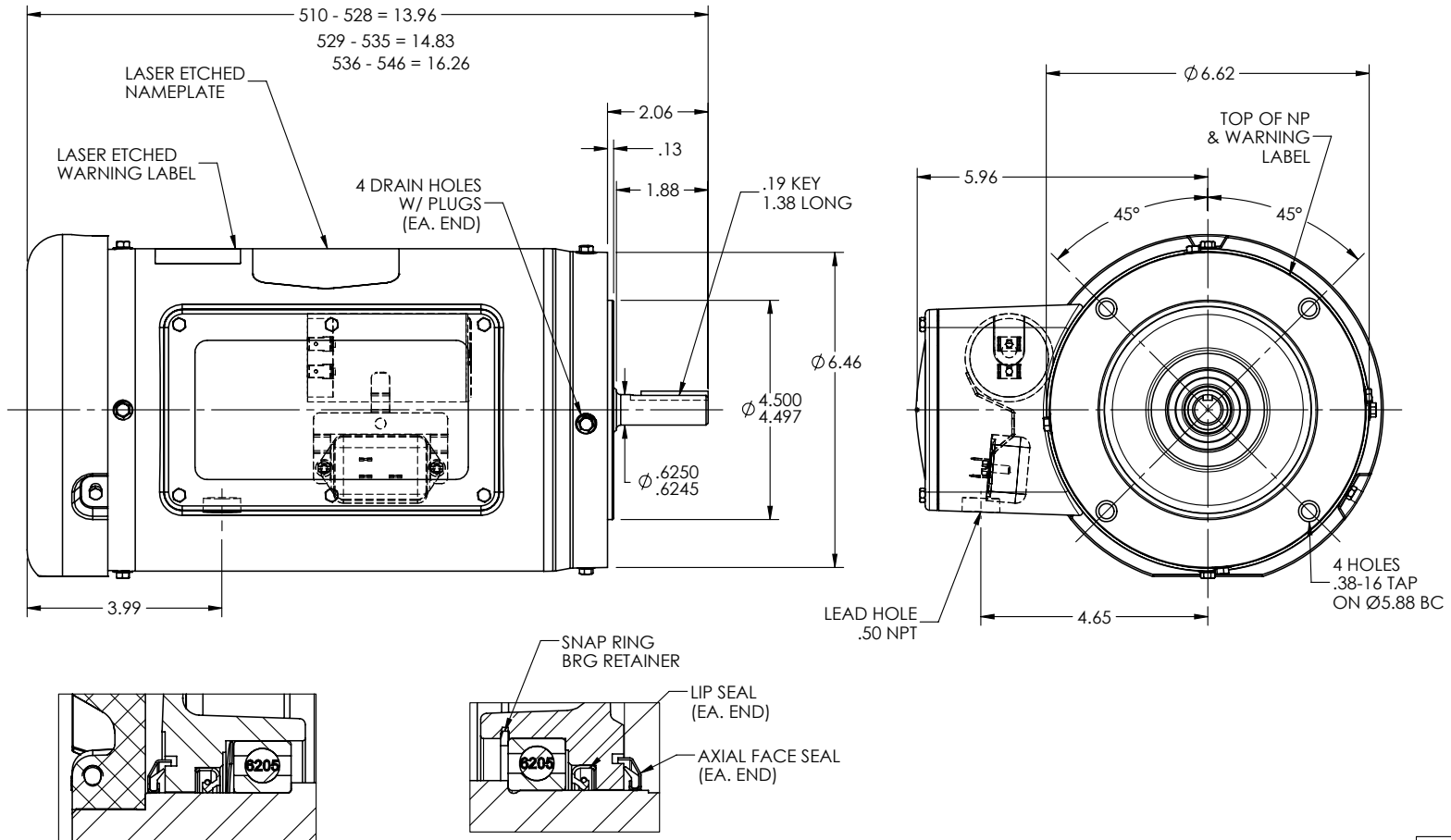
TORQUES (LB-FT): PO=9.56 PU=5.55 LR=8.58 LRA=76.9



3/1/2024 ACPERF, record # 91187



35LYE4628



FRONT END DETAIL

PULLEY END DETAIL

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

REV. DESC: REMOVE FACE DRAINS & DRAIN FTG; ADD DRAIN PLUG

|        |             |                              |                   |
|--------|-------------|------------------------------|-------------------|
| REV: A | VERSION: 01 | REVISED: 09:14:42 01/26/2023 | TDR: 000001202627 |
|--------|-------------|------------------------------|-------------------|

35LYE4628

MODEL NO. 35LYE4628

BY: ENSTEK0

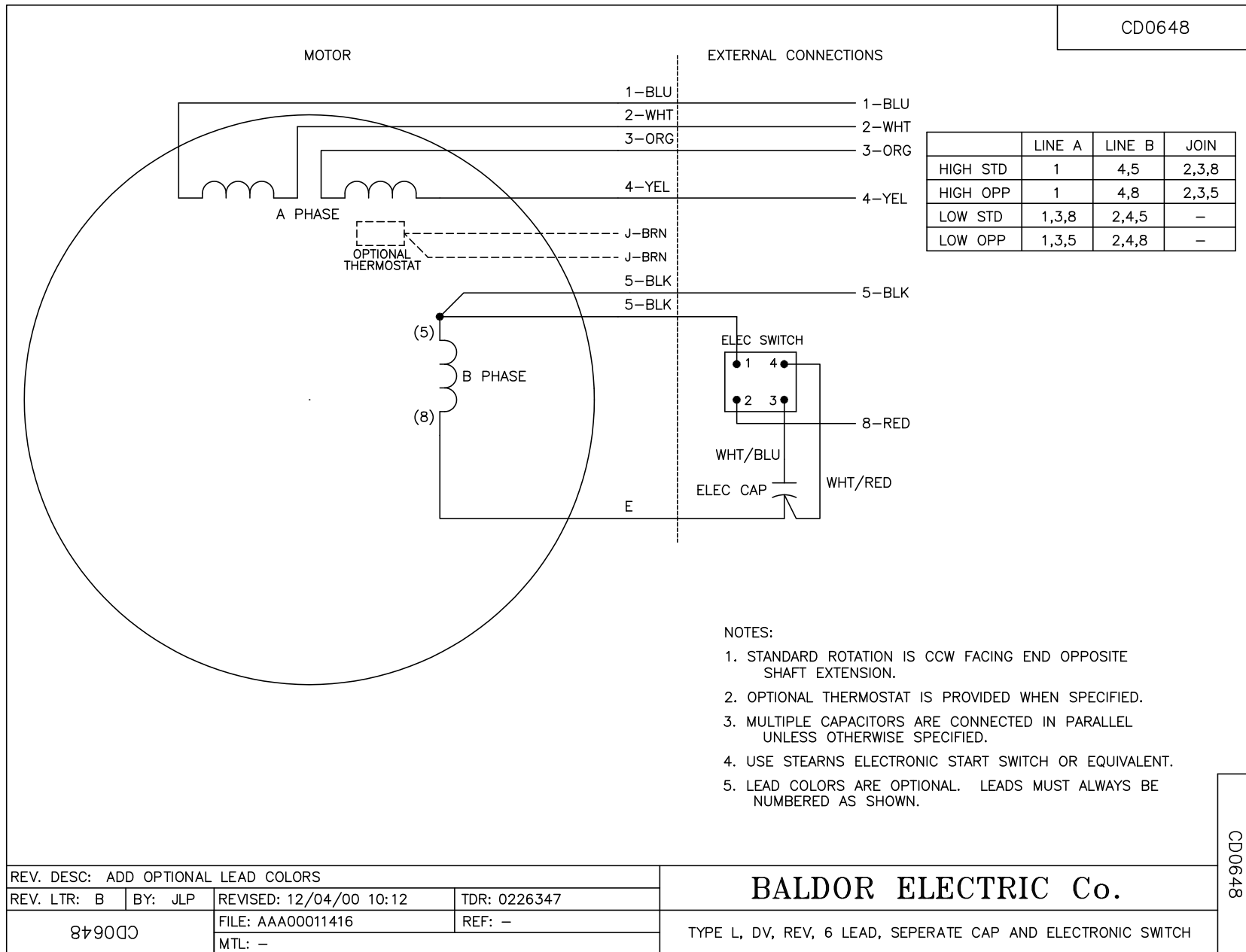
REF: -

**BALDOR**

STD VER 56C TEFC 35L WD11/12

35LYE4628

CD0648



|                                     |         |                         |              |
|-------------------------------------|---------|-------------------------|--------------|
| REV. DESC: ADD OPTIONAL LEAD COLORS |         |                         |              |
| REV. LTR: B                         | BY: JLP | REVISED: 12/04/00 10:12 | TDR: 0226347 |
| 879000                              |         | FILE: AAA00011416       | REF: -       |
|                                     |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

TYPE L, DV, REV, 6 LEAD, SEPERATE CAP AND ELECTRONIC SWITCH

CD0648