

**BALDOR • RELIANCE**

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# Customer information packet

## CEWDNM3545

1HP, 3450RPM, 3PH, 60HZ, 56C, 3516M, TENV, F1, N

Class - None

Division - Not Applicable

## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | TENV  |
| Frame                          | 56C   |
| Frame Material                 | Steel   |
| Frequency                      | 60.00 Hz  |
| Haz Area Class and Group       | None  |
| Haz Area Division              | Not Applicable  |
| Motor Letter Type              | Three Phase   |
| Output @ Frequency             | 1.000 HP @ 60 HZ  |
| Phase                          | 3   |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ  |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                          |
| Agency Approvals               | CSA<br>CSA EEV<br>UR  |
| Ambient Temperature            | 40 °C   |
| Auxillary Box                  | No Auxillary Box  |
| Auxillary Box Lead Termination | None  |
| Base Indicator                 | Rigid   |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                     |
| Blower                         | None  |
| Current @ Voltage              | 2.600 A @ 230.0 V<br>2.800 A @ 208.0 V<br>1.300 A @ 460.0 V |
| Design Code                    | B   |
| Drip Cover                     | No Drip Cover   |
| Duty Rating                    | CONT  |
| Efficiency @ 100% Load         | 82.5 %  |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK   |
| Front Face Code                | Standard  |
| Front Shaft Indicator          | None  |

## Part detail

|              |            |
|--------------|------------|
| Revision     | Q          |
| Type         | AC         |
| Mech. spec.  | 35T964     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGR933   |
| Layout       | 35LYT964   |
| Eff. date    | 02-14-2024 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 02-12-2015 |

|                               |                            |
|-------------------------------|----------------------------|
| Heater Indicator              | No Heater                  |
| High Voltage Full Load Amps   | 1.3 a                      |
| Insulation Class              | F                          |
| Inverter Code                 | Not Inverter               |
| KVA Code                      | L                          |
| Lifting Lugs                  | No Lifting Lugs            |
| Locked Bearing Indicator      | Locked Bearing             |
| Motor Lead Exit               | Ko Box                     |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG                 |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 3516M                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 2                          |
| Overall Length                | 11.06 IN                   |
| Power Factor                  | 88                         |
| Product Family                | Wash Down                  |
| Pulley End Bearing Type       | Sealed Bearing             |
| Pulley Face Code              | C-Face                     |
| Pulley Shaft Indicator        | Standard                   |
| Rodent Screen                 | None                       |
| RoHS Status                   | ROHS COMPLIANT             |
| Service Factor                | 1.25                       |
| Shaft Diameter                | 0.625 IN                   |
| Shaft Extension Location      | Pulley End                 |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Shaft Slinger Indicator       | Shaft Slinger              |
| Speed                         | 3450 rpm                   |
| Speed Code                    | Single Speed               |
| Starting Method               | Direct on line             |
| Thermal Device - Bearing      | None                       |
| Thermal Device - Winding      | Normally Closed Thermostat |
| Vibration Sensor Indicator    | No Vibration Sensor        |

Winding Thermal 1

None

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Winding Thermal 2

None

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**Nameplate**

| <b>NP1669L</b>      |                        |             |            |            |   |              |   |  |  |
|---------------------|------------------------|-------------|------------|------------|---|--------------|---|--|--|
| <b>CAT.NO.</b>      | CEWDM3545              |             |            |            |   |              |   |  |  |
| <b>SPEC.</b>        | 35T964R933G2           |             |            |            |   |              |   |  |  |
| <b>HP</b>           | 1 20:1CT,20:1VT,1.00SF |             |            |            |   |              |   |  |  |
| <b>VOLTS</b>        | 230/460                |             |            |            |   |              |   |  |  |
| <b>AMP</b>          | 2.6/1.3                |             |            |            |   |              |   |  |  |
| <b>RPM</b>          | 3450                   |             |            |            |   |              |   |  |  |
| <b>FRAME</b>        | 56C                    |             | <b>HZ</b>  | 60         |   | <b>PH</b>    | 3 |  |  |
| <b>SER.F.</b>       | 1.25                   | <b>CODE</b> | L          | <b>DES</b> | B | <b>CLASS</b> | F |  |  |
| <b>NEMA-NOM-EFF</b> | 82.5                   | <b>PF</b>   | 88         |            |   |              |   |  |  |
| <b>RATING</b>       | 40C AMB-CONT           |             |            |            |   |              |   |  |  |
| <b>CC</b>           | 010A                   |             |            |            |   |              |   |  |  |
| <b>DE</b>           | 6205                   |             | <b>ODE</b> | 6203       |   |              |   |  |  |
| <b>ENCL</b>         | TENV                   | <b>SN</b>   |            |            |   |              |   |  |  |
| <b>BLANK</b>        | SFA 3.2/1.6            |             |            |            |   |              |   |  |  |

## Parts list

| Part number  | Description                              | Quantity |
|--------------|--|----------|
| SA293678     | SA 35T964R933G2                          | 1.000 ea |
| RA279770     | RA 35T964R933G2                          | 1.000 ea |
| NS2512A01    | INSULATOR, CONDUIT BOX X                 | 1.000 ea |
| 35CB3008A01G | SPL CONDUIT BOX, MACHINED GRAY           | 1.000 ea |
| 35GS1040     | 35 MOLDED GASKET W/LIP, LEAD SEAL,       | 1.000 ea |
| 51XB1016A08  | 10-16X 1/2HXWSSLD SERTYB                 | 2.000 ea |
| 11XW1032G06  | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| 35EP3122D00W | MASTER ODE,203 BRG,.125NPT DRNS(WHITE)   | 1.000 ea |
| HW4072A01    | BLACK DRAIN PLUG FOR .125 NPT            | 3.000 ea |
| HW5100A03    | WAVY WASHER (W1543-017)                  | 1.000 ea |
| 35EP3307E00W | MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C | 1.000 ea |
| HW4072A01    | BLACK DRAIN PLUG FOR .125 NPT            | 3.000 ea |
| HW4600B49    | SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB | 1.000 ea |
| 12XN1032S20  | 10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL | 2.000 ea |
| 35CB4522     | 35 LIPPED CB LID PRIMED                  | 1.000 ea |
| 35GS1030A02  | 35 GS FOR CB LID - WHITE NEOPRENE        | 1.000 ea |
| 59XW0832S07  | TAPTITE II,HEX WSHR UNSLTD SER,410 S.S., | 4.000 ea |
| HW4600B46    | V-RING SLINGER 0.875 X 1.420 X .24 VITON | 1.000 ea |
| MJ5001A27    | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 qt |
| 85XU0407S04  | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| LB1164       | LABEL,WARNING AND DRAIN                  | 1.000 ea |
| HA5027A02    | HA4054 T-DRAIN X2 BAGGED WITH LABEL      | 1.000 ea |
| MJ1000A02    | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| MG1025W01    | WILKOFAS, 781.01, SIGNAL WHITE #9003     | 0.017 ga |
| MG1500Y02    | WILKOPON PRIMER YELLOW                   | 0.017 ga |
| HW2502D13    | SS KEY, 3/16 SQ X 1.375                  | 1.000 ea |
| HA7000A04    | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 ea |
| HA3100S08    | THRUBOLT 7.375LG SS                      | 4.000 ea |
| MN416A01     | TAG-INSTAL-MAINT no wire (2500bx)4/22    | 1.000 ea |
| LC0145B01    | CONNECTION LABEL                         | 1.000 ea |
| NP1669L      | SS WD SUPER-E UL PREM REV MTG            | 1.000 ea |

|            |                          |          |
|------------|--------------------------|----------|
| 36PA1000   | PKG GRP, PRINT PK1016A06 | 1.000 ea |
| FE-0000001 | ZRTG FE ASSEMBLY         | 1.000 ea |
| PE-0000002 | ZRTG PE ASSEMBLY         | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 8818

Typical performance - not guaranteed values

| <b>Winding: 35WGR933-R001</b> |                   | <b>Type: 3516M</b>         |  | <b>Enclosure: TENV</b>       |          |
|-------------------------------|-------------------|----------------------------|--|------------------------------|----------|
| <b>Nameplate Data</b>         |                   |                            | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                              |          |
| <b>Rated Output (HP)</b>      | 1                 | <b>Full Load Torque</b>    | 1.5 LB-FT  |                              |          |
| <b>Volts</b>                  | 230/460           | <b>Start Configuration</b> | direct on line                                   |                              |          |
| <b>Full Load Amps</b>         | 2.6/1.3           | <b>Breakdown Torque</b>    | 7.5 LB-FT  |                              |          |
| <b>R.P.M.</b>                 | 3450              | <b>Pull-up Torque</b>      | 4.2 LB-FT  |                              |          |
| <b>Hz</b>                     | 60 <b>Phase</b>   | 3                          | <b>Locked-rotor Torque</b>                       | 5.6 LB-FT                    |          |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b> | L                          | <b>Starting Current</b>                          | 12.4 A                       |          |
| <b>Service Factor (S.F.)</b>  | 1.25              |                            | <b>No-load Current</b>                           | 0.63 A                       |          |
| <b>NEMA Nom. Eff.</b>         | 82.5              | <b>Power Factor</b>        | 88   | <b>Line-line Res. @ 25°C</b> | 15.129 Ω |
| <b>Rating - Duty</b>          | 40C AMB-CONT      |                            | <b>Temp. Rise @ Rated Load</b>                   | 80°C                         |          |
| <b>S.F. Amps</b>              | 3.2/1.6           |                            | <b>Temp. Rise @ S.F. Load</b>                    | 108°C                        |          |
|                               |                   |                            | <b>Locked-rotor Power Factor</b>                 | 56                           |          |
|                               |                   |                            | <b>Rotor inertia</b>                             | 0.0443 LB-FT <sup>2</sup>    |          |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 49        | 69        | 82        | 88         | 91         | 93         | 91          |
| <b>Efficiency</b>      | 71.6      | 80.5      | 83.1      | 83.6       | 82.7       | 81.3       | 82.7        |
| <b>Speed</b>           | 3560      | 3529      | 3494      | 3462       | 3423       | 3378       | 3423        |
| <b>Line amperes</b>    | 0.7       | 0.85      | 1.04      | 1.28       | 1.58       | 1.86       | 1.58        |



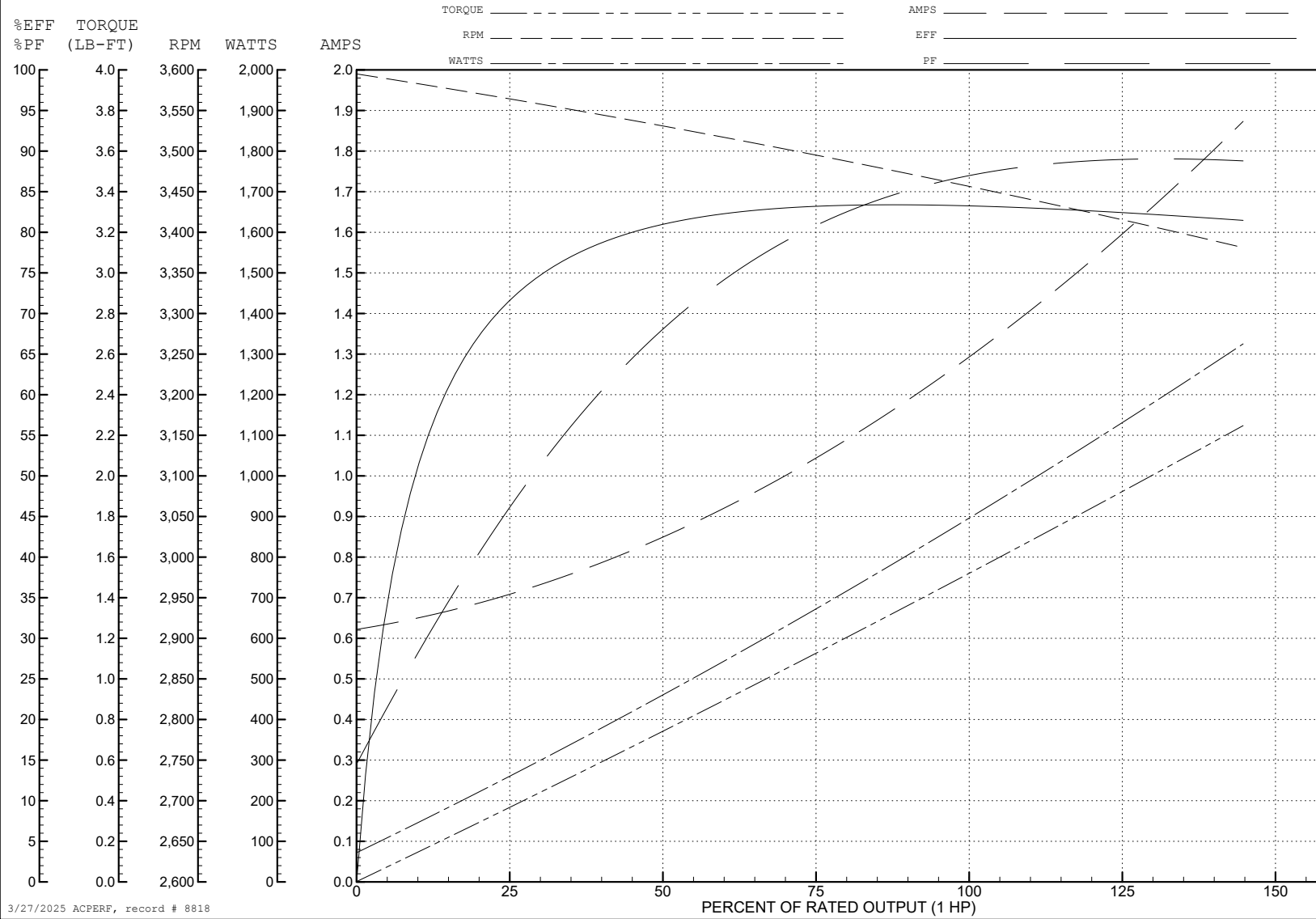
ABB Motors and Mechanical Inc.

WINDING # 35WGR933

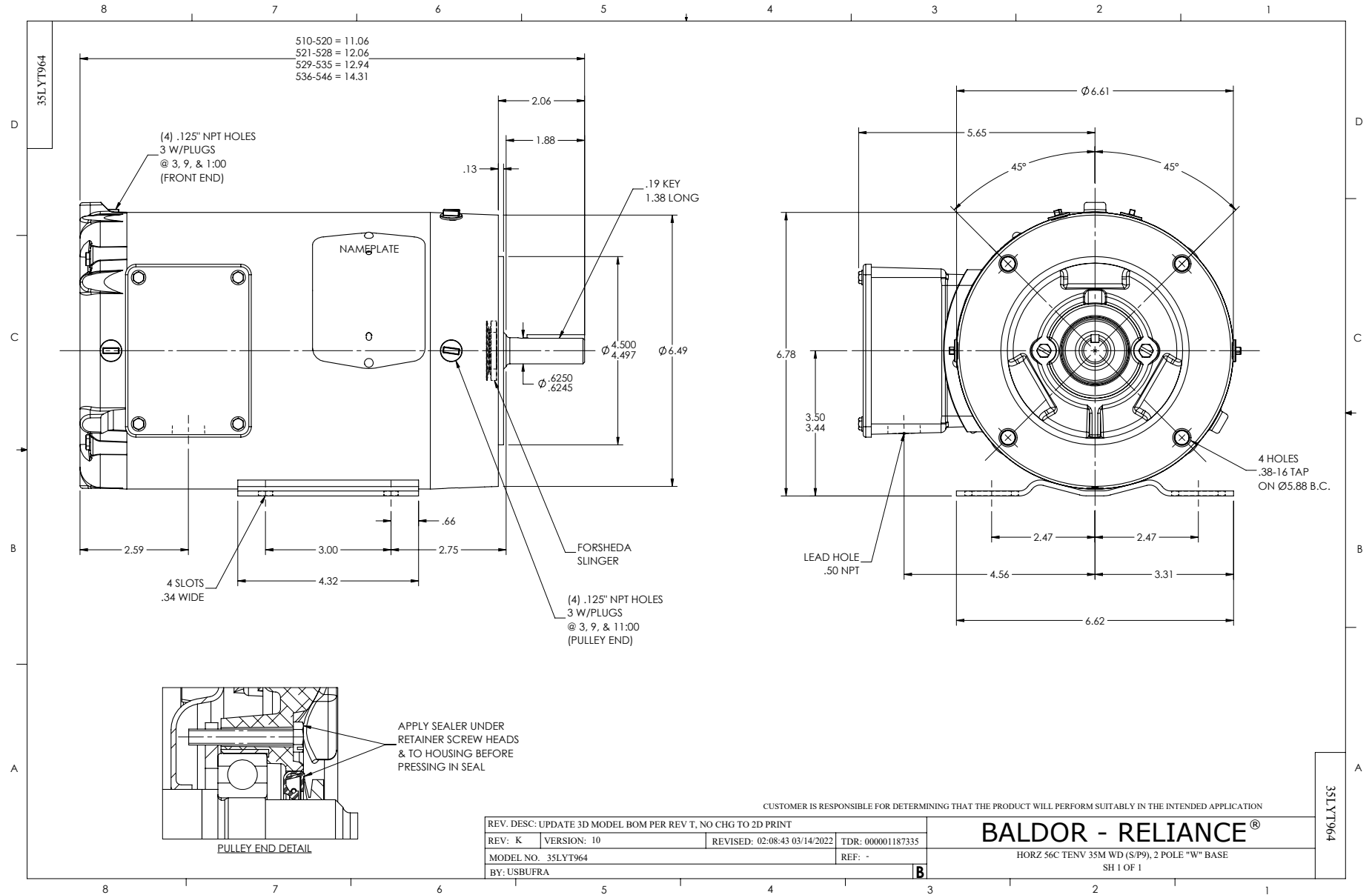
1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=7.5 PU=4.2 LR=5.6 LRA=12.4



3/27/2025 ACPERF, record # 8818



CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS