

# ABB BALDOR RELIANCE III

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## Customer information packet

### UCLE3145

3-4.5HP, 3450RPM, 1PH, 60HZ, 3540LC, N

Class - None

Division - Not Applicable

**Specifications**

|                                |                                          |
|--------------------------------|------------------------------------------|
| Enclosure                      | TEAO                                     |
| Frame                          | 145TZ                                    |
| 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             | 4.500 HP @ 60 HZ<br>3.000 HP @ 60 HZ     |
| Phase                          | 1                                        |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                         |
| Voltage @ Frequency            | 230.0 V @ 60 HZ                          |
| Agency Approvals               | CSA<br>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              | 12.500 A @ 230.0 V<br>20.000 A @ 208.0 V |
| 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                                     |
| Heater Indicator               | No Heater                                |
| High Voltage Full Load Amps    | 12.5 a                                   |
| Insulation Class               | F                                        |

**Part Detail**

|              |                                           |
|--------------|-------------------------------------------|
| Revision     | W                                         |
| Type         | AC                                        |
| Mech. spec.  | 35E2504                                   |
| Base         |                                           |
| Status       | PRD/A                                     |
| Elec. spec.  | 35WGT164                                  |
| Layout       | 35LYE2504                                 |
| Eff. date    | 01-02-2025                                |
| CD Diagram   | CD0017A02                                 |
| Poles        | 02                                        |
| Leads        | 2#14 A PH 30" leads,2#18 B PH 30" leads Y |
| Proprietary  | False                                     |
| Created date | 03-06-2014                                |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Inverter Code</b>                 | Not Inverter               |
| <b>KVA Code</b>                      | K                          |
| <b>Lifting Lugs</b>                  | No Lifting Lugs            |
| <b>Locked Bearing Indicator</b>      | Locked Bearing             |
| <b>Motor Lead Exit</b>               | Pipe Or Pipe Adaptor       |
| <b>Motor Lead Quantity/Wire Size</b> | 2 @ 14 AWG, A PH           |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 3540LC                     |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 2                          |
| <b>Overall Length</b>                | 15.62 IN                   |
| <b>Power Factor</b>                  | 97                         |
| <b>Product Family</b>                | General Purpose            |
| <b>Pulley End Bearing Type</b>       | Ball                       |
| <b>Pulley Face Code</b>              | Standard                   |
| <b>Pulley Shaft Indicator</b>        | Tapped & Key               |
| <b>Rodent Screen</b>                 | None                       |
| <b>RoHS Status</b>                   | ROHS COMPLIANT             |
| <b>Service Factor</b>                | 1.00                       |
| <b>Shaft Diameter</b>                | 0.875 IN                   |
| <b>Shaft Extension Location</b>      | Pulley End                 |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Shaft Slinger Indicator</b>       | No Slinger                 |
| <b>Speed</b>                         | 3450 rpm                   |
| <b>Speed Code</b>                    | Single Speed               |
| <b>Starting Method</b>               | Direct on line             |
| <b>Thermal Device - Bearing</b>      | None                       |
| <b>Thermal Device - Winding</b>      | Normally Closed Thermostat |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor        |
| <b>Winding Thermal 1</b>             | None                       |
| <b>Winding Thermal 2</b>             | None                       |

**Nameplate**

| NP1279L      |               |  |      |      |  |     |   |    |   |
|--------------|---------------|--|------|------|--|-----|---|----|---|
| CAT.NO.      | UCLE3145      |  |      |      |  |     |   |    |   |
| SPEC.        | 35E2504T164G1 |  |      |      |  |     |   |    |   |
| HP           | 3-4.5         |  |      |      |  |     |   |    |   |
| VOLTS        | 230           |  |      |      |  |     |   |    |   |
| AMP          | 12.5-18.5     |  |      |      |  |     |   |    |   |
| RPM          | 3450          |  |      |      |  |     |   |    |   |
| FRAME        | 143TZ         |  | HZ   | 60   |  | PH  |   | 1  |   |
| SER.F.       | 1.00          |  | CODE | K    |  | DES | - | CL | F |
| NEMA-NOM-EFF | 82.5          |  | PF   | 97   |  |     |   |    |   |
| RATING       | 40C AMB-CONT  |  |      |      |  |     |   |    |   |
| CC           |               |  |      |      |  |     |   |    |   |
| DE           | 6206          |  | ODE  | 6203 |  |     |   |    |   |
| ENCL         | TEAO          |  | SN   |      |  |     |   |    |   |

| NP1263L      |               |      |      |     |    |    |    |   |  |
|--------------|---------------|------|------|-----|----|----|----|---|--|
| CAT.NO.      | UCLE3145      |      |      |     |    |    |    |   |  |
| SPEC.        | 35E2504T164G1 |      |      |     |    |    |    |   |  |
| HP           | 3-4.5         |      |      |     |    |    |    |   |  |
| VOLTS        | 230           |      |      |     |    |    |    |   |  |
| AMP          | 12.5-18.5     |      |      |     |    |    |    |   |  |
| RPM          | 3450          |      |      |     |    |    |    |   |  |
| FRAME        | 143TZ         |      |      | HZ  | 60 |    | PH | 1 |  |
| SER.F.       | 1.00          | CODE | K    | DES | -  | CL | F  |   |  |
| NEMA-NOM-EFF | 82.5          | PF   | 97   |     |    |    |    |   |  |
| RATING       | 40C AMB-CONT  |      |      |     |    |    |    |   |  |
| CC           |               |      |      |     |    |    |    |   |  |
| DE           | 6206          | ODE  | 6203 |     |    |    |    |   |  |
| ENCL         | TEAO          | SN   |      |     |    |    |    |   |  |
|              |               |      |      |     |    |    |    |   |  |

**Accessories**

| Part number | Description                             | Multiplier |
|-------------|-----------------------------------------|------------|
| 35-3300FD   | C FACE KIT FARM DUTY 143-5TC ENCL, 6205 | A8         |

**AC Induction Motor Performance Data**

Record # 9277

Typical performance - not guaranteed values

| Winding: 35WGT164-R001 |  |           | Type: 3540LC                          |  | Enclosure: TEAO |                         |                             |
|------------------------|--|-----------|---------------------------------------|--|-----------------|-------------------------|-----------------------------|
|                        |  |           |                                       |  |                 |                         |                             |
| Nameplate Data         |  |           | 230 V, 60 Hz:<br>Single Voltage Motor |  |                 |                         |                             |
| Rated Output (HP)      |  | 3-4.5     | Full Load Torque                      |  | 6.6 LB-FT       |                         |                             |
| Volts                  |  | 230       | Start Configuration                   |  | direct on line  |                         |                             |
| Full Load Amps         |  | 12.5-18.5 | Breakdown Torque                      |  | 14.6 LB-FT      |                         |                             |
| R.P.M.                 |  | 3450      | Pull-up Torque                        |  | 8 LB-FT         |                         |                             |
| Hz                     |  | 60        | Phase                                 |  | 1               | Locked-rotor Torque     | 11.7 LB-FT                  |
| NEMA Design Code       |  | -         | KVA Code                              |  | K               | Starting Current        | 108 A                       |
| Service Factor (S.F.)  |  | 1         |                                       |  |                 | No-load Current         | 2.7 A                       |
| NEMA Nom. Eff.         |  | 82.5      | Power Factor                          |  | 97              | Line-line Res. @ 25°C   | 0.519 Ω A Ph<br>1.58 Ω B Ph |
| Rating - Duty          |  | 40C       | AMB-CONT                              |  |                 | Temp. Rise @ Rated Load |                             |

**Load Characteristics 230 V, 60 Hz, 4.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 95   | 97   | 98   | 97   | 97   | 96   |
| Efficiency      | 69.1 | 78.6 | 82.3 | 79.6 | 78.3 | 73.5 |
| Speed           | 3566 | 3539 | 3507 | 3473 | 3421 | 3364 |
| Line amperes    | 5.9  | 9.5  | 13.9 | 18.2 | 24.1 | 30.5 |

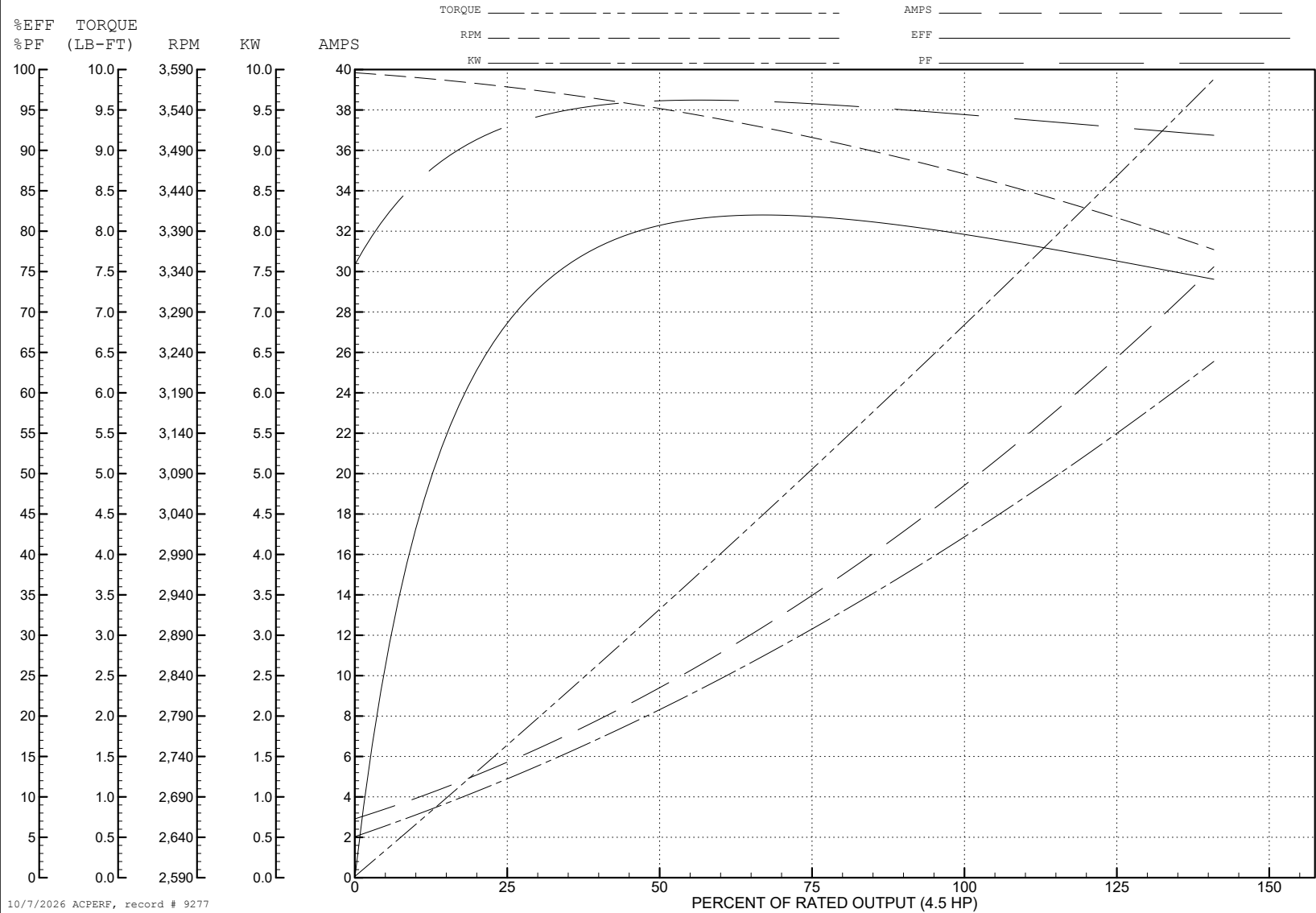
ABB Motors and Mechanical Inc.

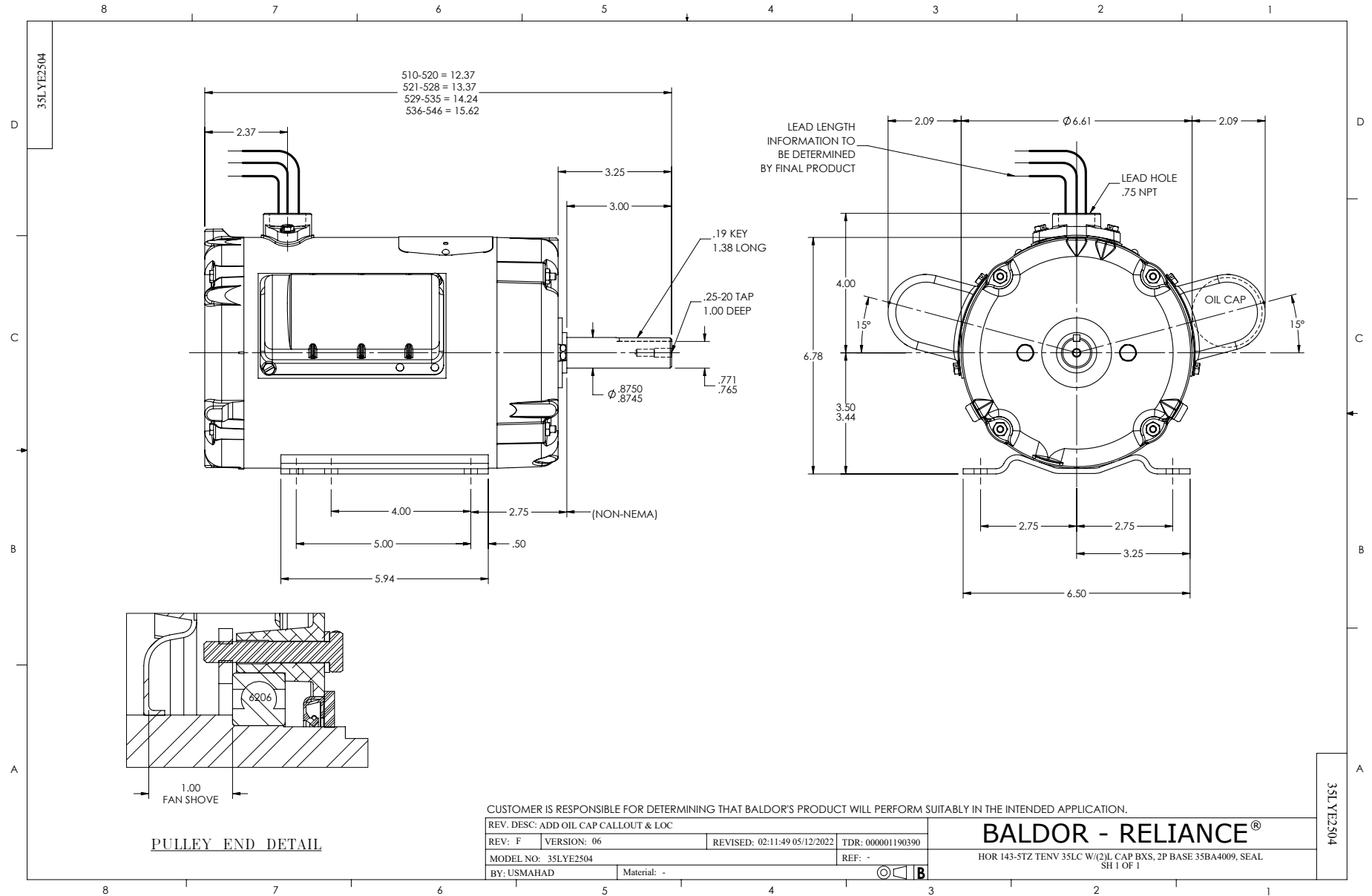
WINDING # 35WGT164

Typical performance - not guaranteed values.

4.5 HP 1 PH 60 HZ 3450 RPM 230 V 3540LC

TORQUES (LB-FT): PO=14.6 PU=8 LR=11.7 LRA=108





CD0017A02

