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# Customer information packet

## EM3155T

2HP, 3450RPM, 3PH, 60HZ, 3524M, N

Class - None

Division - Not Applicable

## Specifications

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Enclosure                      | OPSB                                                        |
| Frame                          | 145T                                                        |
| 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             | 2.000 HP @ 60 HZ                                            |
| Phase                          | 3                                                           |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                            |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| Agency Approvals               | CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<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              | 5.600 A @ 208.0 V<br>5.000 A @ 230.0 V<br>2.500 A @ 460.0 V |
| Design Code                    | B                                                           |
| Drip Cover                     | No Drip Cover                                               |
| Duty Rating                    | CONT                                                        |
| Efficiency @ 100% Load         | 85.5 %                                                      |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK                                                 |
| Front Face Code                | Standard                                                    |

## Part detail

|              |            |
|--------------|------------|
| Revision     | S          |
| Type         | AC         |
| Mech. spec.  | 35T680     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGQ054   |
| Layout       | 35LYT680   |
| Eff. date    | 06-11-2024 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 10-21-2010 |

|                               |                    |
|-------------------------------|--------------------|
| Front Shaft Indicator         | None               |
| Heater Indicator              | No Heater          |
| High Voltage Full Load Amps   | 2.5 a              |
| Insulation Class              | F                  |
| Inverter Code                 | Inverter Ready     |
| KVA Code                      | K                  |
| Lifting Lugs                  | No Lifting Lugs    |
| Locked Bearing Indicator      | No 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                    | 3524M              |
| Mounting Arrangement          | F1                 |
| Number of Poles               | 2                  |
| Overall Length                | 11.63 IN           |
| Power Factor                  | 87                 |
| Product Family                | General Purpose    |
| Pulley End Bearing Type       | Ball               |
| Pulley Face Code              | Standard           |
| Pulley Shaft Indicator        | Standard           |
| Rodent Screen                 | None               |
| RoHS Status                   | ROHS COMPLIANT     |
| Service Factor                | 1.15               |
| Shaft Diameter                | 0.875 IN           |
| Shaft Extension Location      | Pulley End         |
| Shaft Ground Indicator        | No Shaft Grounding |
| Shaft Rotation                | Reversible         |
| Shaft Slinger Indicator       | No Slinger         |
| Speed                         | 3450 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

## NP3553LUA

|                           |                        |      |     |      |   |       |       |
|---------------------------|------------------------|------|-----|------|---|-------|-------|
| CAT.NO.                   | EM3155T                |      |     |      |   |       |       |
| SPEC.                     | 35T680Q054G1           |      |     |      |   |       |       |
| HP                        | 2                      |      |     |      |   |       |       |
| VOLTS                     | 230/460                |      |     |      |   |       |       |
| AMPS                      | 5/2.5                  |      |     |      |   |       |       |
| RPM                       | 3450                   |      |     |      |   |       |       |
| FRAME                     | 145T                   |      | HZ  | 60   |   | PH    | 3     |
| SF                        | 1.15                   | CODE | K   | DES  | B | CLASS | F     |
| NEMA NOM. EFF             | 85.5                   | PF   | 87  |      |   |       |       |
| RATING                    | 40C AMB-CONT           |      |     |      |   |       |       |
| CC                        | 010A                   |      |     |      |   |       |       |
| ENCL                      | OPSB                   | SN   |     |      |   |       |       |
| DE                        | 6205                   |      | ODE | 6203 |   |       |       |
| VPWM INVERTER READY       |                        |      |     |      |   |       |       |
| CT30-60(2:1) VT3-60(20:1) |                        |      |     |      |   |       |       |
| USABLE AT                 | 50HZ 2HP 190/380V 6/3A |      |     |      |   |       | SF1.0 |

**Accessories**

| Part number   | Description  | Multiplier |
|---------------|--------------|------------|
| 35-8764       | C FACE KIT   | A8         |
| 35EP1604A01SP | D-FLANGE KIT |            |

## AC Induction Motor Performance Data

Record # 53132

Typical performance - not guaranteed values

| Winding: 35WGQ054-R008 |  |         |  | Type: 3524M                              |  | Enclosure: OPSB |  |
|------------------------|--|---------|--|------------------------------------------|--|-----------------|--|
| Nameplate Data         |  |         |  | 460 V, 60 Hz:<br>High Voltage Connection |  |                 |  |
| Rated Output (HP)      |  | 2       |  | Full Load Torque                         |  | 3 LB-FT         |  |
| Volts                  |  | 230/460 |  | Start Configuration                      |  | direct on line  |  |
| Full Load Amps         |  | 5/2.5   |  | Breakdown Torque                         |  | 11 LB-FT        |  |
| R.P.M.                 |  | 3450    |  | Pull-up Torque                           |  | 8 LB-FT         |  |
| Hz                     |  | 60      |  | Phase                                    |  | 3               |  |
| NEMA Design Code       |  | B       |  | KVA Code                                 |  | K               |  |
| Service Factor (S.F.)  |  | 1.15    |  | No-load Current                          |  | 21.5 A          |  |
| NEMA Nom. Eff.         |  | 85.5    |  | Power Factor                             |  | 87              |  |
| Rating - Duty          |  | 40C     |  | AMB-CONT                                 |  |                 |  |
| S.F. Amps              |  |         |  | Temp. Rise @ Rated Load                  |  | 31°C            |  |
|                        |  |         |  | Temp. Rise @ S.F. Load                   |  | 37°C            |  |
|                        |  |         |  | Locked-rotor Power Factor                |  | 53.6            |  |
|                        |  |         |  | Rotor inertia                            |  | 0.0657 LB-FT2   |  |

## Load Characteristics 460 V, 60 Hz, 2 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 51   | 70   | 81   | 86   | 87   | 88   | 87   |
| Efficiency      | 78.3 | 85.2 | 86.9 | 86.5 | 85.6 | 84.2 | 86   |
| Speed           | 3570 | 3541 | 3510 | 3476 | 3441 | 3403 | 3455 |
| Line amperes    | 1.2  | 1.6  | 2    | 2.5  | 3.1  | 3.7  | 2.86 |

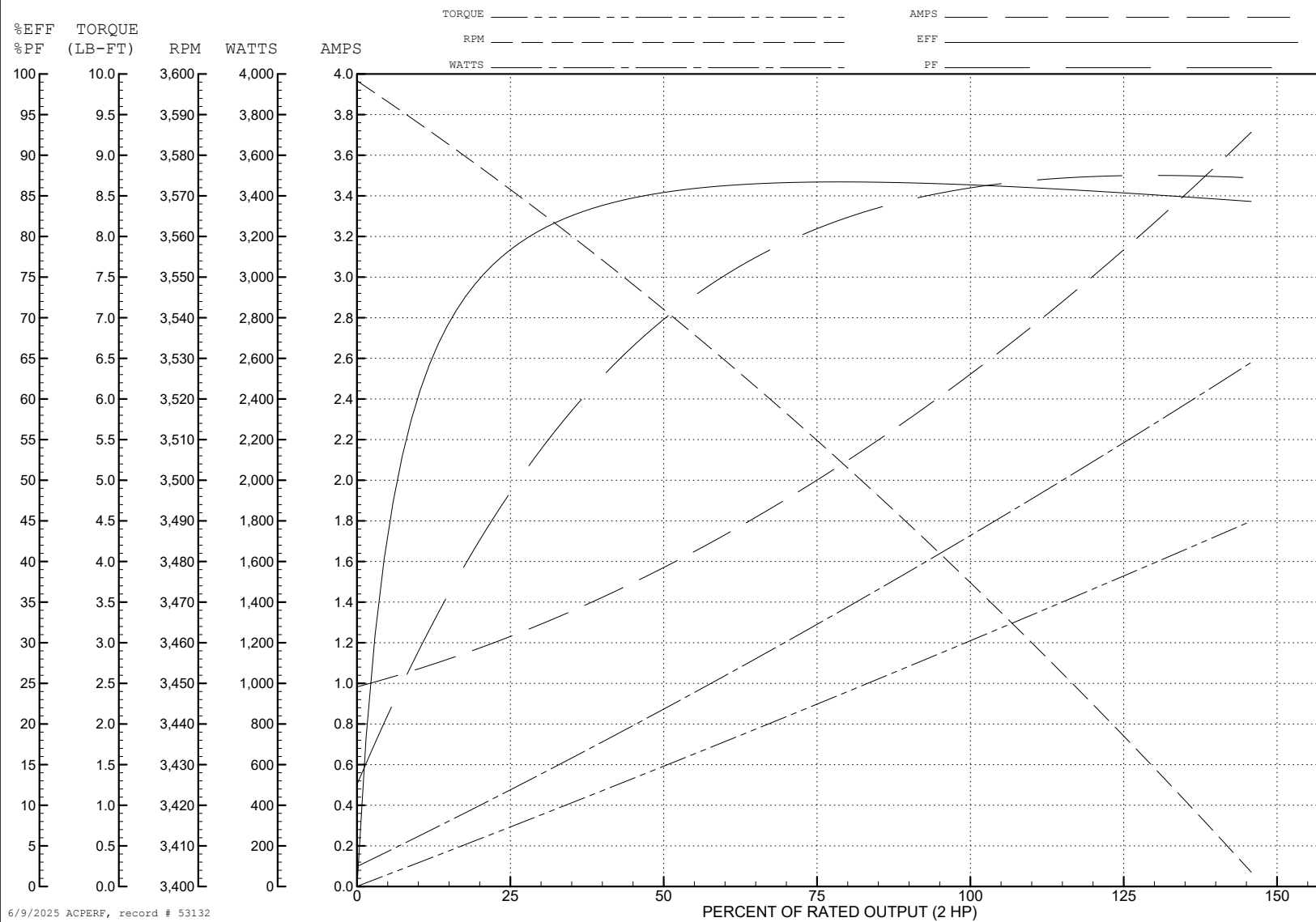
ABB Motors and Mechanical Inc.

WINDING # 35WGQ054

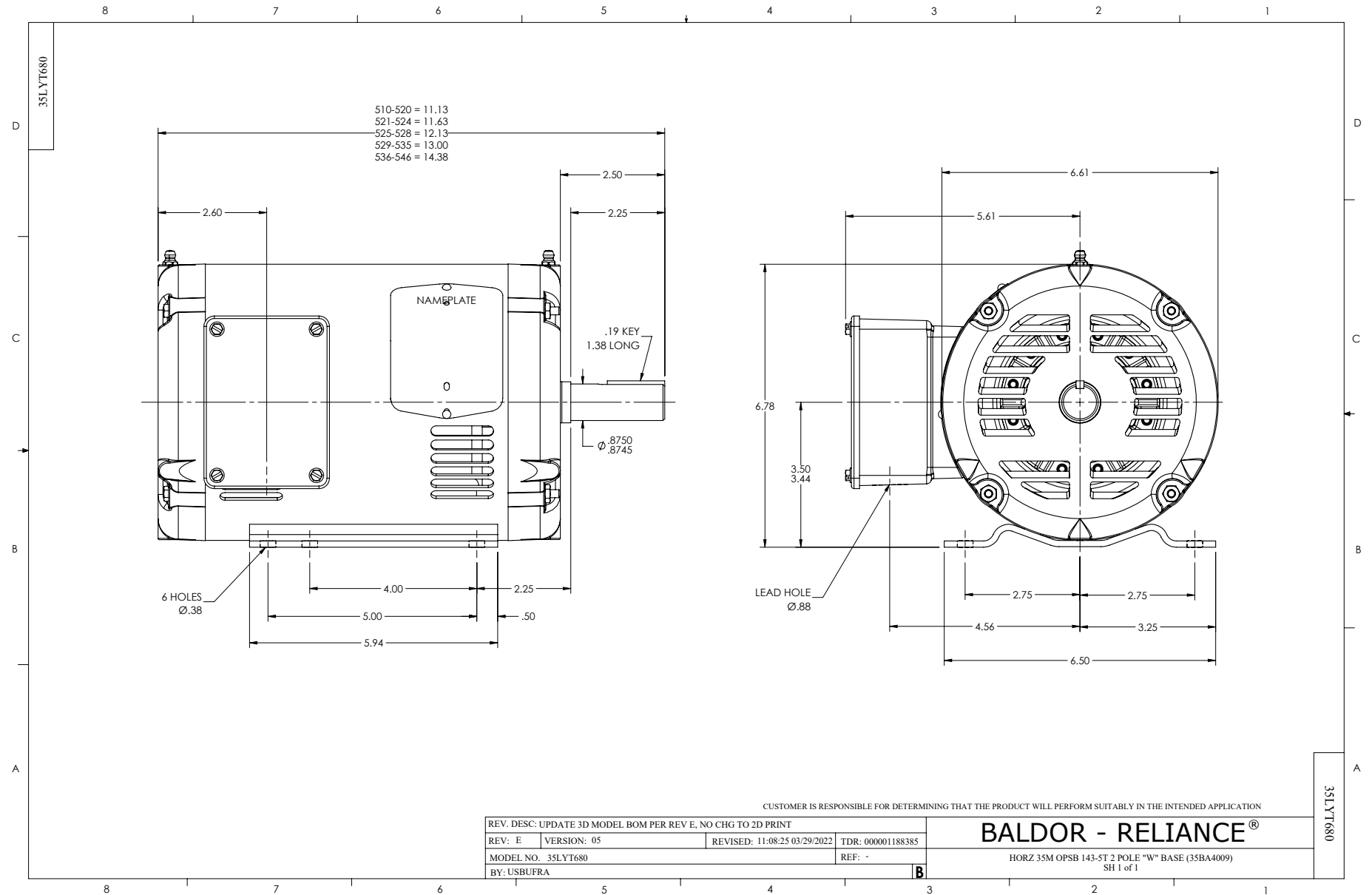
Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 3450 RPM 460 V 3524M

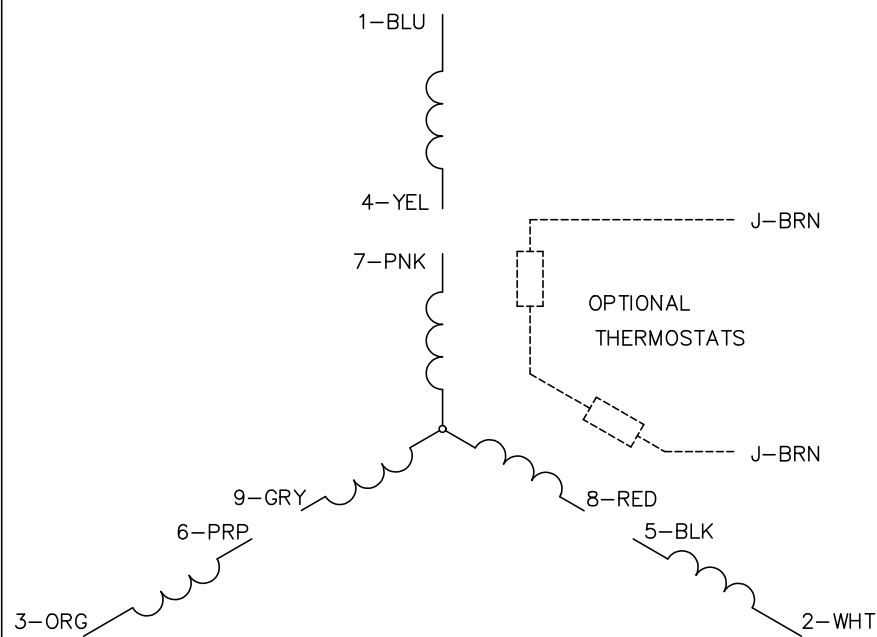
TORQUES (LB-FT): PO=11 PU=8 LR=9.6 LRA=21.5



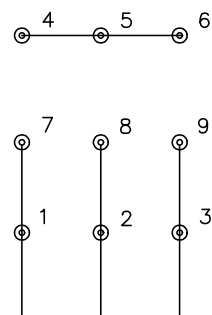




CD0005

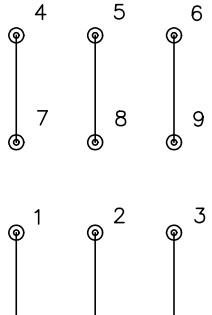


LOW VOLTAGE  
(2Y)



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.

|                                           |         |                         |              |
|-------------------------------------------|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 900000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005