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# Customer information packet

## EM3550T-57

1.5HP, 2850RPM, 3PH, 50HZ, 143T, 3524M, TEFC, F

Class - None

Division - Not Applicable

## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | TEFC  |
| Frame                          | 143T  |
| Frame Material                 | Steel   |
| Frequency                      | 50.00 Hz                                      |
| Motor Letter Type              | Three Phase                                   |
| Output @ Frequency             | 1.500 HP @ 50 HZ                              |
| Phase                          | 3   |
| Synchronous Speed @ Frequency  | 3000 RPM @ 50 HZ                              |
| Voltage @ Frequency            | 230.0 V @ 50 HZ<br>400.0 V @ 50 HZ            |
| XP Class and Group             | None  |
| XP Division                    | Not Applicable                                |
| Agency Approvals               | C UR US<br>CE<br>CURUS<br>IE3<br>UKCA<br>WEEE |
| 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              | 2.300 A @ 400.0 V<br>4.000 A @ 230.0 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                                   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | J          |
| Type         | AC         |
| Mech. spec.  | 35TT638    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGP217   |
| Layout       | 35LYTT638  |
| Eff. date    | 07-06-2023 |
| CD Diagram   | CD0022     |
| Poles        | 02         |
| Leads        | 6#18       |
| Proprietary  | False      |
| Created date | 12-22-2015 |

|                               |                    |
|-------------------------------|--------------------|
| Front Face Code               | Standard           |
| Front Shaft Indicator         | None               |
| Heater Indicator              | No Heater          |
| High Voltage Full Load Amps   | 2.3 a              |
| Insulation Class              | B                  |
| Inverter Code                 | Inverter Ready     |
| KVA Code                      | L                  |
| Lifting Lugs                  | No Lifting Lugs    |
| Locked Bearing Indicator      | No Locked Bearing  |
| Motor Lead Exit               | Ko Box             |
| Motor Lead Quantity/Wire Size | 6 @ 18 AWG         |
| Motor Lead Termination        | Flying Leads       |
| Motor Standards               | NEMA               |
| Motor Type                    | 3524M              |
| Mounting Arrangement          | F1                 |
| Number of Poles               | 2                  |
| Overall Length                | 13.29 IN           |
| Power Factor                  | 84                 |
| 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                         | 2850 rpm           |
| Speed Code                    | Single Speed       |
| Starting Method               | Direct on line     |
| Thermal Device - Bearing      | None               |

|                                   |                     |
|-----------------------------------|---------------------|
| <b>Thermal Device - Winding</b>   | None                |
| <b>Vibration Sensor Indicator</b> | No Vibration Sensor |
| <b>Winding Thermal 1</b>          | None                |
| <b>Winding Thermal 2</b>          | None                |

**Nameplate**

| <b>NP2716L</b>        |                        |             |                 |            |           |             |    |  |  |
|-----------------------|------------------------|-------------|-----------------|------------|-----------|-------------|----|--|--|
| <b>CAT NO</b>         | EM3550T-57             |             |                 |            |           |             |    |  |  |
| <b>SPEC.</b>          | 35TT638P217G2          |             |                 |            |           |             |    |  |  |
| <b>HP</b>             | 1.5/1.1KW              |             |                 |            | <b>PH</b> | 3           |    |  |  |
| <b>VOLTS</b>          | 230/400                |             |                 |            |           |             |    |  |  |
| <b>AMP</b>            | 4/2.3                  |             |                 |            |           |             |    |  |  |
| <b>R.P.M. (1/MIN)</b> | 2850                   |             |                 |            |           |             |    |  |  |
| <b>FRAME</b>          | 143T                   |             | <b>HZ</b>       | 50         |           | <b>I.P.</b> | 44 |  |  |
| <b>SER.F.</b>         | 1.15                   | <b>CODE</b> | L               | <b>DES</b> | B         | <b>CL</b>   | B  |  |  |
| <b>NOM.EFF.</b>       | 85.5                   |             | <b>% (100%)</b> |            |           |             |    |  |  |
| <b>PF</b>             | 84                     |             |                 |            |           |             |    |  |  |
| <b>RATING</b>         | 40C AMB-S1 CONT        |             |                 |            | <b>CC</b> |             |    |  |  |
| <b>DE BRG</b>         | 6205                   |             | <b>ODE</b>      | 6203       |           |             |    |  |  |
| <b>ENCL</b>           | TEFC                   | <b>SN</b>   |                 |            |           |             |    |  |  |
| <b>BLANK</b>          | IE3-85.5(75%)84.1(50%) |             |                 |            |           |             |    |  |  |
|                       | IC411 20KG             |             |                 |            |           |             |    |  |  |

**AC Induction Motor Performance Data**

Record # 54624

Typical performance - not guaranteed values

| Winding: 35WGP217-R006 |              | Type: 3524M         |  | Enclosure: TEFC           |        |  |  |
|------------------------|--------------|---------------------|--|---------------------------|--------|--|--|
| <b>Nameplate Data</b>  |              |                     | <b>400 V, 50 Hz:<br/>High Voltage Connection</b> |                           |        |  |  |
| Rated Output (HP)      | 1.5          | Full Load Torque    | 2.78 LB-FT                                       |                           |        |  |  |
| Volts                  | 230/400      | Start Configuration | direct on line                                   |                           |        |  |  |
| Full Load Amps         | 4/2.3        | Breakdown Torque    | 11.3 LB-FT                                       |                           |        |  |  |
| R.P.M.                 | 2850         | Pull-up Torque      | 9.61 LB-FT                                       |                           |        |  |  |
| Hz                     | 50 Phase     | 3                   | Locked-rotor Torque                              | 12.1 LB-FT                |        |  |  |
| NEMA Design Code       | B            | KVA Code            | L  | Starting Current          | 20.2 A |  |  |
| Service Factor (S.F.)  | 1.15         |                     | No-load Current                                  | 0.949 A                   |        |  |  |
| NEMA Nom. Eff.         | 85.5         | Power Factor        | 84   | Line-line Res. @ 25°C     | 7.48 Ω |  |  |
| Rating - Duty          | 40C AMB-CONT |                     | Temp. Rise @ Rated Load                          | 43°C                      |        |  |  |
| S.F. Amps              |              |                     | Temp. Rise @ S.F. Load                           | 51°C                      |        |  |  |
|                        |              |                     | Locked-rotor Power Factor                        | 55.1                      |        |  |  |
|                        |              |                     | Rotor inertia                                    | 0.0664 LB-FT <sup>2</sup> |        |  |  |

**Load Characteristics 400 V, 50 Hz, 1.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 49   | 70   | 81   | 85   | 88   | 91   | 87   |
| Efficiency      | 76.9 | 84.5 | 85.8 | 85.9 | 84.7 | 82.9 | 85.2 |
| Speed           | 2969 | 2943 | 2916 | 2888 | 2856 | 2823 | 2869 |
| Line amperes    | 1.11 | 1.42 | 1.79 | 2.26 | 2.75 | 3.24 | 2.55 |

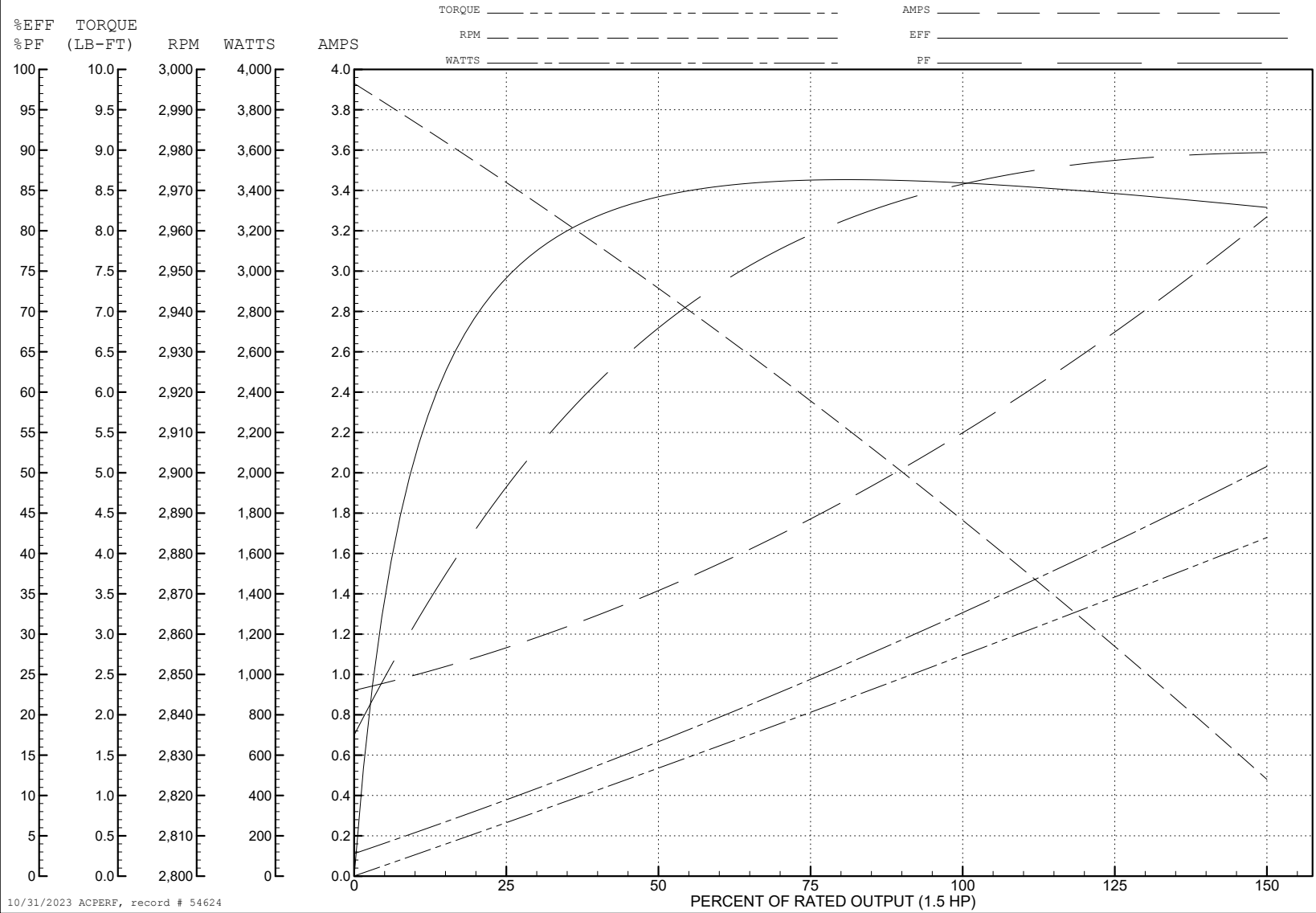
ABB Motors and Mechanical Inc.

WINDING # 35WGP217

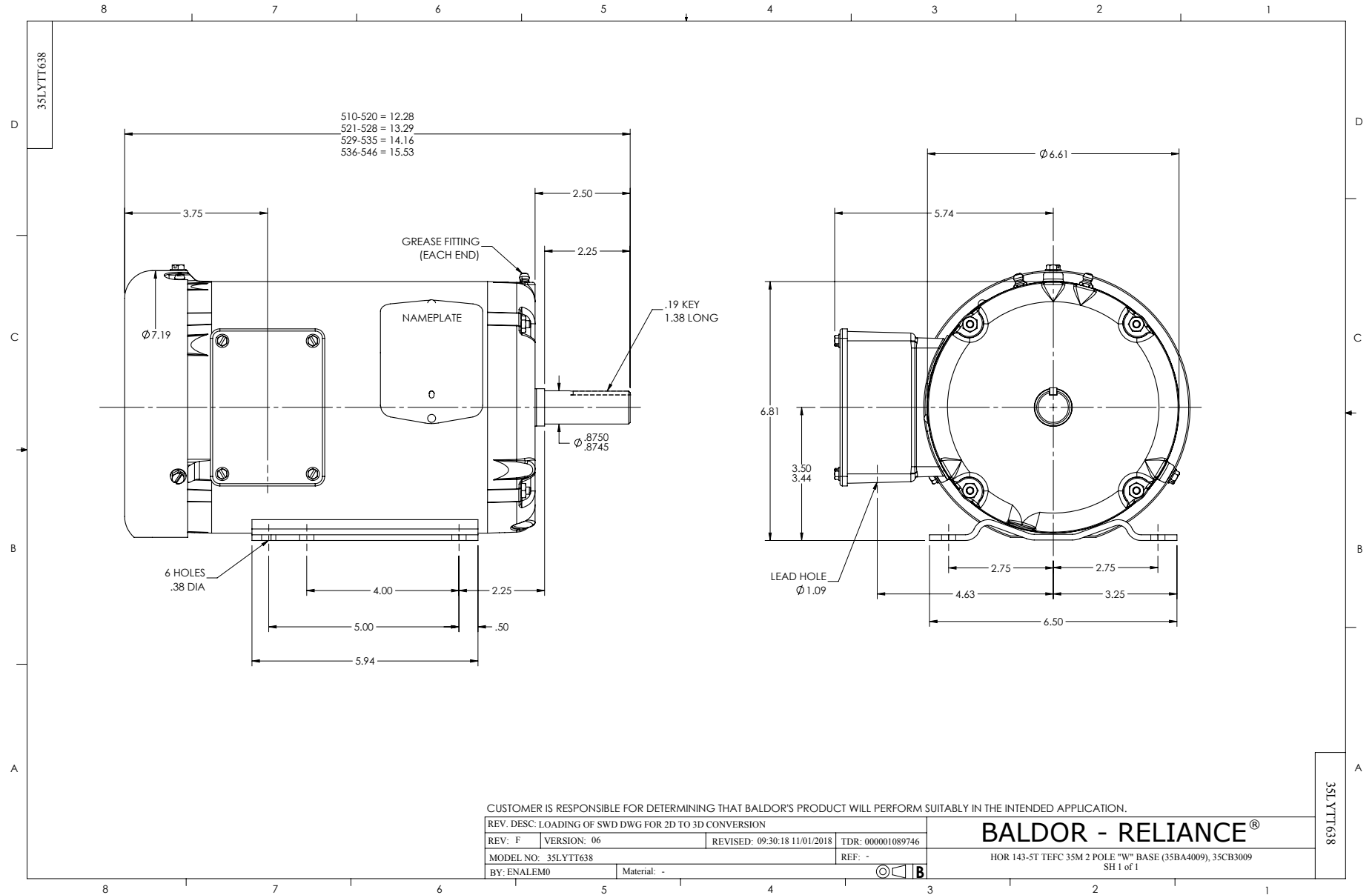
Typical performance - not guaranteed values.

1.5 HP 3 PH 50 HZ 2850 RPM 400 V 3524M

TORQUES (LB-FT): PO=11.3 PU=9.61 LR=12.1 LRA=20.2

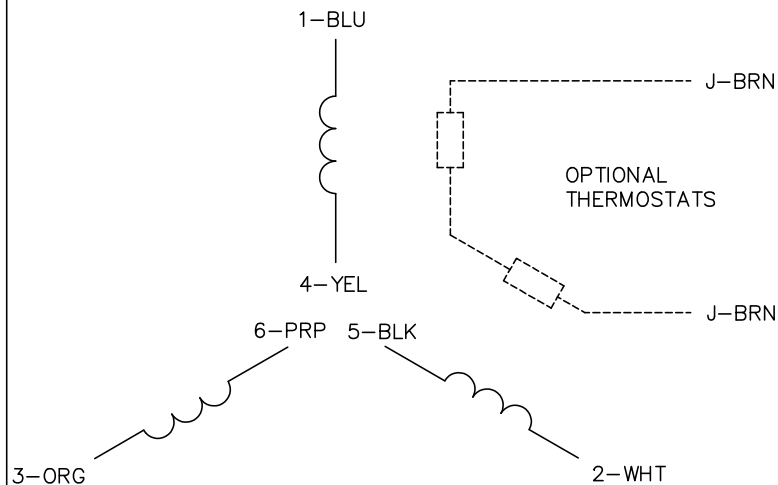


10/31/2023 ACPERF, record # 54624

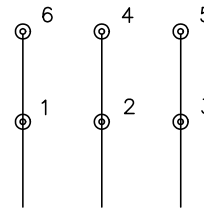




CD0022

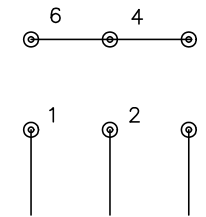


LOW VOLTAGE  
(1D)



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: F                               | BY: JLP | REVISED: 01/21/99 3:54 | TDR: 0171435 |
| CD0022                                    |         | FILE: AAA00005144      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022