

**BALDOR • RELIANCE**

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# Customer information packet

## CEM3586T

2HP, 3490RPM, 3PH, 60HZ, 143TC, 0526M, TEFC, F1

Class - None

Division - Not Applicable

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## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | TEFC  |
| Frame                          | 143TC   |
| Frame Material                 | Iron  |
| 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            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ       |
| Agency Approvals               | CURUSEEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR<br>CSA EEV   |
| 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              | 5.000 A @ 230.0 V<br>5.300 A @ 208.0 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                                   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | S          |
| Type         | AC         |
| Mech. spec.  | 05C052     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 05WGX117   |
| Layout       | 05LYC052   |
| Eff. date    | 04-29-2024 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 07-14-2010 |

|                               |                       |
|-------------------------------|-----------------------|
| Feedback Device               | NO FEEDBACK           |
| Front Face Code               | Standard              |
| 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                      | M                     |
| Lifting Lugs                  | Standard 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                    | 0526M                 |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 2                     |
| Overall Length                | 13.04 IN              |
| Power Factor                  | 88                    |
| Product Family                | General Purpose       |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | C-Face                |
| Pulley Shaft Indicator        | Standard              |
| Rodent Screen                 | None                  |
| 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                         | 3490 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>NP1259L</b>      |              |             |      |            |   |           |   |  |  |
|---------------------|--------------|-------------|------|------------|---|-----------|---|--|--|
| <b>CAT.NO.</b>      | CEM3586T     |             |      |            |   |           |   |  |  |
| <b>SPEC.</b>        | 05C052X117E7 |             |      |            |   |           |   |  |  |
| <b>HP</b>           | 2            |             |      |            |   |           |   |  |  |
| <b>VOLTS</b>        | 208-230/460  |             |      |            |   |           |   |  |  |
| <b>AMP</b>          | 5.3-5/2.5    |             |      |            |   |           |   |  |  |
| <b>RPM</b>          | 3490         |             |      |            |   |           |   |  |  |
| <b>FRAME</b>        | 143TC        | <b>HZ</b>   | 60   | <b>PH</b>  | 3 |           |   |  |  |
| <b>SER.F.</b>       | 1.15         | <b>CODE</b> | M    | <b>DES</b> | B | <b>CL</b> | F |  |  |
| <b>NEMA-NOM-EFF</b> | 85.5         | <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>         | TEFC         | <b>SN</b>   |      |            |   |           |   |  |  |

**AC Induction Motor Performance Data**

Record # 31839

Typical performance - not guaranteed values

| <b>Winding: 05WGX117-R001</b> |                          | <b>Type: 0526M</b>             |  | <b>Enclosure: TEFC</b> |  |
|-------------------------------|--------------------------|--------------------------------|--|------------------------|--|
| <b>Nameplate Data</b>         |                          |                                | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |  |
| <b>Rated Output (HP)</b>      | 2                        | <b>Full Load Torque</b>        | 2.98 LB-FT                                       |                        |  |
| <b>Volts</b>                  | 208-230/460              | <b>Start Configuration</b>     | direct on line                                   |                        |  |
| <b>Full Load Amps</b>         | 5.3-5/2.5                | <b>Breakdown Torque</b>        | 14.2 LB-FT                                       |                        |  |
| <b>R.P.M.</b>                 | 3490                     | <b>Pull-up Torque</b>          | 6.33 LB-FT                                       |                        |  |
| <b>Hz</b>                     | 60 <b>Phase</b>          | 3                              | <b>Locked-rotor Torque</b>                       | 11.2 LB-FT             |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>        | M                              | <b>Starting Current</b>                          | 25.9 A                 |  |
| <b>Service Factor (S.F.)</b>  | 1.15                     | <b>No-load Current</b>         | 0.912 A  |                        |  |
| <b>NEMA Nom. Eff.</b>         | 85.5 <b>Power Factor</b> | 88                             | <b>Line-line Res. @ 25°C</b>                     | 6.9119 Ω               |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT             | <b>Temp. Rise @ Rated Load</b> | 44°C   |                        |  |
| <b>S.F. Amps</b>              |                          | <b>Temp. Rise @ S.F. Load</b>  | 52°C   |                        |  |

**Load Characteristics 460 V, 60 Hz, 2 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>    | 55        | 75        | 84        | 88         | 90         | 91         | 89          |
| <b>Efficiency</b>      | 74.3      | 83.5      | 85.9      | 86.4       | 85.9       | 84.8       | 86.1        |
| <b>Speed</b>           | 3571.7    | 3546.5    | 3520.2    | 3492.1     | 3460.7     | 3425.5     | 3473        |
| <b>Line amperes</b>    | 1.1       | 1.47      | 1.93      | 2.44       | 3          | 3.61       | 2.78        |

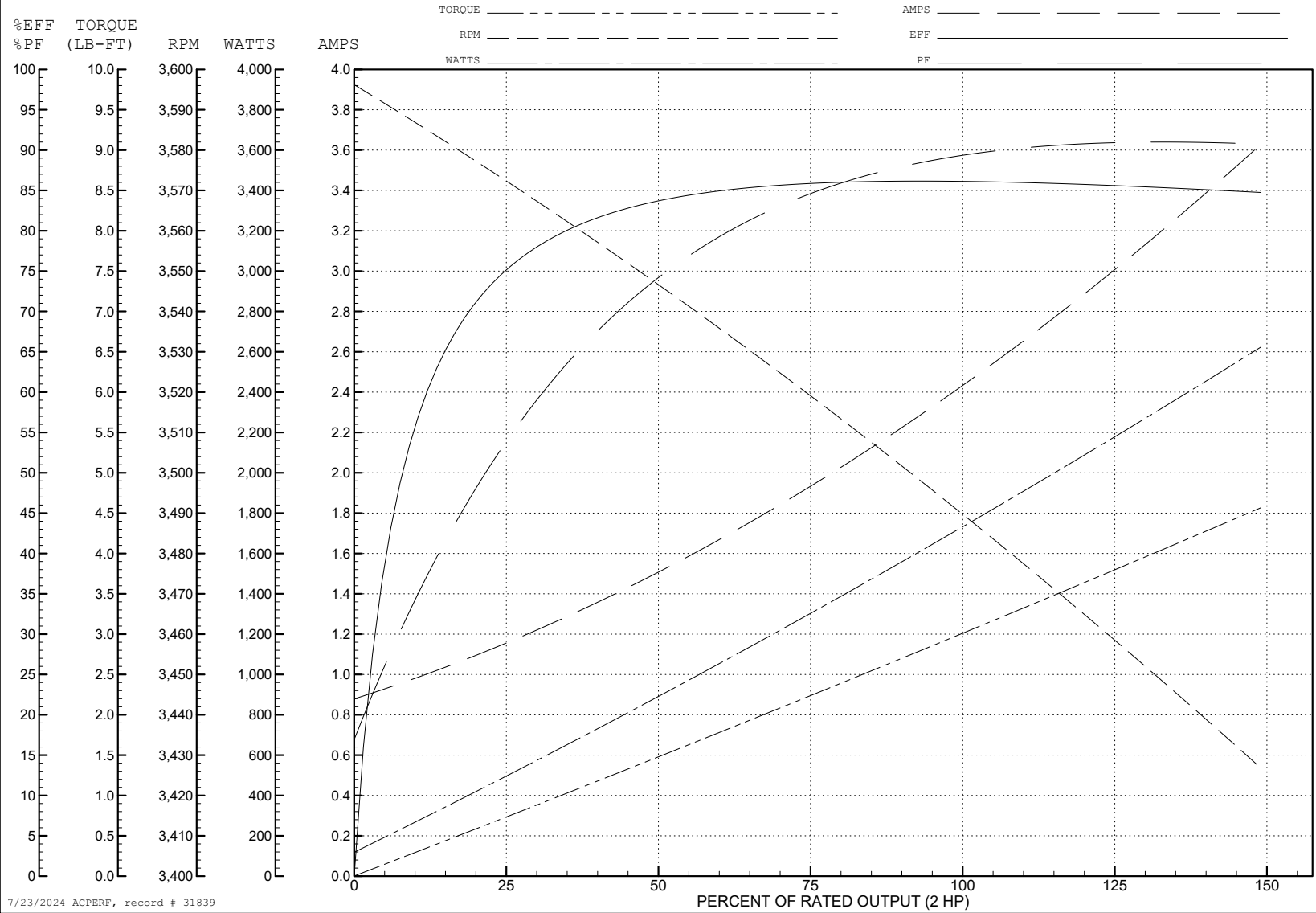
ABB Motors and Mechanical Inc.

WINDING # 05WGX117

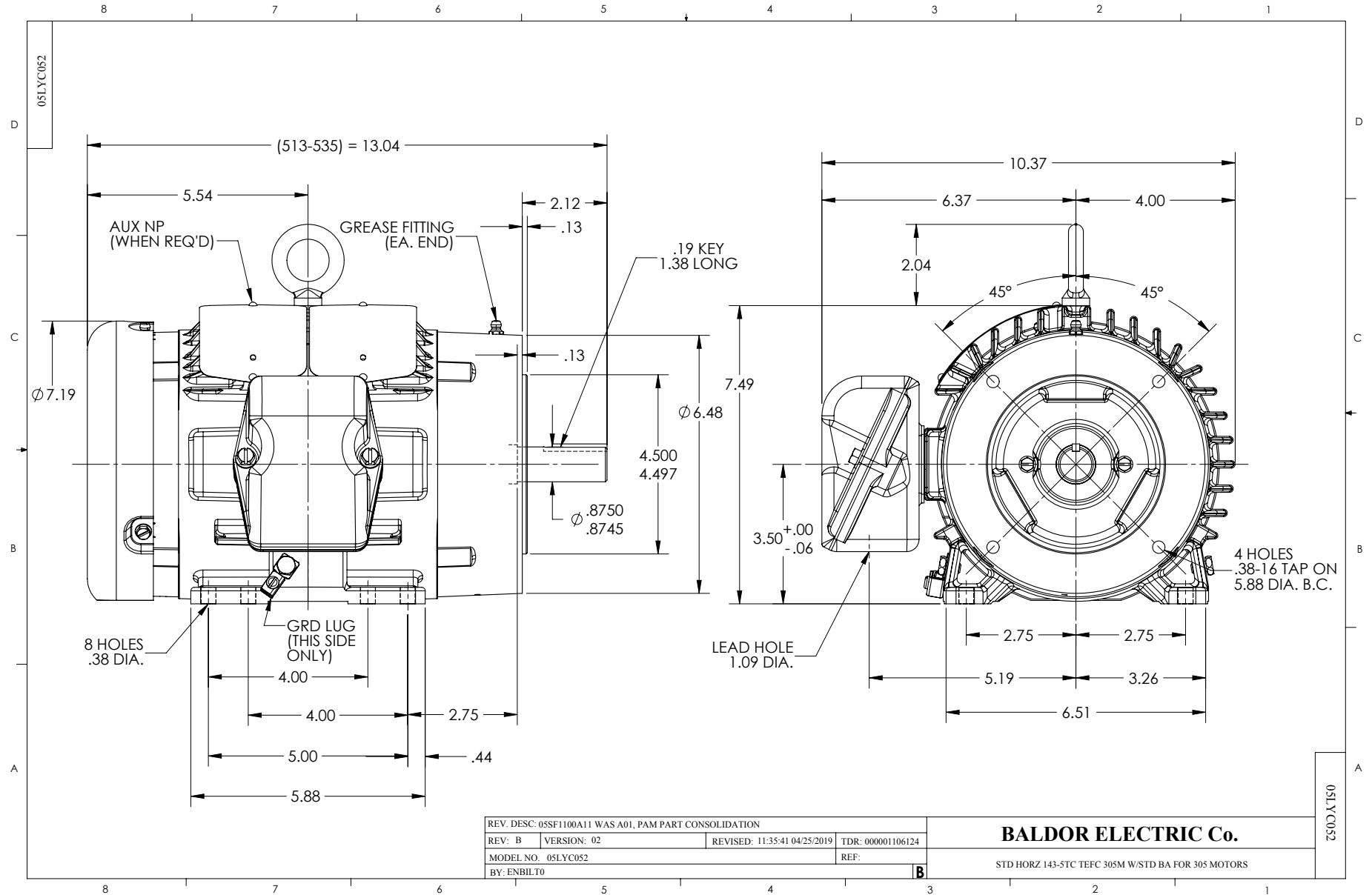
Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 3490 RPM 460 V 0526M

TORQUES (LB-FT): PO=14.2 PU=6.33 LR=11.2 LRA=25.9



7/23/2024 ACPERF, record # 31839





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 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005