

**BALDOR • RELIANCE**

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# Customer information packet

## CEM4108T-G

30HP, 3525RPM, 3PH, 60HZ, 286TSC, TEFC, F1

Class - None

Division - Not Applicable

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## Specifications

|                                |  |
|--------------------------------|--|
| Enclosure                      | TEFC   |
| Frame                          | 286TSC   |
| 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             | 30.000 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<br>CSA EEV<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              | 76.000 A @ 208.0 V<br>68.000 A @ 230.0 V<br>34.000 A @ 460.0 V |
| Design Code                    | B  |
| Drip Cover                     | No Drip Cover  |
| Duty Rating                    | CONT   |
| Efficiency @ 100% Load         | 91.7 %   |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK  |
| Heater Indicator               | No Heater  |

## Part detail

|              |            |
|--------------|------------|
| Revision     | F          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 10WGZ501   |
| Layout       | 10LYJ281   |
| Eff. date    | 06-27-2024 |
| CD Diagram   | CD0180     |
| Poles        | 02         |
| Leads        | 9#10       |
| Proprietary  | False      |
| Created date | 12-16-2019 |

|                             |                       |
|-----------------------------|-----------------------|
| High Voltage Full Load Amps | 34.0 a                |
| Insulation Class            | H                     |
| Inverter Code               | Inverter Duty         |
| IP Rating                   | NONE                  |
| KVA Code                    | G                     |
| Lifting Lugs                | Standard Lifting Lugs |
| Locked Bearing Indicator    | Locked Bearing        |
| Motor Lead Termination      | Flying Leads          |
| Motor Standards             | NEMA                  |
| Motor Type                  | 1048M                 |
| Mounting Arrangement        | F1                    |
| Number of Poles             | 2                     |
| Overall Length              | 26.39 IN              |
| Power Factor                | 90                    |
| Product Family              | General Purpose       |
| Pulley Face Code            | C-Face                |
| Rodent Screen               | None                  |
| Service Factor              | 1.15                  |
| Shaft Diameter              | 1.625 IN              |
| Shaft Ground Indicator      | Shaft Grounding       |
| Shaft Rotation              | Reversible            |
| Speed                       | 3525 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**

**NP3443LUA**

|                  |                           |               |                                |                                   |                |            |                |             |             |
|------------------|---------------------------|---------------|--------------------------------|-----------------------------------|----------------|------------|----------------|-------------|-------------|
| <b>CAT.NO.</b>   | CEM4108T-G                |               |                                | <b>CUST. P/N</b>                  |                |            |                | <b>ENCL</b> | <b>TEFC</b> |
| <b>SPEC.</b>     | 10-0000588                | <b>CC</b>     | 010A                           | <b>FRAME</b>                      | 286TSC         |            | <b>SER.NO.</b> |             |             |
| <b>HP</b>        | 30                        |               | <b>CLASS</b>                   | H                                 | <b>HZ</b>      | 60         |                |             |             |
| <b>R.P.M.</b>    | 3525                      |               | <b>PH.</b>                     | 3                                 | <b>DES.</b>    | B          |                |             |             |
| <b>VOLTS</b>     | 230/460                   |               | <b>CODE</b>                    | G                                 | <b>ODE BRG</b> | 6309       | <b>DE BRG</b>  | 6311        |             |
| <b>AMPS</b>      | 68/34                     |               |                                |                                   |                |            |                |             |             |
| <b>RATING</b>    | 40C AMB-CONT              |               | <b>NEMA NOM. EFF.</b>          | 91.7                              | <b>GREASE</b>  | POLYREX EM |                |             |             |
| <b>P.F.</b>      | 90                        | <b>SER.F.</b> | 1.15                           | <b>CT6-60H(10:1)VT3-60H(20:1)</b> |                |            |                |             |             |
| <b>USABLE AT</b> | 50HZ 30HP 190/380V 82/41A |               | <b>SF1.0</b>                   |                                   |                |            |                |             |             |
| <b>VOLTS</b>     | <b>AMPS</b>               |               | <b>MAX. SPACE HEATER TEMP.</b> |                                   |                |            |                |             |             |

**AC Induction Motor Performance Data**

Record # 55452

Typical performance - not guaranteed values

| <b>Winding: 10WGZ501-R001</b> |                   | <b>Type: 1048M</b> |  | <b>Enclosure: TEFC</b> |                |
|-------------------------------|-------------------|--------------------|--|------------------------|----------------|
| <b>Nameplate Data</b>         |                   |                    | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |                |
| Rated Output (HP)             |                   | 30                 | Full Load Torque                                 |                        | 44.8 LB-FT     |
| Volts                         |                   | 230/460            | Start Configuration                              |                        | direct on line |
| Full Load Amps                |                   | 68/34              | Breakdown Torque                                 |                        | 135 LB-FT      |
| R.P.M.                        |                   | 3520               | Pull-up Torque                                   |                        | 47 LB-FT       |
| Hz                            | 60 Phase          | 3                  | Locked-rotor Torque                              |                        | 65.2 LB-FT     |
| NEMA Design Code              | B KVA Code        | G                  | Starting Current                                 |                        | 212 A          |
| Service Factor (S.F.)         |                   | 1.15               | No-load Current                                  |                        | 8.74 A         |
| NEMA Nom. Eff.                | 91.7 Power Factor | 90                 | Line-line Res. @ 25°C                            |                        | 0.24052 Ω      |
| Rating - Duty                 |                   | 40C AMB-CONT       | Temp. Rise @ Rated Load                          |                        | 69°C           |
| S.F. Amps                     |                   |                    | Temp. Rise @ S.F. Load                           |                        | 85°C           |
|                               |                   |                    | Locked-rotor Power Factor                        |                        | 23.2           |

**Load Characteristics 460 V, 60 Hz, 30 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> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor           | 67        | 83        | 88        | 90         | 90         | 90         | 90          |
| Efficiency             | 87        | 91.3      | 92        | 91.7       | 90.9       | 89.7       | 91.2        |
| Speed                  | 3583      | 3565.7    | 3547.3    | 3526.7     | 3504.4     | 3479.1     | 3513        |
| Line amperes           | 12.4      | 18.7      | 26.1      | 34.1       | 43.1       | 52.5       | 39.5        |

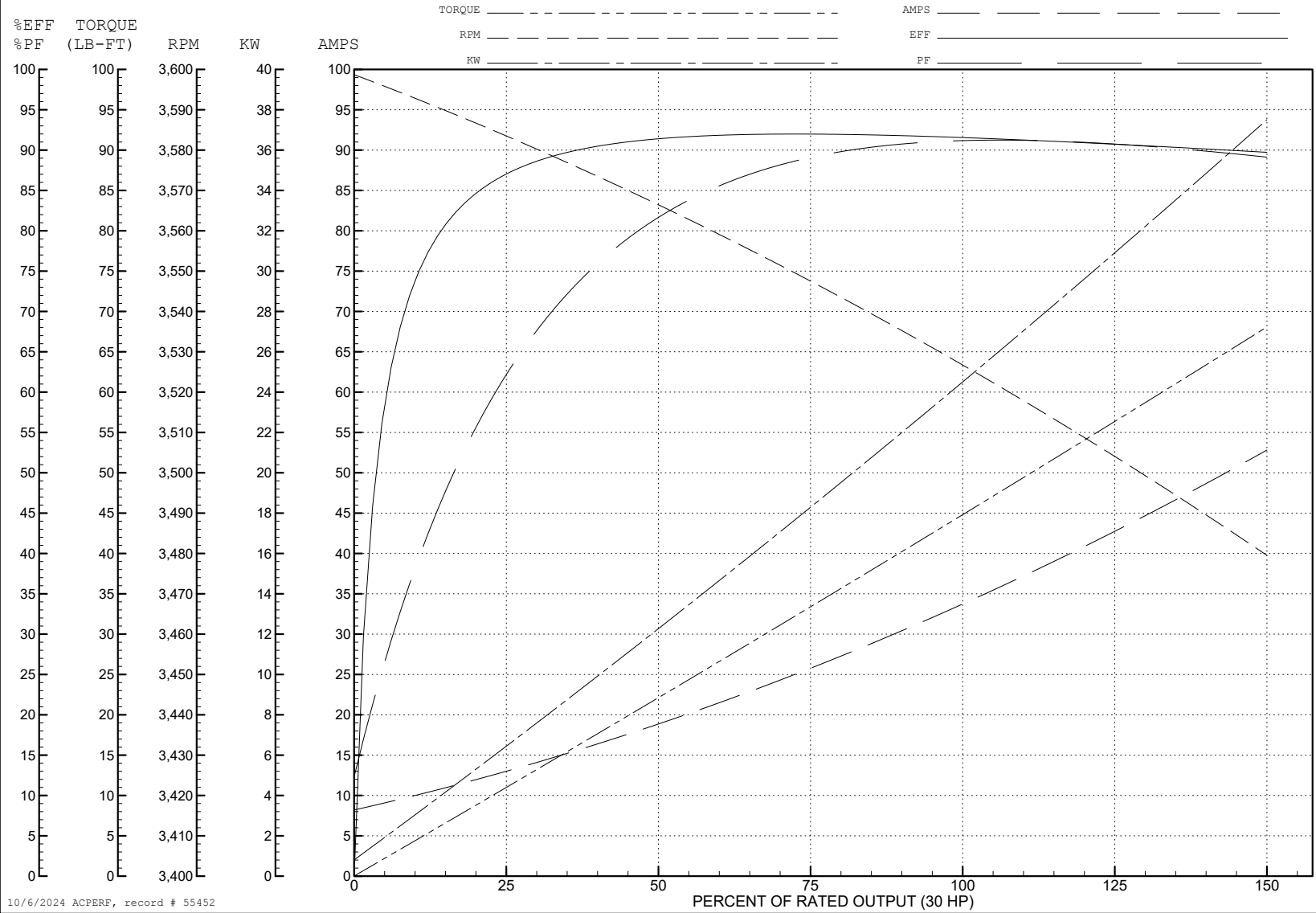
ABB Motors and Mechanical Inc.

WINDING # 10WGZ501

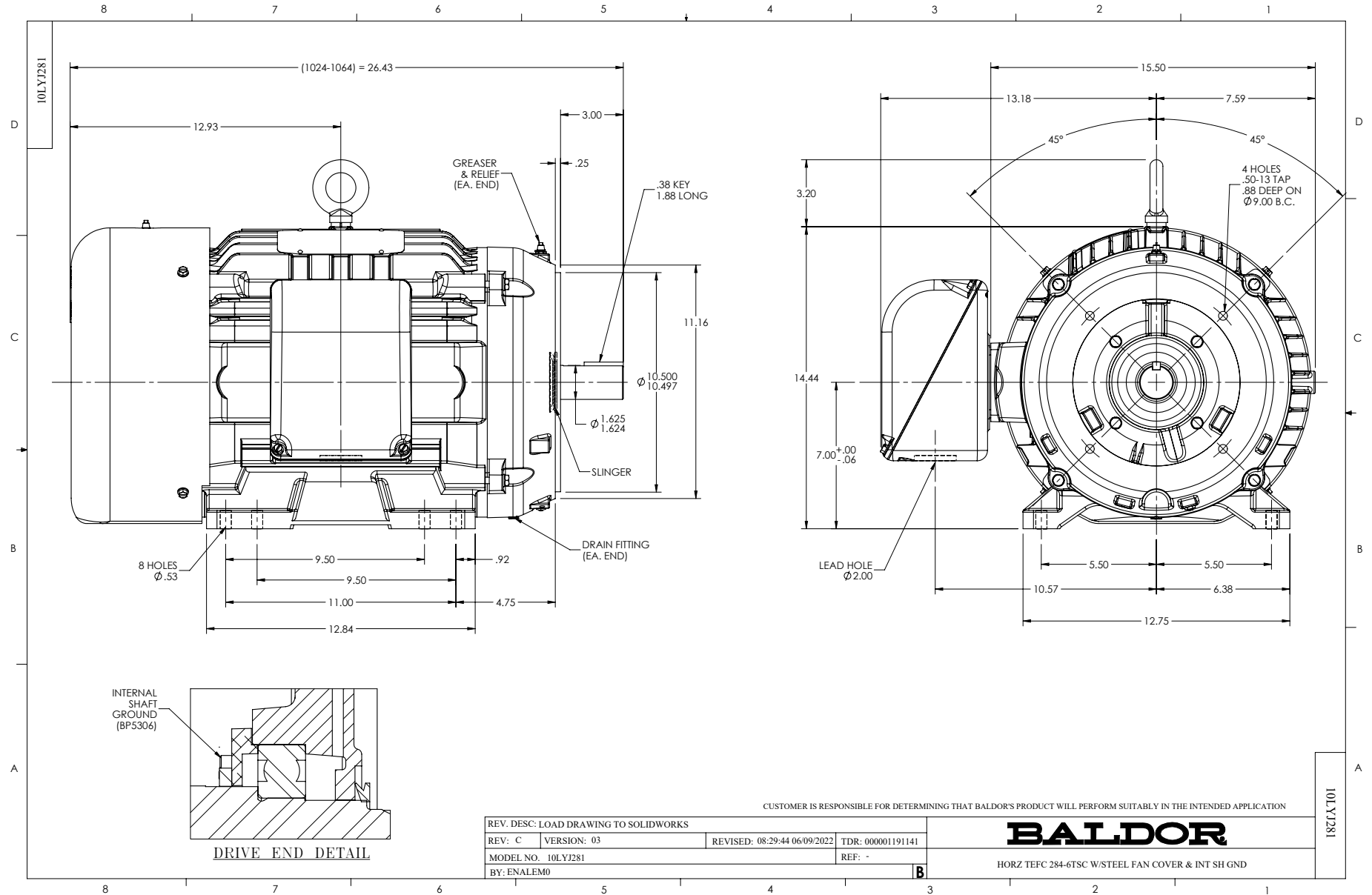
30 HP 3 PH 60 HZ 3520 RPM 460 V 1048M

Typical performance - not guaranteed values.

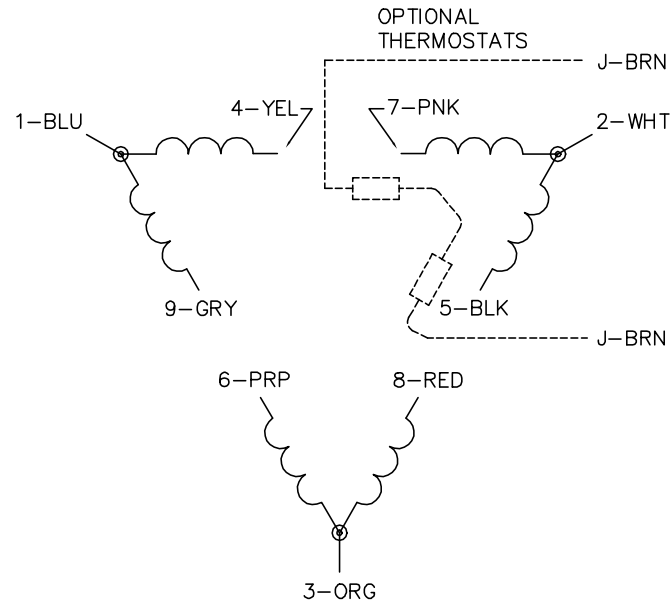
TORQUES (LB-FT): PO=135 PU=47 LR=65.2 LRA=212



10/6/2024 ACPERF, record # 55452



CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



**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.

CD0180

|                                   |                                |                   |
|-----------------------------------|--------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                                |                   |
| REV. LTR: D                       | VERSION: 01                    | TDR: 000001099922 |
| FILE: \AAA\00005\148              | REVISED: 10: 25: 29 02/19/2019 | BY: ENBRIRO       |
| MTL: -                            | © □                            |                   |

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3PH, DV, 9 LEADS, DELTA CONNECTION

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