

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEM4114T-G**

**50HP,3530RPM,3PH,60HZ,326TSC,TEFC,F1**

| Part Detail |    |             |              |             |        |               |            |
|-------------|----|-------------|--------------|-------------|--------|---------------|------------|
| Revision:   | B  | Status:     | PRD/A        | Change #:   |        | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | 12WGY830     | CD Diagram: | CD0180 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 12LY-001-003 | Poles:      | 02     | Created Date: | 12-16-2019 |
| Base:       |    | Eff. Date:  | 01-11-2022   | Leads:      | 9#8    |               |            |

| Specs                           |                         |                           |                       |
|---------------------------------|-------------------------|---------------------------|-----------------------|
| Catalog Number:                 | CEM4114T-G              | Feedback Device:          | NO FEEDBACK           |
| Enclosure:                      | TEFC                    | Heater Indicator:         | No Heater             |
| Frame:                          | 326TSC                  | Insulation Class:         | H                     |
| Frame Material:                 | Iron                    | Inverter Code:            | Inverter Duty         |
| Output @ Frequency:             | 50.000 HP @ 60 HZ       | IP Rating:                | NONE                  |
| Synchronous Speed @ Frequency:  | 3600 RPM @ 60 HZ        | KVA Code:                 | F                     |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Lifting Lugs:             | Standard Lifting Lugs |
|                                 | 230.0 V @ 60 HZ         | Locked Bearing Indicator: | Locked Bearing        |
| XP Class and Group:             | None                    | Motor Lead Termination:   | Flying Leads          |
| XP Division:                    | Not Applicable          | Motor Type:               | 1266M                 |
| Agency Approvals:               | CSA                     | Mounting Arrangement:     | F1                    |
|                                 | CSA EEV                 | Power Factor:             | 91                    |
|                                 | UR                      | Product Family:           | General Purpose       |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:         | C-Face                |
| Auxillary Box Lead Termination: | None                    | Rodent Screen:            | None                  |
| Base Indicator:                 | Rigid                   | Shaft Ground Indicator:   | Shaft Grounding       |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Rotation:           | Reversible            |
| Blower:                         | None                    | Speed Code:               | Single Speed          |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Current @ Voltage:</b>             | 110.000 A @ 230.0 V       | <b>Motor Standards:</b>            | NEMA                |
|                                       | 55.000 A @ 460.0 V        | <b>Starting Method:</b>            | Direct on line      |
| <b>Design Code:</b>                   | B                         | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Thermal Device - Winding:</b>   | None                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Winding Thermal 1:</b>          | None                |
|                                       |                           | <b>Winding Thermal 2:</b>          | None                |

|                            |                            |      |                |                         |           |                            |            |         |      |      |
|----------------------------|----------------------------|------|----------------|-------------------------|-----------|----------------------------|------------|---------|------|------|
| <b>Nameplate NP3443LUA</b> |                            |      |                |                         |           |                            |            |         |      |      |
| CAT.NO.                    | CEM4114T-G                 |      |                |                         | CUST. P/N |                            |            |         | ENCL | TEFC |
| SPEC.                      | 12-0000-1382               |      | CC             | 010A                    | FRAME     | 326TSC                     |            | SER.NO. |      |      |
| HP                         | 50                         |      | CLASS          | H                       | HZ        | 60                         |            |         |      |      |
| R.P.M.                     | 3530                       |      | PH.            | 3                       | DES.      | B                          |            |         |      |      |
| VOLTS                      | 230/460                    |      | CODE           | F                       | ODE BRG   | 6311                       |            | DE BRG  | 6312 |      |
| AMPS                       | 110/55                     |      | USABLE AT 208V | 122                     |           |                            |            |         |      |      |
| RATING                     | 40C AMB-CONT               |      | NEMA NOM. EFF. | 93                      |           | GREASE                     | POLYREX EM |         |      |      |
| P.F.                       | 91                         |      | SER.F.         | 1.15                    |           | CT6-60H(10:1)VT3-60H(20:1) |            |         |      |      |
| USABLE AT                  | 50HZ 50HP 190/380V 134/67A |      |                |                         | SF1.0     |                            |            |         |      |      |
| VOLTS                      |                            | AMPS |                | MAX. SPACE HEATER TEMP. |           |                            |            |         |      |      |

| Parts List   |   |          |
|--------------|---|----------|
| Part Number  | Description                               | Quantity |
| SA377137     | SA 12-0000-1382                           | 1.000 EA |
| RA367065     | RA 12-0000-1382                           | 1.000 EA |
| LB1115N      | LABEL,LIFTING DEVICE (ON ROLLS)           | 1.000 EA |
| LB1119N      | WARNING LABEL                             | 1.000 EA |
| LC0181       | CONNECTION LABEL                          | 1.000 EA |
| NP3443LUA    | SS SUPER-E UL CSA-EEV PREM CC             | 1.000 EA |
| 85XU0407S04  | 4X1/4 U DRIVE PIN STAINLESS               | 4.000 EA |
| MN416A01     | TAG-INSTAL-MAINT no wire (2100/bx) 4/22   | 1.000 EA |
| 12FH1002SP   | FAN COVER, CAST                           | 1.000 EA |
| HW1001A50    | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 4.000 EA |
| XY5013A12    | NUT,1/2-13,HEX,STEEL,ZINCPLATED           | 4.000 EA |
| 37FN3002C04  | EXFN, PLASTIC, 6.00 OD, 2.003 ID          | 1.000 EA |
| HW2500A25    | WOODRUFF KEY USA #1008 #BLOW CARBON STEE  | 1.000 EA |
| 51XB1214A20  | 12-14X1.25 HXWSSLD SERTYB                 | 1.000 EA |
| MJ1000A02    | GREASE, MOBIL POLYREX EM - 124047         | 0.200 LB |
| 12EP1107A188 | FREP W/"O" DRAIN W/O RET RING HLS         | 1.000 EA |
| HA3400A13    | STUD, 1/2-13 X 7" WELKER                  | 4.000 EA |
| HW1001A50    | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 4.000 EA |
| HW5100A13    | W4627-047 WVY WSHER                       | 1.000 EA |
| HA4017A01    | 1/8 X 4 GREASE EXT (F/S)                  | 1.000 EA |
| HA4051A00    | PLASTIC CAP FOR GREASE FITTING            | 1.000 EA |
| HW4500A21    | 1618BALEMITE FITTING 825 UNIVERSAL        | 1.000 EA |
| HW4500A17    | 317400 ALEMITE GREASE RELIEF              | 1.000 EA |
| HA4066A01    | PUSH IN T-DRAIN FITTING (BLACK)           | 1.000 EA |

| Parts List (continued) |   |          |
|------------------------|---|----------|
| Part Number            | Description                               | Quantity |
| 12EP1105A121           | PU ENDPLATE, MACH W/"O" DRAIN             | 1.000 EA |
| HW1001A50              | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 4.000 EA |
| 10XN5013K28            | 1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD    | 4.000 EA |
| HW4600B41              | V-RING SLINGER 2.125 X 2.880 X 0.280      | 1.000 EA |
| 10XN3118K40            | 5/16-18 X 2.75" HEX HD, GRADE 5           | 4.000 EA |
| HW1001A31              | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 4.000 EA |
| HA4051A00              | PLASTIC CAP FOR GREASE FITTING            | 1.000 EA |
| HW4500A03              | GREASE FITTING, .125 NPT 1610(ALEMITE) 8  | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF              | 1.000 EA |
| HA4066A01              | PUSH IN T-DRAIN FITTING (BLACK)           | 1.000 EA |
| 10CB3001               | CONDUIT BOX CAST W/2.500 LEAD HOLE        | 1.000 EA |
| 09GS1000SP             | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE     | 1.000 EA |
| 10XN3118K16            | 5/16-18 X 1' GRADE #5, STL, ZINC PLATE    | 4.000 EA |
| HW1001A31              | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 4.000 EA |
| WD1000B25              | GND LUG, BURNDY L125HP OR T&B L125HP-BB   | 1.000 EA |
| 19XW3118G08            | .31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN    | 1.000 EA |
| 10CB3500SP             | CONDUIT BOX LID, CAST                     | 1.000 EA |
| 10GS1000SP             | GASKET, CONDUIT BOX LID                   | 1.000 EA |
| 51XW2520A12            | .25-20 X .75, TAPTITE II, HEX WSHR SLTD   | 4.000 EA |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,       | 0.125 GA |
| 12PA1000               | PACKAGING GROUP PRINT PK1024A07           | 1.000 EA |
| HW2501H18              | KEY, 1/2 SQ X 2.000                       | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 74207

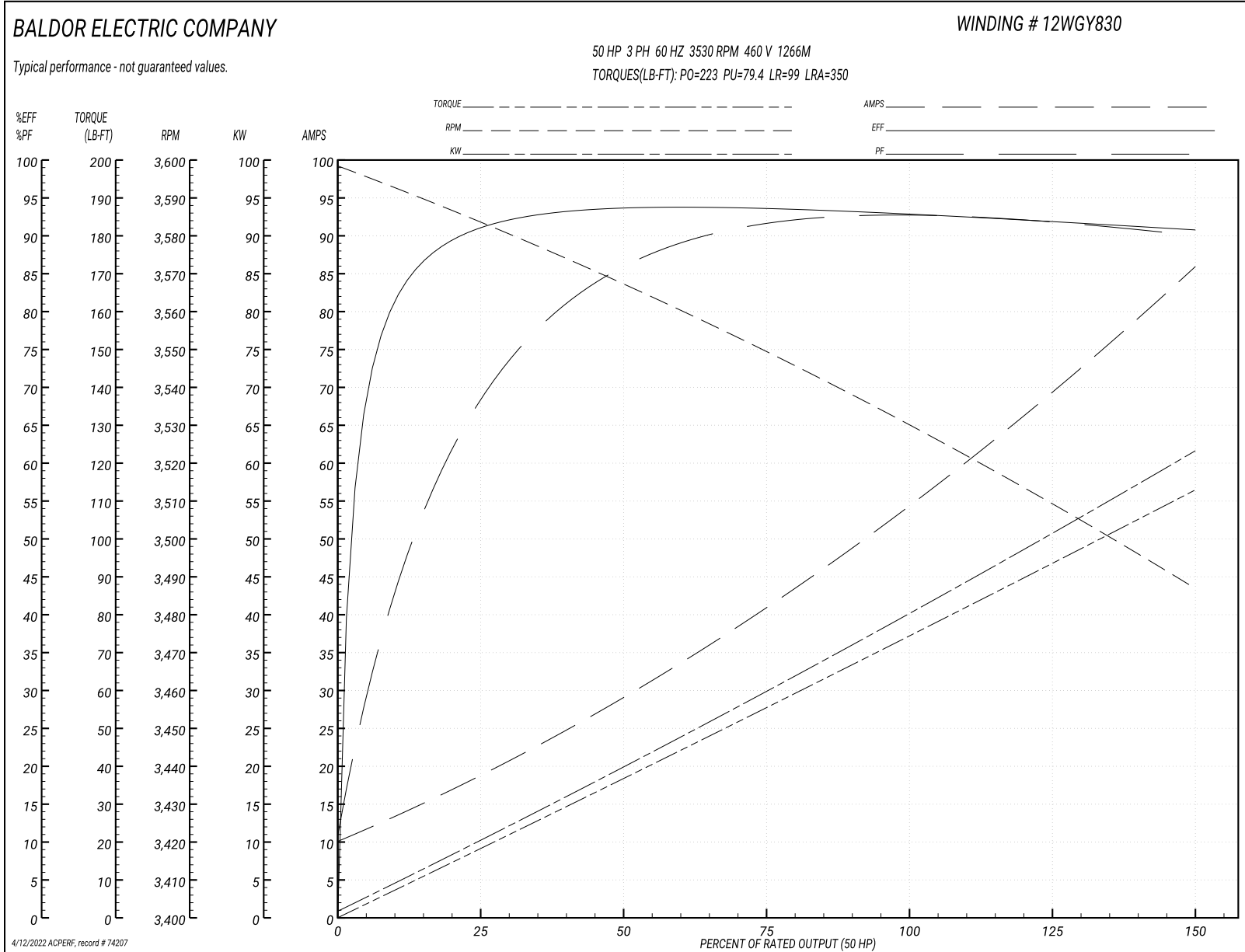
Typical performance - not guaranteed values

| <b>Winding: 12WGY830-R005</b> |                        | <b>Type: 1266M</b>               |  | <b>Enclosure: TEFC</b> |  |
|-------------------------------|------------------------|----------------------------------|--|------------------------|--|
| <b>Nameplate Data</b>         |                        |                                  | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |  |
| <b>Rated Output (HP)</b>      | 50                     | <b>Full Load Torque</b>          | 74.5 LB-FT                                       |                        |  |
| <b>Volts</b>                  | 230/460                | <b>Start Configuration</b>       | direct on line                                   |                        |  |
| <b>Full Load Amps</b>         | 110/55                 | <b>Breakdown Torque</b>          | 223 LB-FT  |                        |  |
| <b>R.P.M.</b>                 | 3530                   | <b>Pull-up Torque</b>            | 79.4 LB-FT                                       |                        |  |
| <b>Hz</b>                     | 60 <b>Phase</b>        | 3                                | <b>Locked-rotor Torque</b>                       | 99 LB-FT               |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>      | F                                | <b>Starting Current</b>                          | 350 A                  |  |
| <b>Service Factor (S.F.)</b>  | 1.15                   | <b>No-load Current</b>           | 11 A   |                        |  |
| <b>NEMA Nom. Eff.</b>         | 93 <b>Power Factor</b> | 91                               | <b>Line-line Res. @ 25°C</b>                     | 0.113 Ω                |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT           | <b>Temp. Rise @ Rated Load</b>   | 78°C   |                        |  |
| <b>S.F. Amps</b>              |                        | <b>Temp. Rise @ S.F. Load</b>    | 98°C   |                        |  |
|                               |                        | <b>Locked-rotor Power Factor</b> | 20.1   |                        |  |
|                               |                        | <b>Rotor inertia</b>             | 5.16 LB-FT <sup>2</sup>                          |                        |  |

**Load Characteristics 460 V, 60 Hz, 50 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>    | 75        | 87        | 91        | 91         | 92         | 90         | 92          |
| <b>Efficiency</b>      | 90.9      | 93.3      | 93.6      | 92.9       | 92         | 90.6       | 92.4        |
| <b>Speed</b>           | 3583      | 3566      | 3549      | 3531       | 3510       | 3486       | 3518        |
| <b>Line amperes</b>    | 17.7      | 28.8      | 41.5      | 55.2       | 69.5       | 85.6       | 63.8        |

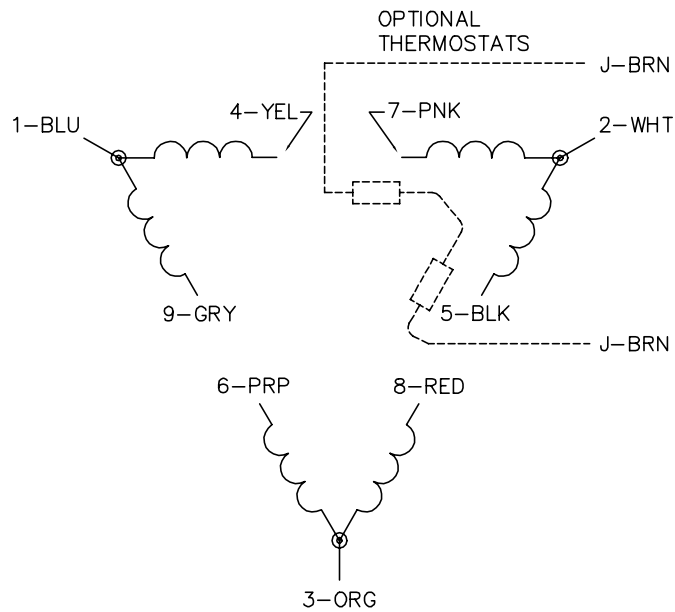
Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values



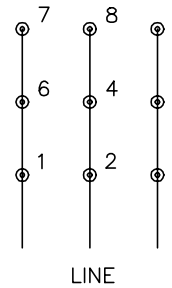




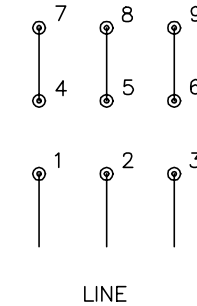
CD0180



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

|                                   |                              |                   |
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**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

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