

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CXT3504T-5**

**50HP, 1770RPM, 3PH, 60HZ, 326TC, 1272M, TEFC, F**

| Part Detail |    |             |            |             |        |               |            |
|-------------|----|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | A  | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | 12WGY613   | CD Diagram: | CD0006 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 12LYC052   | Poles:      | 04     | Created Date: | 06-01-2021 |
| Base:       |    | Eff. Date:  | 01-13-2022 | Leads:      | 3#8    |               |            |

| Specs                           |                         |                           |                       |
|---------------------------------|-------------------------|---------------------------|-----------------------|
| Catalog Number:                 | CXT3504T-5              | Feedback Device:          | NO FEEDBACK           |
| Enclosure:                      | TEFC                    | Heater Indicator:         | No Heater             |
| Frame:                          | 326TC                   | Insulation Class:         | F                     |
| Frame Material:                 | Iron                    | Inverter Code:            | Inverter Duty         |
| Output @ Frequency:             | 50.000 HP @ 60 HZ       | IP Rating:                | NONE                  |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | KVA Code:                 | F                     |
| Voltage @ Frequency:            | 575.0 V @ 60 HZ         | Lifting Lugs:             | Standard Lifting Lugs |
| XP Class and Group:             | CLI GP A,B,C,D          | Locked Bearing Indicator: | Locked Bearing        |
| XP Division:                    | Division II             | Motor Lead Termination:   | Flying Leads          |
| Agency Approvals:               | CSA EEV                 | Motor Type:               | 1272M                 |
|                                 | NEMA PREMIUM            | Mounting Arrangement:     | F1                    |
|                                 | NEMA_PREMIUM            | Power Factor:             | 87                    |
|                                 | UR                      | Product Family:           | General Purpose       |
|                                 | CCSA US                 | Pulley Face Code:         | C-Face                |
| Auxillary Box:                  | No Auxillary Box        | Rodent Screen:            | None                  |
| Auxillary Box Lead Termination: | None                    | Shaft Ground Indicator:   | No Shaft Grounding    |
| Base Indicator:                 | Rigid                   | Shaft Rotation:           | Reversible            |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Speed Code:               | Single Speed          |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Blower:</b>                        | None                      | <b>Motor Standards:</b>            | NEMA                |
| <b>Constant Torque Speed Range:</b>   | 3                         | <b>Starting Method:</b>            | Direct on line      |
| <b>Current @ Voltage:</b>             | 45.000 A @ 575.0 V        | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Design Code:</b>                   | B                         | <b>Thermal Device - Winding:</b>   | None                |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Duty Rating:</b>                   | CONT                      | <b>Winding Thermal 1:</b>          | None                |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Winding Thermal 2:</b>          | None                |
|                                       |                           | <b>XP Temp Code:</b>               | T3                  |

|                          |              |  |            |             |    |           |                       |                |                      |    |
|--------------------------|--------------|--|------------|-------------|----|-----------|-----------------------|----------------|----------------------|----|
| <b>Nameplate NP4224L</b> |              |  |            |             |    |           |                       |                |                      |    |
| <b>CAT.NO.</b>           | CXT3504T-5   |  |            |             |    |           | <b>I.P.</b>           | 54             |                      |    |
| <b>SPEC.</b>             | 12-0000-2198 |  |            |             |    |           | <b>ENCL</b>           | TEFC           |                      |    |
| <b>FRAME</b>             | 326TC        |  |            | <b>H.P.</b> | 50 |           |                       | <b>T. CODE</b> | T3                   |    |
| <b>VOLTS</b>             | 575          |  |            |             |    |           | <b>P.F.</b>           | 87             |                      |    |
| <b>F.L. AMPS</b>         | 45           |  |            |             |    |           | <b>RATING</b>         | 40C AMB-CONT   |                      |    |
| <b>R.P.M.</b>            | 1770         |  |            |             |    |           | <b>USABLE AT 208V</b> |                |                      |    |
| <b>HZ.</b>               | 60           |  |            |             |    |           | <b>PH.</b>            | 3              |                      |    |
| <b>SER.F.</b>            | 1.15         |  |            |             |    |           | <b>DES.</b>           | B              |                      |    |
| <b>NEMA NOM. EFF.</b>    | 94.5         |  |            |             |    |           | <b>WK2</b>            | 9.59           |                      |    |
| <b>DE</b>                | 6312         |  |            |             |    |           | <b>ODE</b>            | 6311           |                      |    |
| <b>MAG. CUR.</b>         | 14.2         |  |            |             |    |           |                       |                |                      |    |
| <b>INV TYPE</b>          | PWM          |  | <b>CHP</b> | 60          |    | <b>TO</b> | 90                    |                | <b>INV TEMP CODE</b> | T3 |
| <b>CT</b>                | 3            |  | <b>TO</b>  | 60          |    | <b>VT</b> | 3                     |                | <b>TO</b>            | 60 |
| <b>CC</b>                | 010A         |  |            | <b>SN</b>   |    |           |                       |                |                      |    |
|                          |              |  |            |             |    |           |                       |                |                      |    |
|                          |              |  |            |             |    |           |                       |                |                      |    |

| Parts List   |   |          |
|--------------|---|----------|
| Part Number  | Description                               | Quantity |
| SA395611     | SA 12-0000-2198                           | 1.000 EA |
| RA386362     | RA 12-0000-2198                           | 1.000 EA |
| LB1115N      | LABEL,LIFTING DEVICE (ON ROLLS)           | 1.000 EA |
| LB1119N      | WARNING LABEL                             | 1.000 EA |
| LC0006       | CONNECTION LABEL                          | 1.000 EA |
| LB1449       | DIV-2/NEC WARNING LABEL                   | 1.000 EA |
| NP4224L      | SS CP INV DIV-2 UL CSA-C US EEV PREM, DI  | 1.000 EA |
| 85XU0407S04  | 4X1/4 U DRIVE PIN STAINLESS               | 2.000 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 |
| 09FN3001C03  | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO  | 1.000 EA |
| HW2500A25    | WOODRUFF KEY USA #1008 #BLOW CARBON STEE  | 1.000 EA |
| MJ1000A02    | GREASE, MOBIL POLYREX EM - 124047         | 0.200 LB |
| 12EP1107A196 | FREP W/SLINGER & "0" DRAIN,W/O RET 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 |
| HW4600B41    | V-RING SLINGER 2.125 X 2.880 X 0.280      | 1.000 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 |

| Parts List (continued) |   |          |
|------------------------|---|----------|
| Part Number            | Description                               | Quantity |
| HA4066A01              | PUSH IN T-DRAIN FITTING (BLACK)           | 1.000 EA |
| 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 |
| MG1025L14              | WILKOFAS, 776.14, GRUNDFOS BLACK          | 0.125 GA |
| 12PA1000               | PACKAGING GROUP PRINT PK1024A07           | 1.000 EA |
| HW2501H33              | KEY, 1/2 SQ X 3.875                       | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 47188

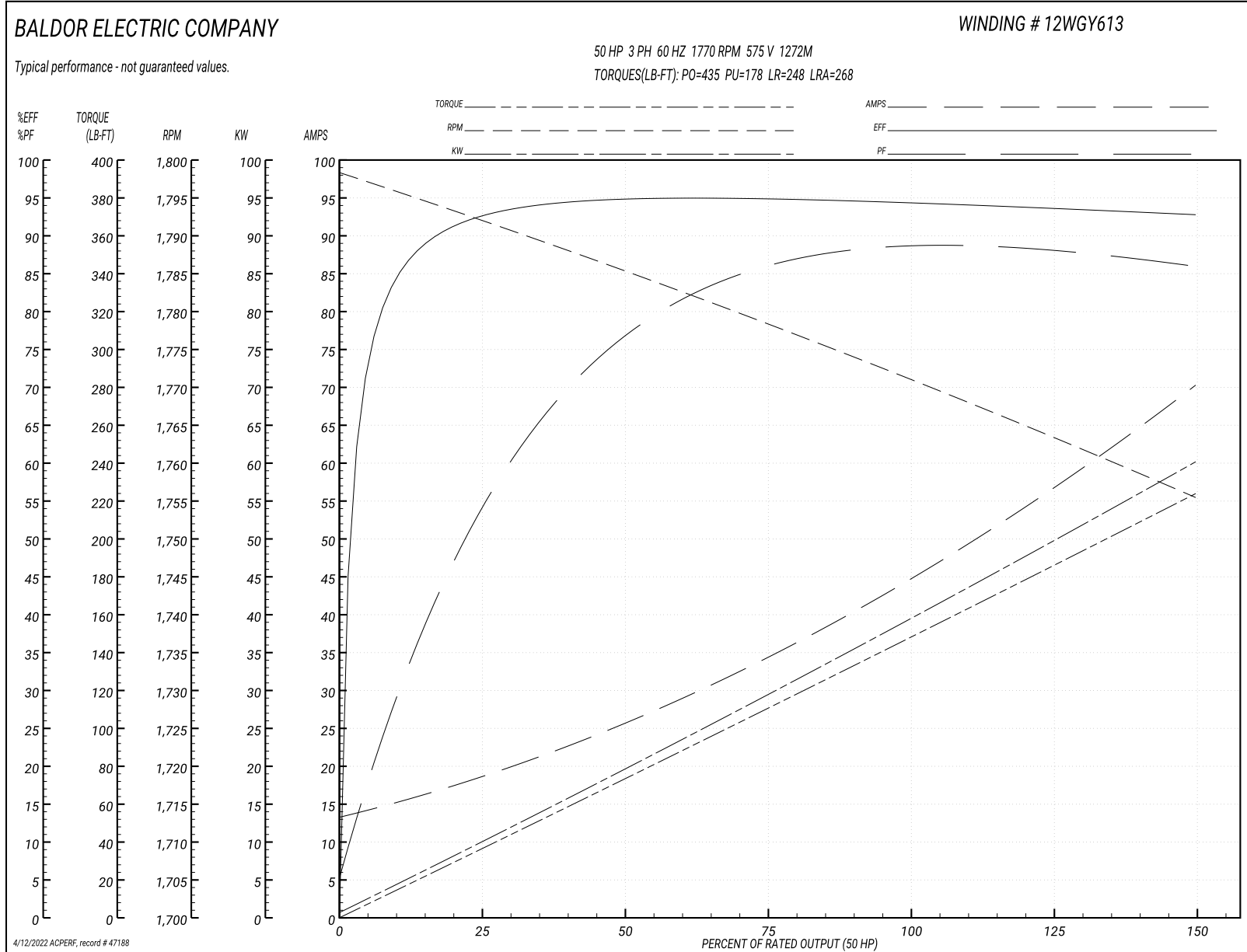
Typical performance - not guaranteed values

| Winding: 12WGY613-R006 |                   | Type: 1272M                                   | Enclosure: TEFC         |
|------------------------|-------------------|---|-------------------------|
| <b>Nameplate Data</b>  |                   | <b>575 V, 60 Hz:<br/>Single Voltage Motor</b> |                         |
| Rated Output (HP)      | 50                | Full Load Torque                              | 148 LB-FT               |
| Volts                  | 575               | Start Configuration                           | direct on line          |
| Full Load Amps         | 45                | Breakdown Torque                              | 435 LB-FT               |
| R.P.M.                 | 1770              | Pull-up Torque                                | 178 LB-FT               |
| Hz                     | 60 Phase          | Locked-rotor Torque                           | 248 LB-FT               |
| NEMA Design Code       | B KVA Code        | Starting Current                              | 268 A                   |
| Service Factor (S.F.)  | 1.15              | No-load Current                               | 14.2 A                  |
| NEMA Nom. Eff.         | 94.5 Power Factor | Line-line Res. @ 25°C                         | 0.186 Ω                 |
| Rating - Duty          | 40C AMB-CONT      | Temp. Rise @ Rated Load                       | 61°C                    |
| S.F. Amps              |                   | Temp. Rise @ S.F. Load                        | 75°C                    |
|                        |                   | Rotor inertia                                 | 9.59 LB-FT <sup>2</sup> |

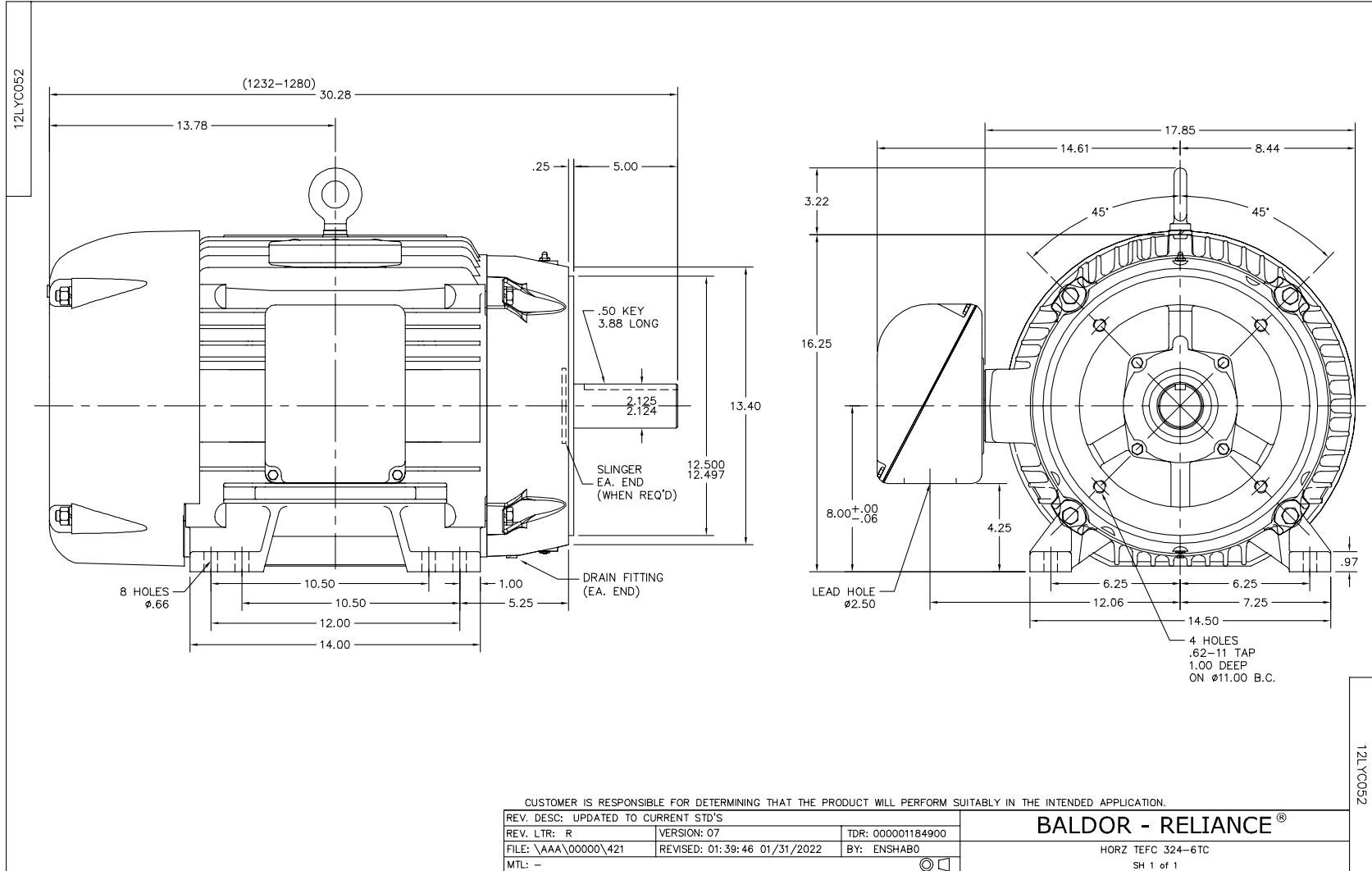
**Load Characteristics 575 V, 60 Hz, 50 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 59   | 79   | 85   | 87   | 88   | 87   | 88   |
| Efficiency      | 92.3 | 94.8 | 95   | 94.5 | 93.8 | 92.7 | 94   |
| Speed           | 1791 | 1785 | 1779 | 1771 | 1764 | 1755 | 1767 |
| Line amperes    | 17.4 | 25.3 | 34.6 | 45.4 | 57   | 69.8 | 52.4 |

Performance Graph at 575V, 60Hz, 50.0HP Typical performance - Not guaranteed values







CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

|                                   |                              |                   |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                              |                   |
| REV. LTR: E                       | VERSION: 01                  | TDR: 000001099922 |
| FILE: \AAA\00005\141              | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO       |
| MTL: -                            | © □                          |                   |

**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>