

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CDRX28324T-5**

**30HP,3520RPM,3PH,60HZ,286TSC,XPFC,F1**

| Part Detail |    |             |            |             |        |               |            |
|-------------|----|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | C  | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | 10WGZ218   | CD Diagram: | CD0006 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 10LYG898   | Poles:      | 02     | Created Date: | 07-19-2019 |
| Base:       |    | Eff. Date:  | 06-26-2020 | Leads:      | 3#10   |               |            |

| Specs                           |                         |                           |                          |
|---------------------------------|-------------------------|---------------------------|--------------------------|
| Catalog Number:                 | CDRX28324T-5            | Insulation Class:         | F                        |
| Enclosure:                      | XPFC                    | Inverter Code:            | Inverter Duty            |
| Frame:                          | 286TSC                  | IP Rating:                | NONE                     |
| Frame Material:                 | Iron                    | KVA Code:                 | G                        |
| Output @ Frequency:             | 30.000 HP @ 60 HZ       | Lifting Lugs:             | Standard Lifting Lugs    |
| Synchronous Speed @ Frequency:  | 3600 RPM @ 60 HZ        | Locked Bearing Indicator: | Locked Bearing           |
| Voltage @ Frequency:            | 575.0 V @ 60 HZ         | Motor Lead Termination:   | Flying Leads             |
| XP Class and Group:             | CLI GP C,D              | Motor Type:               | 1046M                    |
| XP Division:                    | Division I              | Mounting Arrangement:     | F1                       |
| Agency Approvals:               | CSA                     | Power Factor:             | 90                       |
|                                 | CSA EEV                 | Product Family:           | Hazardous Location Motor |
|                                 | UR                      | Pulley Face Code:         | C-Face                   |
| Auxillary Box:                  | No Auxillary Box        | Rodent Screen:            | None                     |
| Auxillary Box Lead Termination: | None                    | RoHS Status:              | ROHS NON-COMPLIANT       |
| Base Indicator:                 | Rigid                   | Shaft Ground Indicator:   | No Shaft Grounding       |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Rotation:           | Reversible               |
| Blower:                         | None                    | Speed Code:               | Single Speed             |
| Constant Torque Speed Range:    | 6                       | Motor Standards:          | NEMA                     |

|                                       |                           |                                    |                            |
|---------------------------------------|---------------------------|------------------------------------|----------------------------|
| <b>Current @ Voltage:</b>             | 26.000 A @ 575.0 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>   | Normally Closed Thermostat |
| <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>Feedback Device:</b>               | NO FEEDBACK               | <b>Winding Thermal 2:</b>          | None                       |
| <b>Heater Indicator:</b>              | No Heater                 | <b>XP Temp Code:</b>               | T3C                        |

| Nameplate NP1401XPSLEV |                            |    |        |              |                     |          |          |      |  |
|------------------------|----------------------------|----|--------|--------------|---------------------|----------|----------|------|--|
| NO.                    |                            |    |        |              | CC                  | 010A     |          |      |  |
| S/N                    |                            |    |        |              | TEMP CODE           | T3C      |          |      |  |
| SPEC.                  | 10-0000-0935               |    |        |              | INV. TYPE           | PWM      |          |      |  |
| CAT.NO.                | CDRX28324T-5               |    |        |              | C HP FR             | 60       | C HP TO  | 90   |  |
| HP                     | 30                         |    |        |              | CT HZ FROM          | 6        | CT HZ TO | 60   |  |
| VOLTS                  | 575                        |    |        |              | VT HZ FROM          | 6        | VT HZ TO | 60   |  |
| AMPS                   | 26                         |    |        |              | MAG CUR             | 6.9      |          |      |  |
| RPM                    | 3520                       |    |        |              | MX RPM              | 5400     |          |      |  |
| HZ                     | 60                         | PH | 3      | CL           | F                   | NOM.EFF. | 91.7     |      |  |
| SER.F.                 | 1.00                       |    | DES    | B            | SL HZ               | 1.3      | WK2      | 1.98 |  |
| FRAME                  | 286TSC                     |    | RATING | 40C AMB-CONT |                     |          |          |      |  |
|                        | 55C AMB @ 1.0 SF, 60C RISE |    |        |              |                     |          |          |      |  |
|                        | 1.15SF ON SINEWAVE         |    |        |              | NEMA MG-1 PT.5,IP55 |          |          |      |  |
|                        |                            |    |        |              |                     |          |          |      |  |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA372041      | SA 10-0000-0935                          | 1.000 EA |
| RA361764      | RA 10-0000-0935                          | 1.000 EA |
| LB1115N       | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| LB1119N       | WARNING LABEL                            | 1.000 EA |
| LC0006        | CONNECTION LABEL                         | 1.000 EA |
| LB1417        | LABEL CARTON 6X4 PERFORATED BLANK ROLLS  | 1.000 EA |
| NP1401XPSLEV  | SS XP INV UL CSA-EEV CC CL-I GP-C&D      | 1.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 EA |
| MN416A01      | TAG-INSTAL-MAINT no wire (2100/bx) 4/22  | 1.000 EA |
| LB1081C       | ALUM XP CAUTION LABEL (COL PLANT ONLY-   | 1.000 EA |
| 10FH1008A05P  | 310 FAN HOUSING X-PROOF MACH. W/EPOXY PR | 1.000 EA |
| HW1001A31     | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 3.000 EA |
| 10XN3118K12   | 5/16-18 X .75 GRADE 5, ZINC PLATED       | 3.000 EA |
| 37FN3002C03   | EXFN, PLASTIC, 6.00 OD, 1.690 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        | 0.130 LB |
| WD4100A03     | DE-750 HEYCO PLUG 62MP0750 MICRO PLASTIC | 1.000 EA |
| 10EP1701A57PP | FR ENDPLATE, MACH                        | 1.000 EA |
| HA3050A03     | 3/8-16 X 2.25" GRADE 8 BOLT              | 4.000 EA |
| HW1001A38     | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HA2066A02     | SLINGER, ALUM (AUTO)                     | 1.000 EA |
| 80XN1032A06   | 10-32 X 3/8 SET SC HEX SOCK              | 2.000 EA |

| Parts List (continued) |   |           |
|------------------------|---|-----------|
| Part Number            | Description                               | Quantity  |
| HW5100A11              | W3917-042 WVY WSHR (WB)                   | 1.000 EA  |
| HW4500A20              | 1/8NPT SL PIPE PLUG                       | 2.000 EA  |
| HW4505A02              | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS  | 1.000 EA  |
| HW3023E06              | .125 X .625 SPIRAL SPRING PIN             | 1.000 EA  |
| 10EP1710A09P           | FACE MTD. EP MACH XPFC W/HW4505A02 W/PRI  | 1.000 EA  |
| HW1001A38              | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I  | 4.000 EA  |
| HA3050A03              | 3/8-16 X 2.25" GRADE 8 BOLT               | 4.000 EA  |
| HA2067A01              | ALUM SLINGER (AUTO)                       | 1.000 EA  |
| 80XN1032A06            | 10-32 X 3/8 SET SC HEX SOCK               | 2.000 EA  |
| 10XN2520K40            | 1/4-20 X 2-1/2 HEX HD CAPSCREW, GRADE 5,Z | 4.000 EA  |
| HW4500A20              | 1/8NPT SL PIPE PLUG                       | 2.000 EA  |
| HW4505A02              | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS  | 1.000 EA  |
| HW3023E06              | .125 X .625 SPIRAL SPRING PIN             | 1.000 EA  |
| 12CB1003A02P           | KOBX, MACH 1.50 NPT GROUP C MTRS ,EPOXY   | 1.000 EA  |
| 10XN3118K24            | 5/16-18 X 1.50" HEX HD, GRADE 5           | 4.000 EA  |
| HW1001A31              | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 4.000 EA  |
| WD1000B19              | TERMINAL BURNDY L250HP                    | 1.000 EA  |
| 10XN3816K12            | 3/8-16 X 3/4 HEX HD CAP GRADE 5           | 1.000 EA  |
| HW1001A38              | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I  | 1.000 EA  |
| 12CB1502A01P           | CONDUIT BOX LID MACH. GROUP C MTRS        | 1.000 EA  |
| 84XN5013J32            | SOCKET HD.CAP SCR,1/2-13 X 2"LG,ALLOY ST  | 10.000 EA |
| HW1001A50              | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 10.000 EA |
| MG1025G29              | WILKOFAS, 789.229, DARK CHARCOAL GRAY     | 0.125 GA  |
| 14PA1000               | PACKAGING 314 GROUP COMBINED PRINT        | 1.000 EA  |

|           |   |          |
|-----------|---|----------|
| HW2501G17 | KEY, 3/8 SQ X 1.875                     | 1.000 EA |
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.001 QT |

**AC Induction Motor Performance Data**

Record # 77475

Typical performance - not guaranteed values

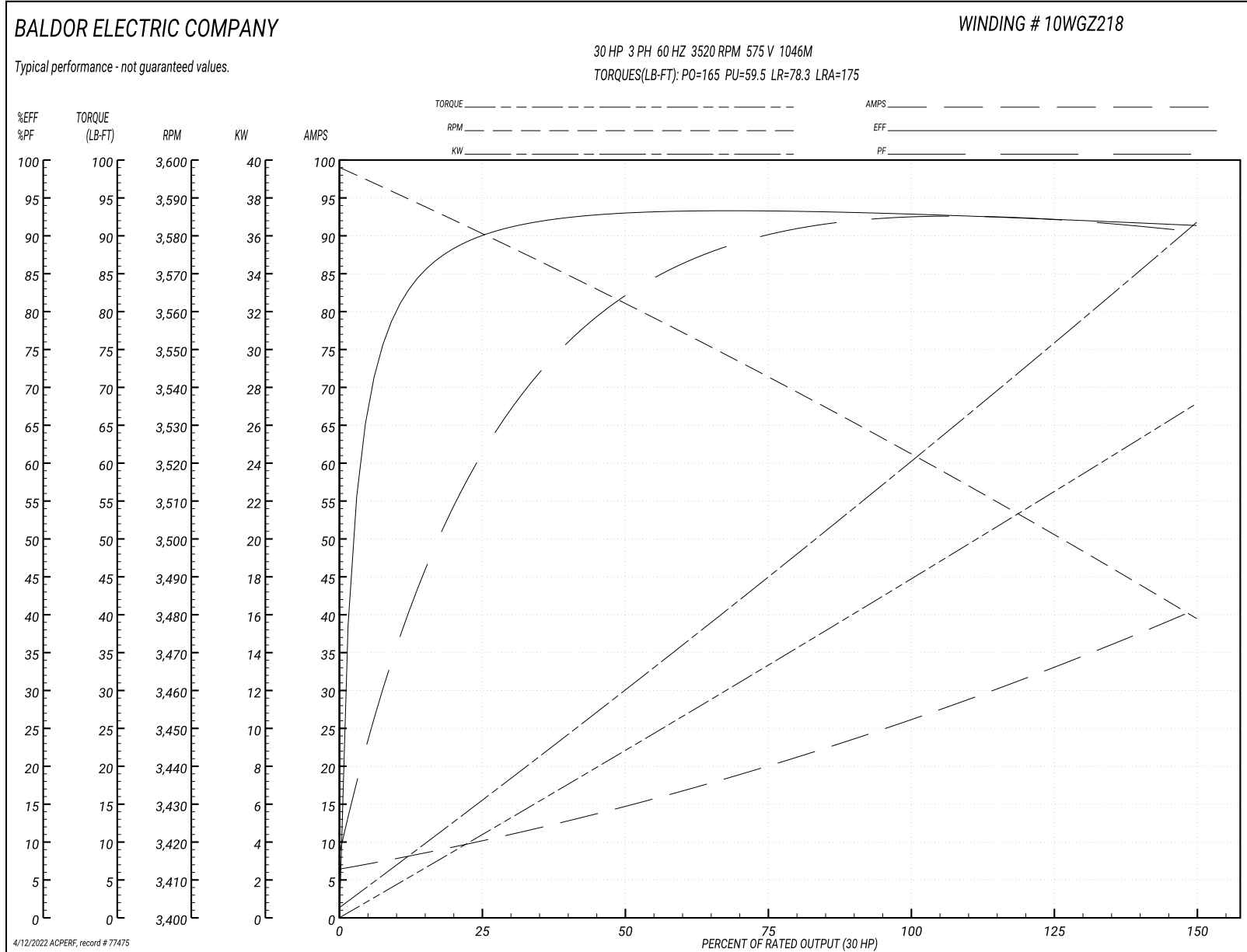
| <b>Winding: 10WGZ218-R002</b> |                   | <b>Type: 1046M</b>         |   | <b>Enclosure: XPFC</b>  |  |
|-------------------------------|-------------------|----------------------------|---|-------------------------|--|
| <b>Nameplate Data</b>         |                   |                            | <b>575 V, 60 Hz:<br/>Single Voltage Motor</b> |                         |  |
| <b>Rated Output (HP)</b>      | 30                | <b>Full Load Torque</b>    | 44.4 LB-FT                                    |                         |  |
| <b>Volts</b>                  | 575               | <b>Start Configuration</b> | direct on line                                |                         |  |
| <b>Full Load Amps</b>         | 26                | <b>Breakdown Torque</b>    | 165 LB-FT                                     |                         |  |
| <b>R.P.M.</b>                 | 3520              | <b>Pull-up Torque</b>      | 59.5 LB-FT                                    |                         |  |
| <b>Hz</b>                     | 60 Phase          | <b>Locked-rotor Torque</b> | 78.3 LB-FT                                    |                         |  |
| <b>NEMA Design Code</b>       | B KVA Code        | <b>G</b>                   | <b>Starting Current</b>                       | 175 A                   |  |
| <b>Service Factor (S.F.)</b>  |                   | 1                          | <b>No-load Current</b>                        | 6.89 A                  |  |
| <b>NEMA Nom. Eff.</b>         | 91.7 Power Factor | 90                         | <b>Line-line Res. @ 25°C</b>                  | 0.38 Ω                  |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT      |                            | <b>Temp. Rise @ Rated Load</b>                | 58°C                    |  |
| <b>S.F. Amps</b>              |                   |                            | <b>Temp. Rise @ S.F. Load</b>                 | 72°C                    |  |
|                               |                   |                            | <b>Locked-rotor Power Factor</b>              | 23.5                    |  |
|                               |                   |                            | <b>Rotor inertia</b>                          | 1.97 LB-FT <sup>2</sup> |  |

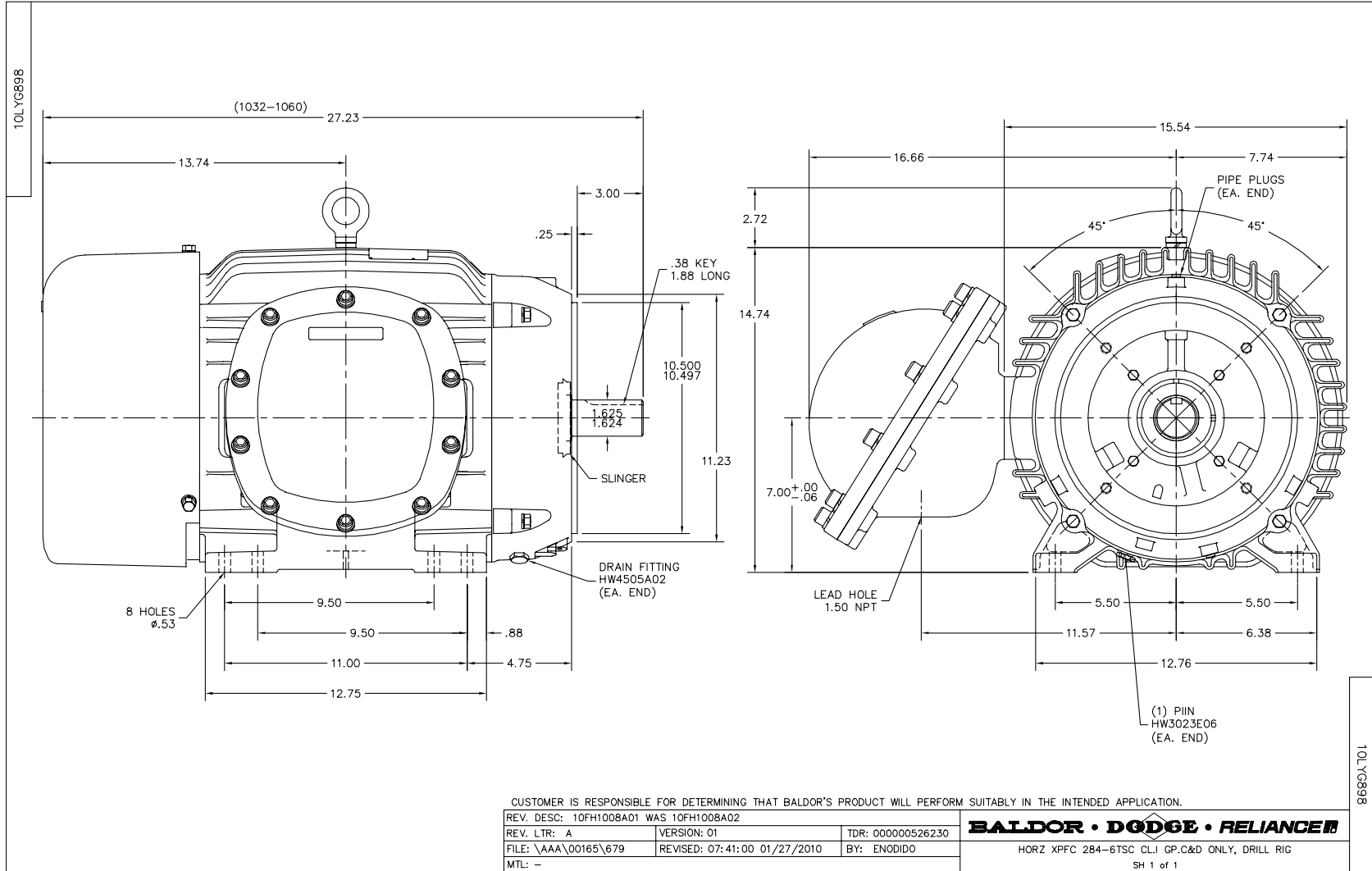
**Load Characteristics 575 V, 60 Hz, 30 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|
| <b>Power Factor</b>    | 65        | 84        | 89        | 91         | 92         | 91         |
| <b>Efficiency</b>      | 89.7      | 92.9      | 93.4      | 92.7       | 92.3       | 91.3       |
| <b>Speed</b>           | 3580      | 3561      | 3543      | 3524       | 3502       | 3478       |
| <b>Line amperes</b>    | 9.46      | 14.5      | 20.1      | 26.4       | 33.2       | 40.5       |



Performance Graph at 575V, 60Hz, 30.0HP 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: -                            | © □                          |                   |

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

SH 1 of 1

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