

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CPX21146T**

**10HP,1765//1465RPM,3PH,60HZ,215T,XPFC,F1**

| Part Detail |    |             |              |             |        |               |            |
|-------------|----|-------------|--------------|-------------|--------|---------------|------------|
| Revision:   | F  | Status:     | PRD/A        | Change #:   |        | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | 07WGX598     | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 07LY-000-019 | Poles:      | 04     | Created Date: | 02-20-2019 |
| Base:       |    | Eff. Date:  | 04-26-2021   | Leads:      | 9#14   |               |            |

| Specs                           |                           |                                |                           |
|---------------------------------|---------------------------|--------------------------------|---------------------------|
| Catalog Number:                 | CPX21146T                 | Electrically Isolated Bearing: | Not Electrically Isolated |
| Enclosure:                      | XPFC                      | Enclosure Modification:        | Severe Duty Features      |
| Frame:                          | 215T                      | Feedback Device:               | NO FEEDBACK               |
| Frame Material:                 | Iron                      | Heater Indicator:              | No Heater                 |
| Output @ Frequency:             | 10.000 HP @ 60 HZ         | Insulation Class:              | F                         |
|                                 | 7.500 HP @ 50 HZ          | Inverter Code:                 | Inverter Duty             |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ          | IP Rating:                     | IP55                      |
| Voltage @ Frequency:            | 230.0 V @ 60 HZ           | KVA Code:                      | J                         |
|                                 | 380.0 V @ 50 HZ           | Lifting Lugs:                  | Standard Lifting Lugs     |
|                                 | 460.0 V @ 60 HZ           | Locked Bearing Indicator:      | Locked Bearing            |
|                                 | 190.0 V @ 50 HZ           | Motor Lead Termination:        | Flying Leads              |
| XP Class and Group:             | CLI GP C,D; CLII GP E,F,G | Motor Type:                    | 0750M                     |
| XP Division:                    | Division I                | Mounting Arrangement:          | F1                        |
| Agency Approvals:               | UR                        | Power Factor:                  | 81                        |
|                                 | CSA EEV                   | Product Family:                | General Purpose           |
|                                 | CSA                       | Pulley Face Code:              | Standard                  |
| Auxillary Box:                  | No Auxillary Box          | Rodent Screen:                 | None                      |
| Auxillary Box Lead Termination: | None                      | RoHS Status:                   | ROHS NON-COMPLIANT        |

|                                     |                         |                                    |                            |
|-------------------------------------|-------------------------|------------------------------------|----------------------------|
| <b>Base Indicator:</b>              | Rigid                   | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding         |
| <b>Bearing Grease Type:</b>         | Polyrex EM (-20F +300F) | <b>Shaft Rotation:</b>             | Reversible                 |
| <b>Blower:</b>                      | None                    | <b>Speed Code:</b>                 | Single Speed               |
| <b>Constant Torque Speed Range:</b> | 6                       | <b>Motor Standards:</b>            | NEMA                       |
| <b>Current @ Voltage:</b>           | 25.000 A @ 230.0 V      | <b>Starting Method:</b>            | Direct on line             |
|                                     | 23.200 A @ 190.0 V      | <b>Thermal Device - Bearing:</b>   | None                       |
|                                     | 12.500 A @ 460.0 V      | <b>Thermal Device - Winding:</b>   | Normally Closed Thermostat |
|                                     | 11.600 A @ 380.0 V      | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor        |
| <b>Design Code:</b>                 | A                       | <b>Winding Thermal 1:</b>          | None                       |
| <b>Drip Cover:</b>                  | No Drip Cover           | <b>Winding Thermal 2:</b>          | None                       |
| <b>Duty Rating:</b>                 | CONT                    | <b>XP Temp Code:</b>               | T3C                        |

| Nameplate NP2033XPSLEV |                             |     |        |              |     |                  |      |          |    |  |
|------------------------|-----------------------------|-----|--------|--------------|-----|------------------|------|----------|----|--|
| NO.                    |                             |     |        |              |     | CC               | 010A |          |    |  |
| S/N                    |                             |     |        |              |     | TEMP CODE        | T3C  |          |    |  |
| SPEC.                  | 07-0000-0020                |     |        |              |     | INV.TYPE         | PWM  |          |    |  |
| CAT.NO.                | CPX21146T                   |     |        |              |     | C HP FR          | 60   | C HP TO  | 90 |  |
| HP                     | 10//7.5                     |     |        |              |     | CT HZ FROM       | 6    | CT HZ TO | 60 |  |
| VOLTS                  | 230/460//190/380            |     |        |              |     | VT HZ FROM       | 6    | VT HZ TO | 60 |  |
| AMPS                   | 25/12.5//23.2/11.6          |     |        |              |     | MAG CUR          | 5.6  |          |    |  |
| RPM                    | 1765//1465                  |     |        |              |     | MX RPM           | 2700 |          |    |  |
| HZ                     | 60//50                      | PH  | 3      | CL           | F   | NOM.EFF.         | 91.7 |          |    |  |
| SER.F.                 | 1.00                        | DES | A      | SL HZ        | 1.2 | WK2              | 1.18 |          |    |  |
| FRAME                  | 215T                        |     | RATING | 40C AMB-CONT |     |                  |      |          |    |  |
| BLANK                  | 55C AMB AT 1.00 SF SINEWAVE |     |        |              |     |                  |      |          |    |  |
|                        | NEMA MG-1 PART 5, IP55      |     |        |              |     | 1.15 SF SINEWAVE |      |          |    |  |
|                        |                             |     |        |              |     |                  |      |          |    |  |

| Parts List   |  |          |
|--------------|--|----------|
| Part Number  | Description                              | Quantity |
| SA366397     | SA 07-0000-0020                          | 1.000 EA |
| RA355823     | RA 07-0000-0020                          | 1.000 EA |
| LB1115N      | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| LB1119N      | WARNING LABEL                            | 1.000 EA |
| LC0145B01    | CONNECTION LABEL                         | 1.000 EA |
| NP2033XPSLEV | 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 |
| LB1081F      | ALUM XP CAUTION LABEL (FS PLANT ONLY-    | 1.000 EA |
| HW3201A05    | 3/8-16 EYEBOLT                           | 1.000 EA |
| 07FH1003A05G | FAN HOUSING 307 EXPLOSION PROOF W/ GREAS | 1.000 EA |
| 10XN2520A12  | 1/4-20 X 3/4 HEX HEAD CAP                | 4.000 EA |
| 37FN3002B01  | EXFN, PLASTIC, 7.50 OD, 1.155 ID         | 1.000 EA |
| MJ1000A02    | GREASE, MOBIL POLYREX EM - 124047        | 0.050 LB |
| 07EP1707A22G | FRONT ENDPLATE EXPLOSION PROOF(GROUP C & | 1.000 EA |
| 10XN3816K28  | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38    | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HA2009A25    | SLINGER, FOR GROUP E MOTORS - 206 BRG.   | 1.000 EA |
| 80XN0632A10  | SET SCREW,#6-32 X .62 LG.HEX SOC. HD.    | 2.000 EA |
| HW5100A06    | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| HW4500A01    | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW4500A19    | 1/4-28X1/4 SLOTTED PLUG F/S              | 1.000 EA |
| HW4506A02    | BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI | 1.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| HW3022E05              | .125 DIA X .500 ROLLED SPRING PIN        | 1.000 EA |
| 07EP1709A09G           | PUEP X-PROOF W/LOK'D BRG. GP-E (GREY)    | 1.000 EA |
| HW1001A38              | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10XN3816K28            | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HA2009A56              | SLINGER, FOR GROUP E MOTORS - 307 BRG.   | 1.000 EA |
| 80XN0632A10            | SET SCREW,#6-32 X .62 LG.HEX SOC. HD.    | 1.000 EA |
| 10XN2520A36            | 1/4-20X 2 1/4 HEX HD X                   | 4.000 EA |
| HW1001A25              | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| MG1500Y02              | WILKOPON PRIMER YELLOW                   | 0.022 GA |
| HW4500A01              | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW4500A19              | 1/4-28X1/4 SLOTTED PLUG F/S              | 1.000 EA |
| HW4506A02              | BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI | 1.000 EA |
| HW3022E05              | .125 DIA X .500 ROLLED SPRING PIN        | 1.000 EA |
| 07CB1000A12G           | CONDUIT BOX, 1.88 SQ MTG PATTERN & 1.00  | 1.000 EA |
| 10XN3118A16            | 5/16-18X1 HEX HD CAP                     | 4.000 EA |
| WD1000B17              | T&B CX35TN OR L35P TERMINAL LUG          | 1.000 EA |
| 11XW1032G06            | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 07CB1502A01G           | CONDUIT BOX LID MACH (DUCTILE IRON) GRAY | 1.000 EA |
| 84XN2520J16            | 1/4-20 X 1 SOC HD CAP SCREW              | 4.000 EA |
| MG1025G29              | WILKOFASST, 789.229, DARK CHARCOAL GRAY  | 0.022 GA |
| 07PA1011               | PKG GRP, 07 CAST IRON PK1181             | 1.000 EA |
| 10XL3808A28            | 3/8 X 1 3/4" LAG SCREW                   | 2.000 EA |
| HW2501F21              | KEY, 5/16 SQ X 2.375                     | 1.000 EA |
| HA7000A02              | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 EA |

|           |   |          |
|-----------|---|----------|
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.001 QT |
|-----------|---|----------|

**AC Induction Motor Performance Data**

Record # 73683

Typical performance - not guaranteed values

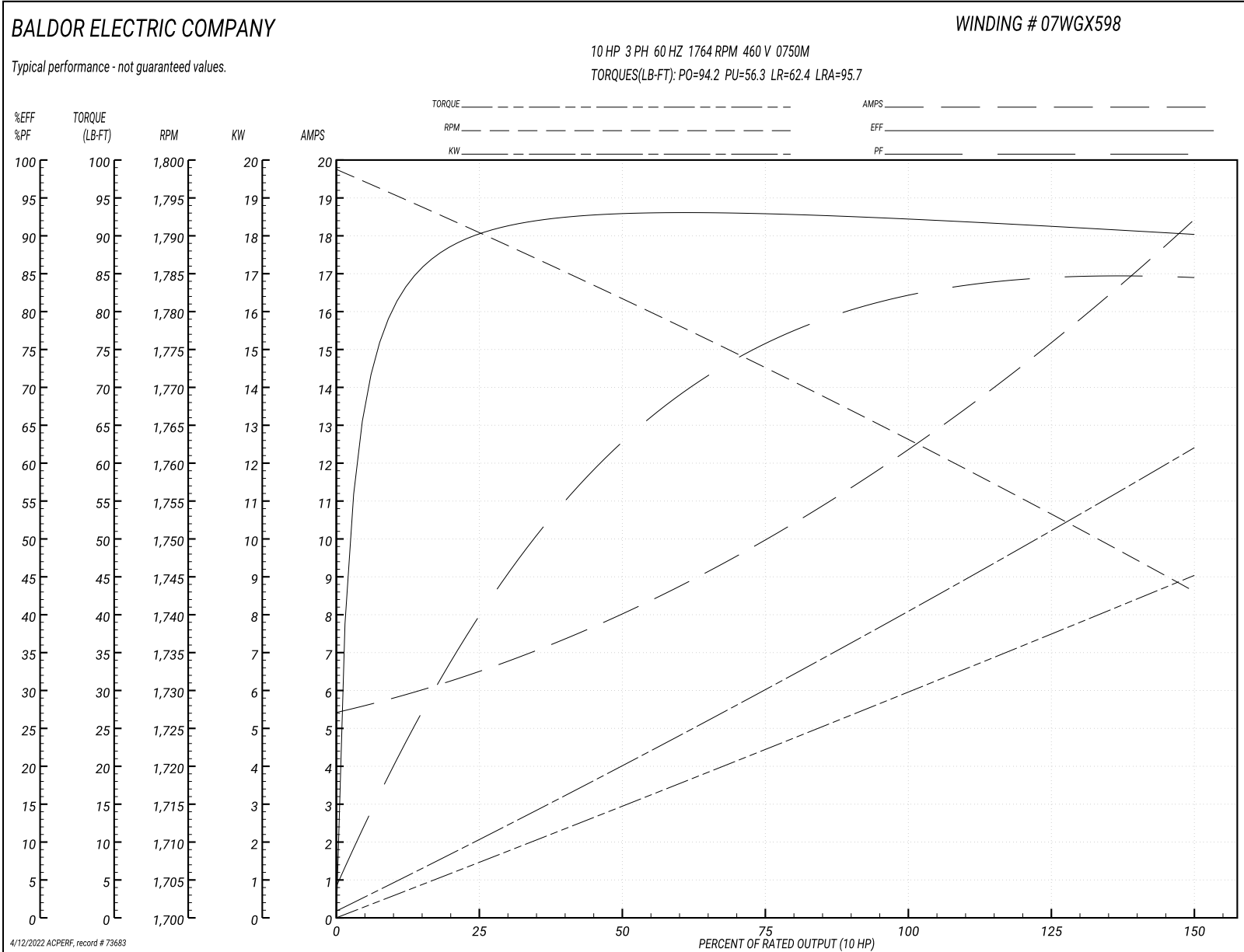
| <b>Winding: 07WGX598-R015</b> |                    | <b>Type: 0750M</b>  |  | <b>Enclosure: XPFC</b>           |                         |        |
|-------------------------------|--------------------|---------------------|--|----------------------------------|-------------------------|--------|
| <b>Nameplate Data</b>         |                    |                     | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                                  |                         |        |
| <b>Rated Output (HP)</b>      | 10//7.5            |                     | <b>Full Load Torque</b>                          | 29.7 LB-FT                       |                         |        |
| <b>Volts</b>                  | 230/460//190/380   |                     | <b>Start Configuration</b>                       | direct on line                   |                         |        |
| <b>Full Load Amps</b>         | 25/12.5//23.2/11.6 |                     | <b>Breakdown Torque</b>                          | 94.2 LB-FT                       |                         |        |
| <b>R.P.M.</b>                 | 1765//1465         |                     | <b>Pull-up Torque</b>                            | 56.3 LB-FT                       |                         |        |
| <b>Hz</b>                     | 60//50             | <b>Phase</b>        | 3  | <b>Locked-rotor Torque</b>       | 62.4 LB-FT              |        |
| <b>NEMA Design Code</b>       | A                  |                     | <b>KVA Code</b>                                  | J                                | <b>Starting Current</b> | 95.7 A |
| <b>Service Factor (S.F.)</b>  | 1                  |                     |  |                                  | <b>No-load Current</b>  | 5.6 A  |
| <b>NEMA Nom. Eff.</b>         | 91.7               | <b>Power Factor</b> | 81   | <b>Line-line Res. @ 25°C</b>     | 0.866 Ω                 |        |
| <b>Rating - Duty</b>          | 40C AMB-CONT       |                     |  | <b>Temp. Rise @ Rated Load</b>   | 55°C                    |        |
|                               |                    |                     |  | <b>Locked-rotor Power Factor</b> | 35.2                    |        |
|                               |                    |                     |  | <b>Rotor inertia</b>             | 1.23 LB-FT <sup>2</sup> |        |

**Load Characteristics 460 V, 60 Hz, 10 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>    | 41        | 64        | 76        | 81         | 84         | 85         |
| <b>Efficiency</b>      | 89.8      | 93.5      | 92.5      | 92.2       | 91.3       | 90.1       |
| <b>Speed</b>           | 1790      | 1782      | 1772      | 1764       | 1753       | 1743       |
| <b>Line amperes</b>    | 6.28      | 7.9       | 10        | 12.5       | 15.3       | 18.3       |



Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 81617

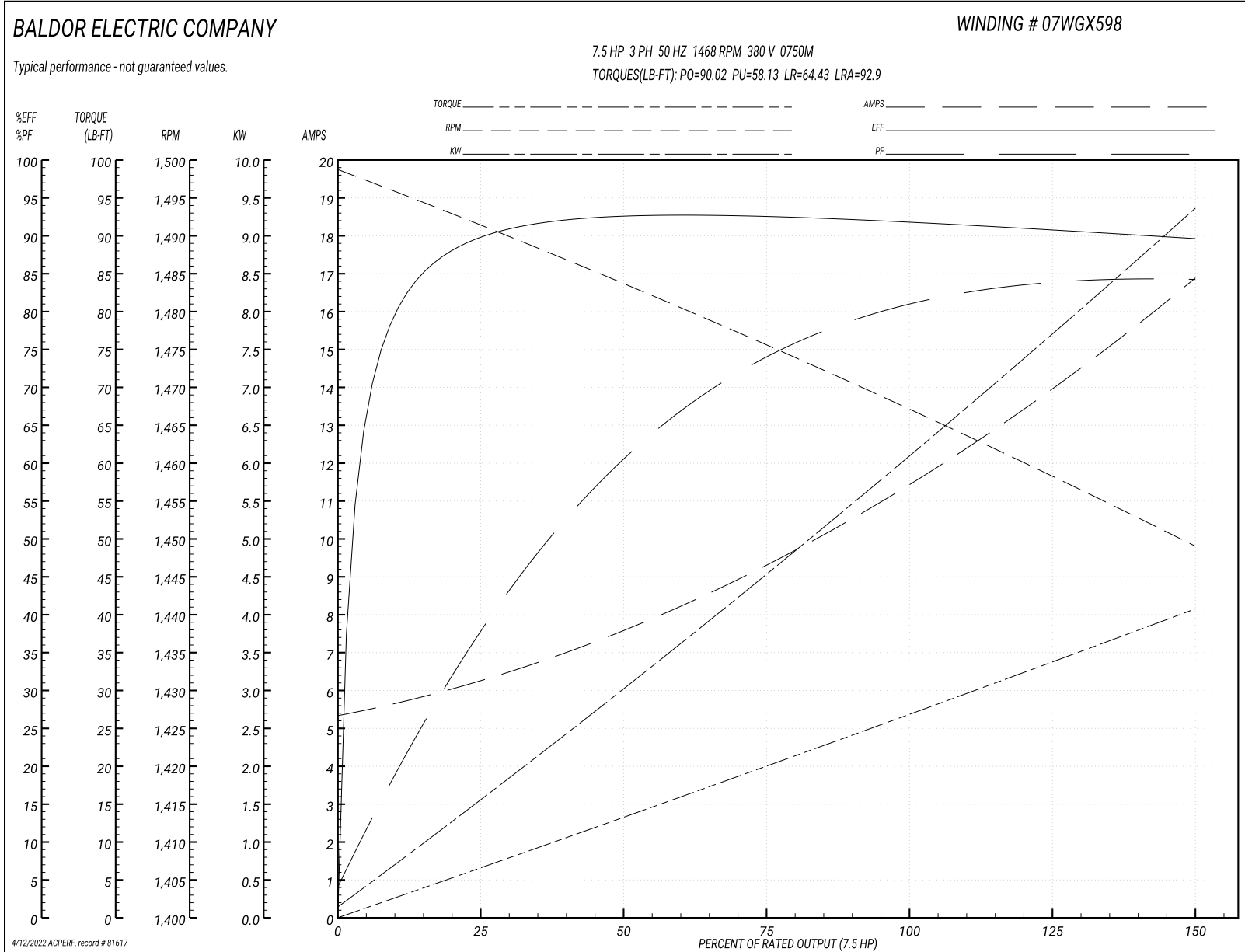
Typical performance - not guaranteed values

| <b>Winding: 07WGX598-R015</b> |                    | <b>Type: 0750M</b>  |  | <b>Enclosure: XPFC</b>           |                         |        |
|-------------------------------|--------------------|---------------------|--|----------------------------------|-------------------------|--------|
| <b>Nameplate Data</b>         |                    |                     | <b>380 V, 50 Hz:<br/>High Voltage Connection</b> |                                  |                         |        |
| <b>Rated Output (HP)</b>      | 10//7.5            |                     | <b>Full Load Torque</b>                          | 26.76 LB-FT                      |                         |        |
| <b>Volts</b>                  | 230/460//190/380   |                     | <b>Start Configuration</b>                       | direct on line                   |                         |        |
| <b>Full Load Amps</b>         | 25/12.5//23.2/11.6 |                     | <b>Breakdown Torque</b>                          | 90.02 LB-FT                      |                         |        |
| <b>R.P.M.</b>                 | 1765//1465         |                     | <b>Pull-up Torque</b>                            | 58.13 LB-FT                      |                         |        |
| <b>Hz</b>                     | 60//50             | <b>Phase</b>        | 3  | <b>Locked-rotor Torque</b>       | 64.43 LB-FT             |        |
| <b>NEMA Design Code</b>       | A                  |                     | <b>KVA Code</b>                                  | J                                | <b>Starting Current</b> | 92.9 A |
| <b>Service Factor (S.F.)</b>  | 1                  |                     |  |                                  | <b>No-load Current</b>  | 5.49 A |
| <b>NEMA Nom. Eff.</b>         | 91.7               | <b>Power Factor</b> | 81   | <b>Line-line Res. @ 25°C</b>     | 0.866 Ω                 |        |
| <b>Rating - Duty</b>          | 40C AMB-CONT       |                     |  | <b>Temp. Rise @ Rated Load</b>   | 48°C                    |        |
|                               |                    |                     |  | <b>Locked-rotor Power Factor</b> | 39.2                    |        |
|                               |                    |                     |  | <b>Rotor inertia</b>             | 1.23 lb-ft <sup>2</sup> |        |

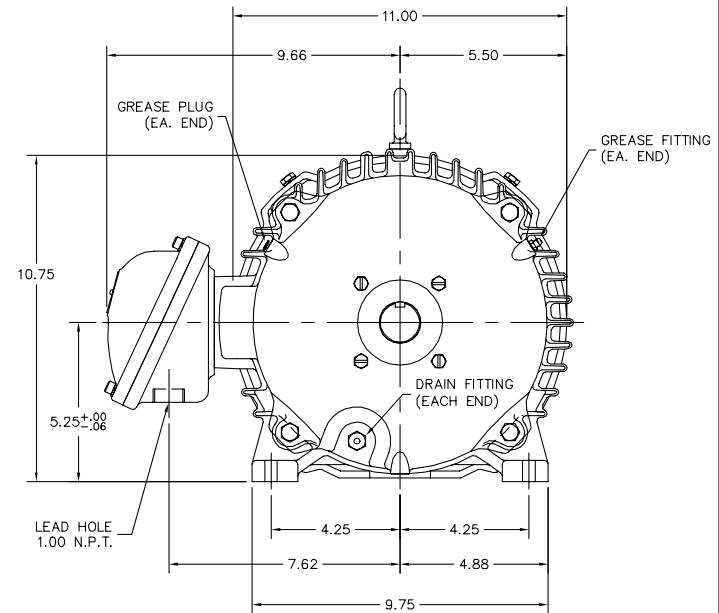
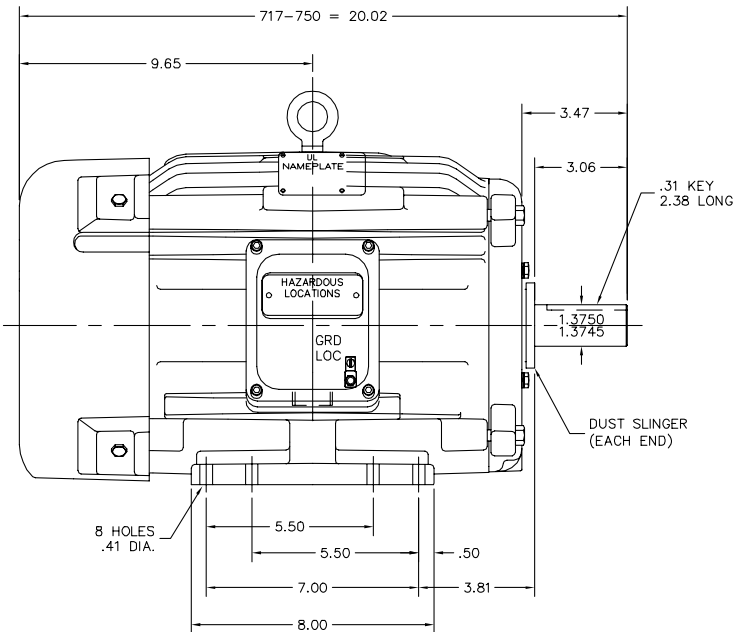
**Load Characteristics 380 V, 50 Hz, 7.5 HP**

| <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>    | 39        | 61        | 74        | 80         | 83         | 85         |
| <b>Efficiency</b>      | 89.3      | 93.2      | 92.2      | 91.8       | 90.8       | 89.6       |
| <b>Speed</b>           | 1491      | 1484      | 1475      | 1468       | 1458       | 1449       |
| <b>Line amperes</b>    | 6.07      | 7.46      | 9.35      | 11.55      | 14.06      | 16.77      |

Performance Graph at 380V, 50Hz, 7.5HP Typical performance - Not guaranteed values



07LY-000-019



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|                      |                              |                   |
|----------------------|------------------------------|-------------------|
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| REV. LTR: -          | REVISED: 08:49:59 02/15/2019 | BY: ENMICWI       |
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| MTL: -               |                              |                   |

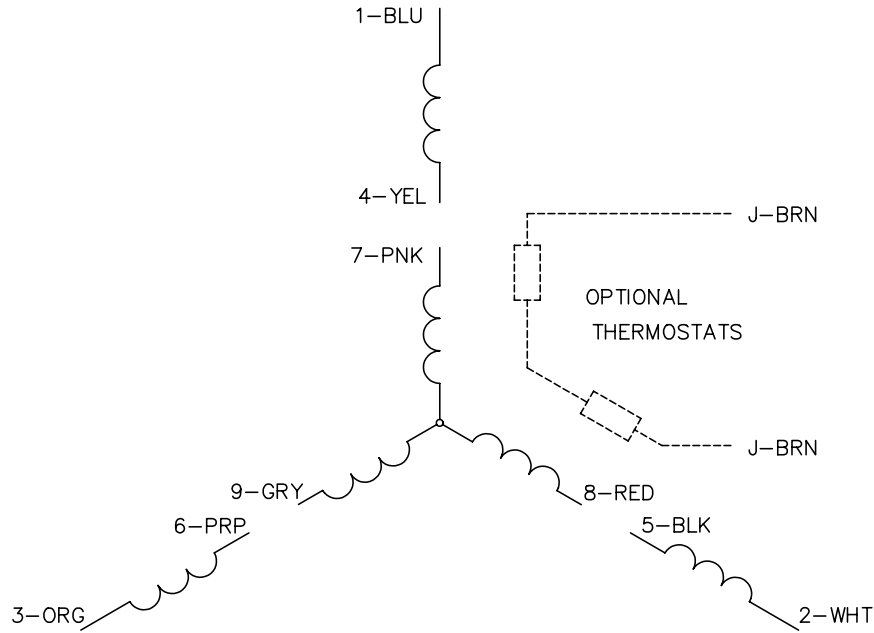
**BALDOR - RELIANCE**®

HOR 213-5T XPFC CLI GP C&D,CLII GP E,F&G,CP FT,GRSR,1.00 NPT

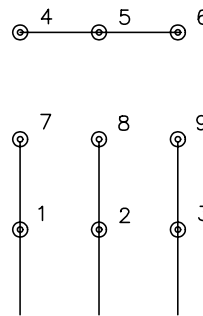
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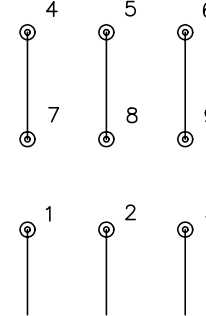


LOW VOLTAGE  
(2Y)



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

90000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

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