

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CCPX25246T**

**20HP, 1770//1470RPM, 3PH, 60HZ, 256TC, XPFC, F**

| Part Detail |    |             |              |             |        |               |            |
|-------------|----|-------------|--------------|-------------|--------|---------------|------------|
| Revision:   | G  | Status:     | PRD/A        | Change #:   |        | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | 09WGT459     | CD Diagram: | CD0180 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 09LY-000-321 | Poles:      | 04     | Created Date: | 04-20-2019 |
| Base:       |    | Eff. Date:  | 06-29-2021   | Leads:      | 9#10   |               |            |

| Specs                           |                           |                                |                           |
|---------------------------------|---------------------------|--------------------------------|---------------------------|
| Catalog Number:                 | CCPX25246T                | Duty Rating:                   | CONT                      |
| Enclosure:                      | XPFC                      | Electrically Isolated Bearing: | Not Electrically Isolated |
| Frame:                          | 256TC                     | Enclosure Modification:        | Severe Duty Features      |
| Frame Material:                 | Iron                      | Feedback Device:               | NO FEEDBACK               |
| Output @ Frequency:             | 20.000 HP @ 60 HZ         | Heater Indicator:              | No Heater                 |
|                                 | 15.000 HP @ 50 HZ         | Insulation Class:              | F                         |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ          | Inverter Code:                 | Inverter Duty             |
| Voltage @ Frequency:            | 190.0 V @ 50 HZ           | IP Rating:                     | IP55                      |
|                                 | 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            |
| XP Class and Group:             | CLI GP C,D; CLII GP E,F,G | Motor Lead Termination:        | Flying Leads              |
| XP Division:                    | Division I                | Motor Type:                    | 0960M                     |
| Agency Approvals:               | UR                        | Mounting Arrangement:          | F1                        |
|                                 | CSA EEV                   | Power Factor:                  | 83                        |
|                                 | CSA                       | Product Family:                | Chemical Process Features |
| Auxillary Box:                  | No Auxillary Box          | Pulley Face Code:              | C-Face                    |
| Auxillary Box Lead Termination: | None                      | Rodent Screen:                 | None                      |

|                                     |                         |                                    |                            |
|-------------------------------------|-------------------------|------------------------------------|----------------------------|
| <b>Base Indicator:</b>              | Rigid                   | <b>RoHS Status:</b>                | ROHS NON-COMPLIANT         |
| <b>Bearing Grease Type:</b>         | Polyrex EM (-20F +300F) | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding         |
| <b>Blower:</b>                      | None                    | <b>Shaft Rotation:</b>             | Reversible                 |
| <b>Constant Torque Speed Range:</b> | 6                       | <b>Speed Code:</b>                 | Single Speed               |
| <b>Current @ Voltage:</b>           | 52.000 A @ 208.0 V      | <b>Motor Standards:</b>            | NEMA                       |
|                                     | 48.000 A @ 230.0 V      | <b>Starting Method:</b>            | Direct on line             |
|                                     | 44.000 A @ 190.0 V      | <b>Thermal Device - Bearing:</b>   | None                       |
|                                     | 24.000 A @ 460.0 V      | <b>Thermal Device - Winding:</b>   | Normally Closed Thermostat |
|                                     | 22.000 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>XP Temp Code:</b>               | T3C                        |

| Nameplate NP2033XPSLEV |                            |  |        |              |  |                     |           |  |          |      |  |
|------------------------|----------------------------|--|--------|--------------|--|---------------------|-----------|--|----------|------|--|
| NO.                    |                            |  |        |              |  | CC                  | 010A      |  |          |      |  |
| S/N                    |                            |  |        |              |  | TEMP CODE           | T3C       |  |          |      |  |
| SPEC.                  | 09-0000-1336               |  |        |              |  | INV.TYPE            | PWM       |  |          |      |  |
| CAT.NO.                | CCPX25246T                 |  |        |              |  | C HP FR             | 60        |  | C HP TO  | 90   |  |
| HP                     | 20//15                     |  |        |              |  | CT HZ FROM          | 6         |  | CT HZ TO | 60   |  |
| VOLTS                  | 230/460//190/380           |  |        |              |  | VT HZ FROM          | 6         |  | VT HZ TO | 60   |  |
| AMPS                   | 48/24//44/22               |  |        |              |  | MAG CUR             | 20.8/10.4 |  |          |      |  |
| RPM                    | 1770//1470                 |  |        |              |  | MX RPM              | 2700      |  |          |      |  |
| HZ                     | 60//50                     |  | PH     | 3            |  | CL                  | F         |  | NOM.EFF. | 93   |  |
| SER.F.                 | 1.00                       |  | DES    | A            |  | SL HZ               | 1         |  | WK2      | 2.62 |  |
| FRAME                  | 256TC                      |  | RATING | 40C AMB-CONT |  |                     |           |  |          |      |  |
| BLANK                  | 55C AMB @ 1.0 SF, 60C RISE |  |        |              |  |                     |           |  |          |      |  |
|                        | 1.15SF ON SINEWAVE         |  |        |              |  | NEMA MG-1 PT.5,IP55 |           |  |          |      |  |
|                        |                            |  |        |              |  |                     |           |  |          |      |  |

| Parts List     |  |          |
|----------------|--|----------|
| Part Number    | Description                              | Quantity |
| SA368654       | SA 09-0000-1336                          | 1.000 EA |
| RA358174       | RA 09-0000-1336                          | 1.000 EA |
| LB1115N        | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| LB1119N        | WARNING LABEL                            | 1.000 EA |
| LC0181         | 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 |
| LB1081Z        | ALUM XP CAUTION LABEL (ZK PLANT ONLY-    | 1.000 EA |
| HW3201A01      | 1/2-13 EYEBOLT                           | 1.000 EA |
| HW1002A63      | WASHER, 5/8 HI-COLLAR SPRLCKWASHER       | 1.000 EA |
| 09FH1004A48P   | FAN COVER, MACH, W/GRSR, RLF & DRN HOLE  | 1.000 EA |
| HW1001A25      | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 3.000 EA |
| 10XN2520K14    | 1/4-20 X .88 HEX GRD 5 (20001)           | 3.000 EA |
| 37FN3002B02    | EXFN, PLASTIC, 7.50 OD, 1.503 ID         | 1.000 EA |
| HW2500A25      | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| MJ1000A02      | GREASE, MOBIL POLYREX EM - 124047        | 0.080 LB |
| 09EP1700A70LP5 | FREP, MACH FOR GROUP C & GROUP E MTRS    | 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 |
| HA2009A39      | SLINGER FOR GROUP E MTRS - 208 BRG.      | 1.000 EA |
| 80XN0632A10    | SET SCREW,#6-32 X .62 LG.HEX SOC. HD.    | 2.000 EA |
| HW5100A08      | W3118-035 WVY WSHR (WB)                  | 1.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| HA4017A03              | .125 X 1.75 GREASE EXT (F/S)             | 1.000 EA |
| HA4017A08              | .125X3.50 GREASER EXTEN.                 | 1.000 EA |
| HW4019A01              | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING | 1.000 EA |
| HA4051A00              | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| HW4500A21              | 1618BALEMITE FITTING 825 UNIVERSAL       | 1.000 EA |
| HW4500A20              | 1/8NPT SL PIPE PLUG                      | 1.000 EA |
| HW4505A02              | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS | 1.000 EA |
| HW3023E06              | .125 X .625 SPIRAL SPRING PIN            | 1.000 EA |
| 09EP1708A56P           | FACE MTD. EP, MACH X-PROOF GP.E W/EPOXY  | 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 |
| HA2009A38              | SLINGER FOR GROUP E MTRS - 309 BRG.      | 1.000 EA |
| 80XN0632A10            | SET SCREW,#6-32 X .62 LG.HEX SOC. HD.    | 2.000 EA |
| 10XN2520K36            | 1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P | 4.000 EA |
| HA4051A00              | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA |
| HW4500A03              | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A20              | 1/8NPT SL PIPE PLUG                      | 1.000 EA |
| HW4505A02              | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS | 1.000 EA |
| HW3023E06              | .125 X .625 SPIRAL SPRING PIN            | 1.000 EA |
| 09CB1003A01P           | KOBX, MACH 1.25 NPT GROUP C MTRS PRIMED  | 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 |
| WD1000B25              | GND LUG, BURNDY L125HP OR T&B L125HP-BB  | 1.000 EA |
| 10XN3118K12            | 5/16-18 X .75 GRADE 5, ZINC PLATED       | 1.000 EA |

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|              |   |          |
|--------------|---|----------|
| HW1001A31    | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 1.000 EA |
| 09CB1502A01P | CONDUIT BOX LID MACH. GROUP C MTRS W/EP   | 1.000 EA |
| 84XN5013J24  | 1/2-13 X 1-1/2 HEX SOCKET HD CAP SCREW    | 6.000 EA |
| HW1001A50    | LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I | 6.000 EA |
| MG1025G29    | WILKOFAS, 789.229, DARK CHARCOAL GRAY     | 0.070 GA |
| 40PA1005     | PACKAGING GROUP, 09 STD                   | 1.000 EA |
| HW2501G25    | KEY, 3/8 SQ X 2.875                       | 1.000 EA |
| MJ5000A09    | EFI KIT #1578 (400 ML CARTRIDGE OF EFI    | 0.031 EA |

**AC Induction Motor Performance Data**

Record # 68068

Typical performance - not guaranteed values

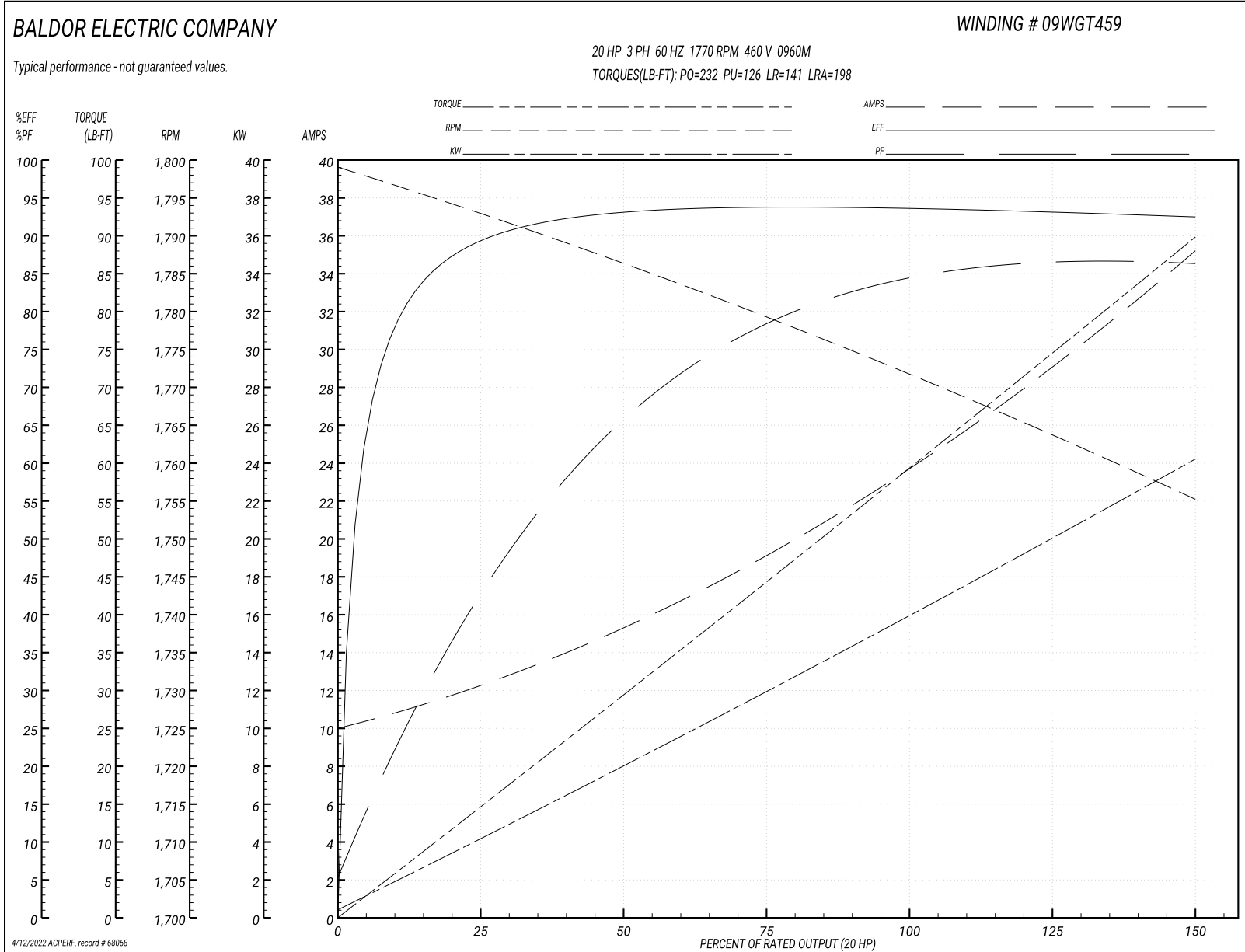
| <b>Winding:</b> 09WGT459-R009 |                        | <b>Type:</b> 0960M         |  | <b>Enclosure:</b> XPFC |  |
|-------------------------------|------------------------|----------------------------|--|------------------------|--|
| <b>Nameplate Data</b>         |                        |                            | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |  |
| <b>Rated Output (HP)</b>      | 20                     | <b>Full Load Torque</b>    | 59.27 LB-FT                                      |                        |  |
| <b>Volts</b>                  | 230/460                | <b>Start Configuration</b> | direct on line                                   |                        |  |
| <b>Full Load Amps</b>         | 48/24                  | <b>Breakdown Torque</b>    | 232 LB-FT  |                        |  |
| <b>R.P.M.</b>                 | 1770                   | <b>Pull-up Torque</b>      | 126 LB-FT  |                        |  |
| <b>Hz</b>                     | 60 <b>Phase</b>        | 3                          | <b>Locked-rotor Torque</b>                       | 141 LB-FT              |  |
| <b>NEMA Design Code</b>       | A <b>KVA Code</b>      | J                          | <b>Starting Current</b>                          | 198 A                  |  |
| <b>Service Factor (S.F.)</b>  |                        | 1                          | <b>No-load Current</b>                           | 10.4 A                 |  |
| <b>NEMA Nom. Eff.</b>         | 93 <b>Power Factor</b> | 83                         | <b>Line-line Res. @ 25°C</b>                     | 0.33814 Ω              |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT           |                            | <b>Temp. Rise @ Rated Load</b>                   | 58°C                   |  |
|                               |                        |                            | <b>Locked-rotor Power Factor</b>                 | 26.5                   |  |

**Load Characteristics 460 V, 60 Hz, 20 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>    | 45        | 67        | 78        | 83         | 86         | 87         |
| <b>Efficiency</b>      | 89.2      | 93        | 93.7      | 93.6       | 93.1       | 92.4       |
| <b>Speed</b>           | 1793.2    | 1786.4    | 1779.1    | 1771.9     | 1763.7     | 1755.3     |
| <b>Line amperes</b>    | 11.8      | 15        | 19.2      | 24         | 29.3       | 34.9       |



Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 75710

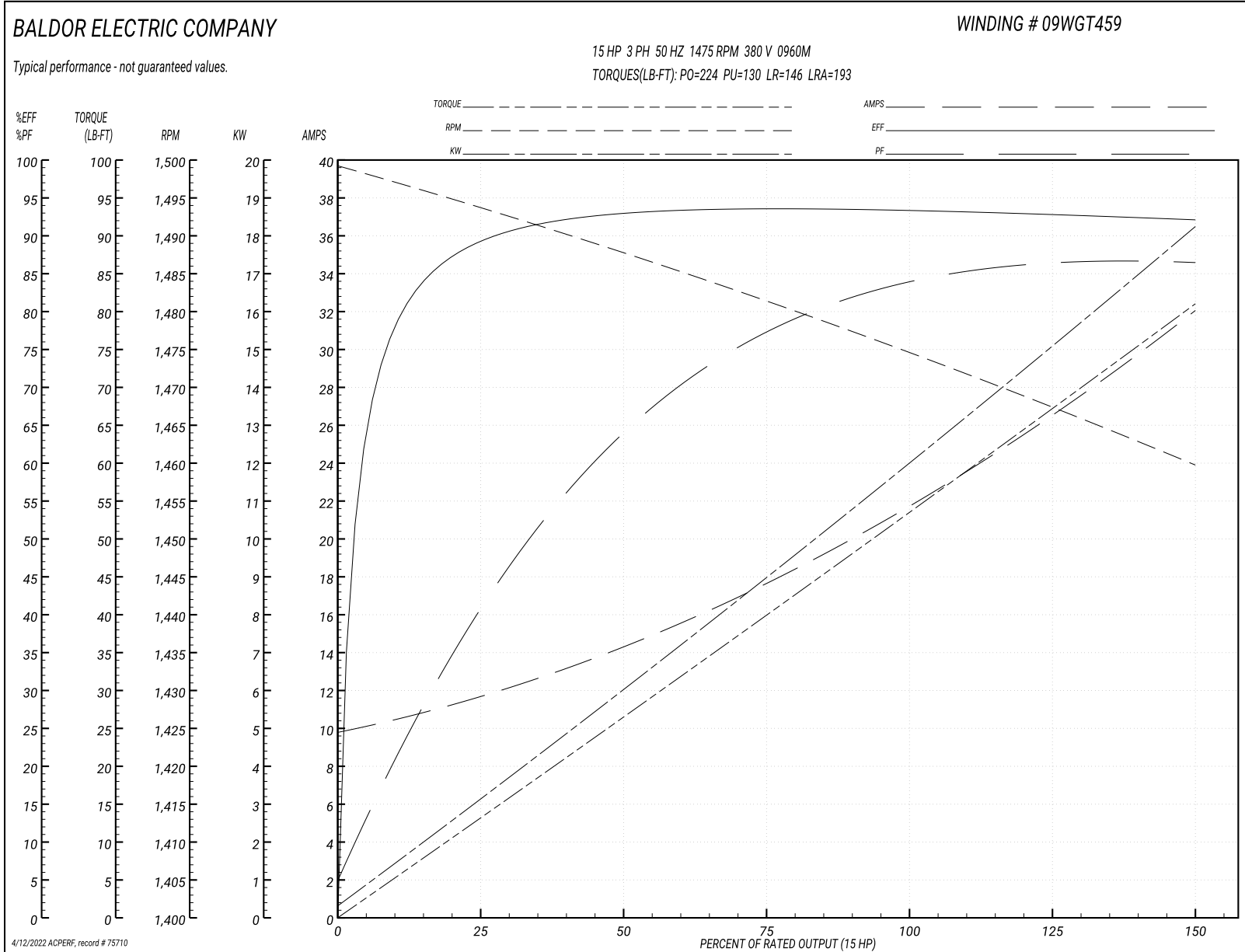
Typical performance - not guaranteed values

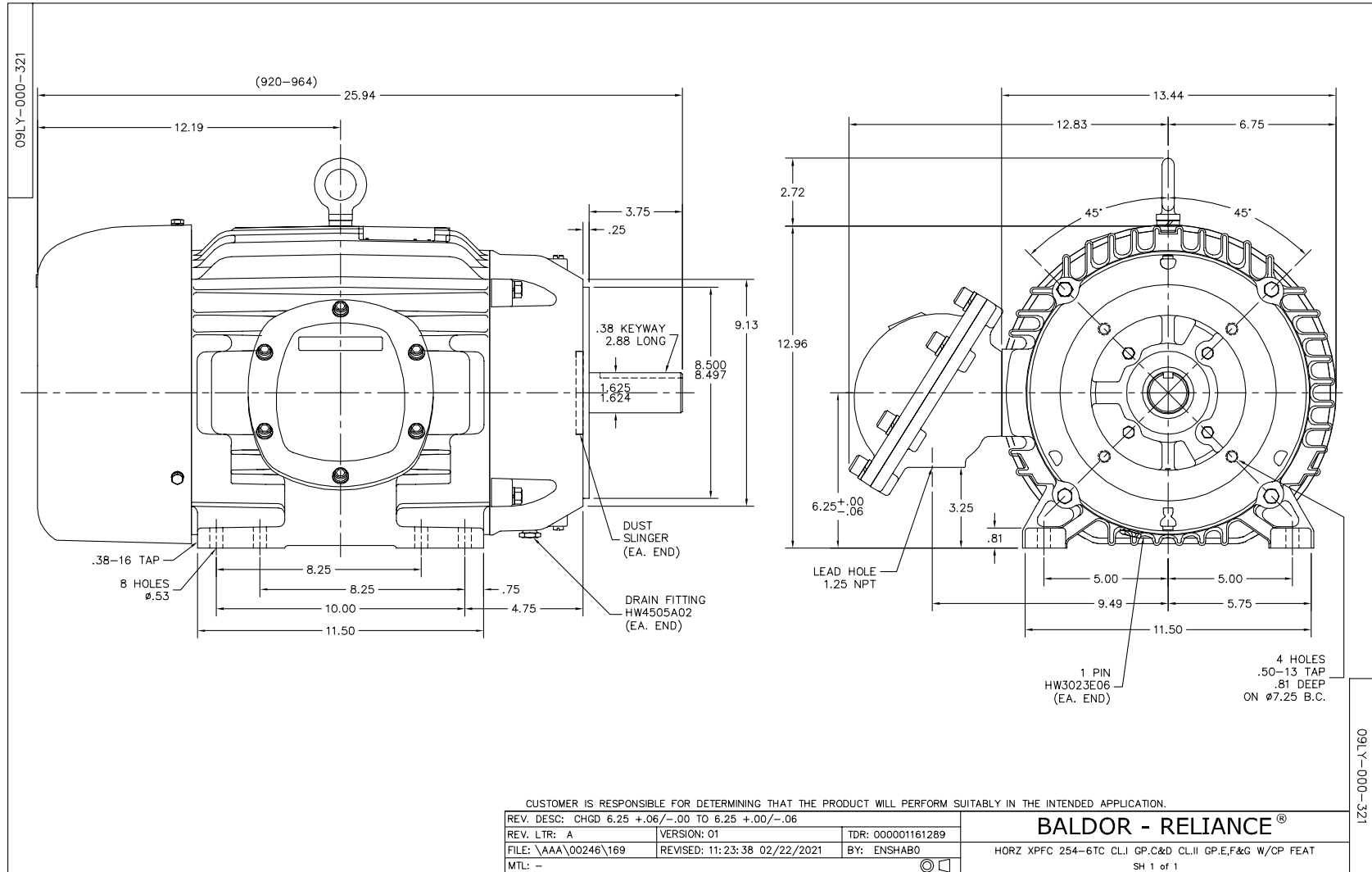
| <b>Winding: 09WGT459-R033</b> |                  | <b>Type: 0960M</b>  |  | <b>Enclosure: XPFC</b>       |           |
|-------------------------------|------------------|---------------------|--|------------------------------|-----------|
| <b>Nameplate Data</b>         |                  |                     | <b>380 V, 50 Hz:<br/>High Voltage Connection</b> |                              |           |
| <b>Rated Output (HP)</b>      | 20//15           |                     | <b>Full Load Torque</b>                          | 53.39 LB-FT                  |           |
| <b>Volts</b>                  | 230/460//190/380 |                     | <b>Start Configuration</b>                       | direct on line               |           |
| <b>Full Load Amps</b>         | 48/24//44/22     |                     | <b>Breakdown Torque</b>                          | 224 LB-FT                    |           |
| <b>R.P.M.</b>                 | 1770//1470       |                     | <b>Pull-up Torque</b>                            | 130 LB-FT                    |           |
| <b>Hz</b>                     | 60//50           | <b>Phase</b>        | 3  | <b>Locked-rotor Torque</b>   | 146 LB-FT |
| <b>NEMA Design Code</b>       | A                | <b>KVA Code</b>     | J  | <b>Starting Current</b>      | 193 A     |
| <b>Service Factor (S.F.)</b>  | 1                |                     | <b>No-load Current</b>                           | 10.15 A                      |           |
| <b>NEMA Nom. Eff.</b>         | 93               | <b>Power Factor</b> | 83   | <b>Line-line Res. @ 25°C</b> | 0.332 Ω   |
| <b>Rating - Duty</b>          | 40C AMB-CONT     |                     | <b>Temp. Rise @ Rated Load</b>                   | 50°C                         |           |
| <b>S.F. Amps</b>              |                  |                     | <b>Temp. Rise @ S.F. Load</b>                    | 60°C                         |           |
|                               |                  |                     | <b>Locked-rotor Power Factor</b>                 | 29.8                         |           |
|                               |                  |                     | <b>Rotor inertia</b>                             | 2.65 LB-FT <sup>2</sup>      |           |

**Load Characteristics 380 V, 50 Hz, 15 HP**

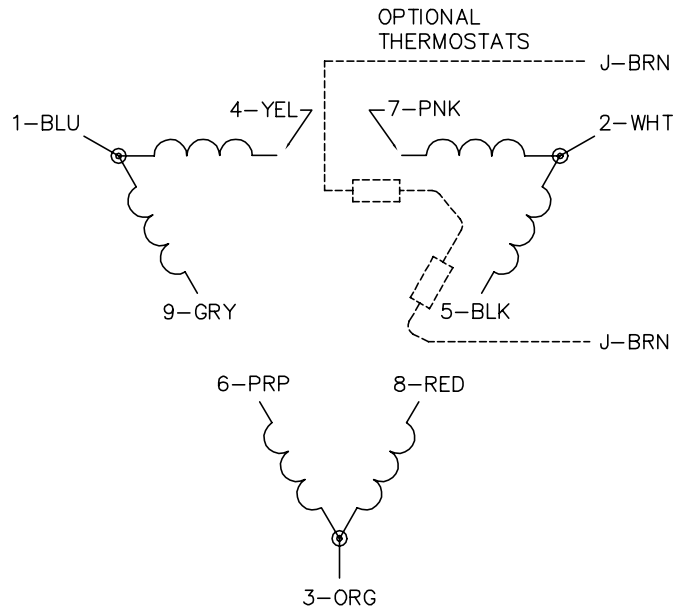
| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|
| <b>Power Factor</b>    | 43        | 65        | 77        | 83         | 85         | 87         |
| <b>Efficiency</b>      | 89.1      | 92.8      | 93.5      | 93.4       | 92.8       | 92.1       |
| <b>Speed</b>           | 1494      | 1488      | 1481      | 1475       | 1467       | 1460       |
| <b>Line amperes</b>    | 11.28     | 14        | 17.72     | 21.99      | 26.74      | 31.76      |

Performance Graph at 380V, 50Hz, 15.0HP Typical performance - Not guaranteed values

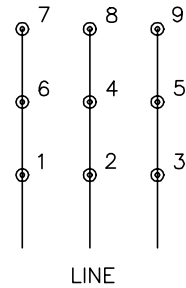




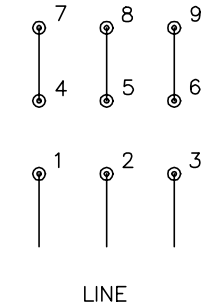
CD0180



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

|                                   |                              |                   |
|-----------------------------------|------------------------------|-------------------|
| 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: -                            | © □                          |                   |

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

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