

# ABB BALDOR RELIANCE III

---

## Customer information packet

### CCPX282526T

25HP, 3520//2925RPM, 3PH, 60HZ, 284TSCY, XPFC

Class - CLI GP C,D; CLII GP E,F,G

Division - Division I

**Specifications**

|                                       |                                                                                      |
|---------------------------------------|--------------------------------------------------------------------------------------|
| <b>Enclosure</b>                      | XPFC                                                                                 |
| <b>Frame</b>                          | 284TSCY                                                                              |
| <b>Frame Material</b>                 | Iron                                                                                 |
| <b>Frequency</b>                      | 60.00 Hz                                                                             |
| <b>Haz Area Class and Group</b>       | CLI GP C,D; CLII GP E,F,G                                                            |
| <b>Haz Area Division</b>              | Division I                                                                           |
| <b>Motor Letter Type</b>              | Three Phase                                                                          |
| <b>Output @ Frequency</b>             | 20.000 HP @ 50 HZ<br>25.000 HP @ 60 HZ                                               |
| <b>Phase</b>                          | 3                                                                                    |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                                                                     |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>190.0 V @ 50 HZ<br>460.0 V @ 60 HZ<br>380.0 V @ 50 HZ             |
| <b>Agency Approvals</b>               | UL<br>CSA EEV                                                                        |
| <b>Ambient Temperature</b>            | 40 °C                                                                                |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                                                     |
| <b>Auxiliary Box Lead Termination</b> | None                                                                                 |
| <b>Base Indicator</b>                 | Rigid                                                                                |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                                              |
| <b>Blower</b>                         | None                                                                                 |
| <b>Constant Torque Speed Range</b>    | 6                                                                                    |
| <b>Current @ Voltage</b>              | 56.000 A @ 230.0 V<br>54.000 A @ 190.0 V<br>28.000 A @ 460.0 V<br>27.000 A @ 380.0 V |
| <b>Design Code</b>                    | B                                                                                    |
| <b>Drip Cover</b>                     | No Drip Cover                                                                        |
| <b>Duty Rating</b>                    | CONT                                                                                 |
| <b>Efficiency @ 100% Load</b>         | 91.7 %                                                                               |

**Part Detail**

|                     |              |
|---------------------|--------------|
| <b>Revision</b>     | K            |
| <b>Type</b>         | AC           |
| <b>Mech. spec.</b>  |              |
| <b>Base</b>         |              |
| <b>Status</b>       | PRD/A        |
| <b>Elec. spec.</b>  | 10WGZ273     |
| <b>Layout</b>       | 10LY-000-521 |
| <b>Eff. date</b>    | 11-22-2024   |
| <b>CD Diagram</b>   | CD0180       |
| <b>Poles</b>        | 02           |
| <b>Leads</b>        | 9#10         |
| <b>Proprietary</b>  | False        |
| <b>Created date</b> | 04-29-2019   |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Electrically Isolated Bearing</b> | Not Electrically Isolated  |
| <b>Enclosure Modification</b>        | Severe Duty Features       |
| <b>Feedback Device</b>               | NO FEEDBACK                |
| <b>Haz Area Temp Code</b>            | T3C                        |
| <b>Heater Indicator</b>              | No Heater                  |
| <b>High Voltage Full Load Amps</b>   | 27.0 a                     |
| <b>Insulation Class</b>              | F                          |
| <b>Inverter Code</b>                 | Inverter Duty              |
| <b>IP Rating</b>                     | IP55                       |
| <b>KVA Code</b>                      | F                          |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs      |
| <b>Locked Bearing Indicator</b>      | Locked Bearing             |
| <b>Max Speed</b>                     | 5400 rpm                   |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 1048M                      |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 2                          |
| <b>Overall Length</b>                | 27.24 IN                   |
| <b>Power Factor</b>                  | 90                         |
| <b>Product Family</b>                | Chemical Process Features  |
| <b>Pulley Face Code</b>              | C-Face                     |
| <b>Rodent Screen</b>                 | None                       |
| <b>RoHS Status</b>                   | ROHS NON-COMPLIANT         |
| <b>Service Factor</b>                | 1.00                       |
| <b>Shaft Diameter</b>                | 1.625 IN                   |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Speed</b>                         | 3520 rpm                   |
| <b>Speed Code</b>                    | Single Speed               |
| <b>Starting Method</b>               | Direct on line             |
| <b>Thermal Device - Bearing</b>      | None                       |
| <b>Thermal Device - Winding</b>      | Normally Closed Thermostat |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor        |



|                   |      |
|-------------------|------|
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

**Nameplate**

| NP2033XPSLEV |                            |        |   |              |                     |            |      |          |    |  |  |
|--------------|----------------------------|--------|---|--------------|---------------------|------------|------|----------|----|--|--|
| NO.          |                            |        |   |              |                     | CC         | 010A |          |    |  |  |
| S/N          |                            |        |   |              |                     | TEMP CODE  |      | T3C      |    |  |  |
| SPEC.        | 10-0000-0735               |        |   |              |                     | INV.TYPE   |      | PWM      |    |  |  |
| CAT.NO.      | CCPX282526T                |        |   |              |                     | C HP FR    | 60   | C HP TO  | 90 |  |  |
| HP           | 25//20                     |        |   |              |                     | CT HZ FROM | 6    | CT HZ TO | 60 |  |  |
| VOLTS        | 230/460//190/380           |        |   |              |                     | VT HZ FROM | 6    | VT HZ TO | 60 |  |  |
| AMPS         | 56/28//54/27               |        |   |              | MAG CUR             | 14/7       |      |          |    |  |  |
| RPM          | 3520//2925                 |        |   |              | MX RPM              | 5400       |      |          |    |  |  |
| HZ           | 60//50                     | PH     | 3 | CL           | F                   | NOM.EFF.   | 91.7 |          |    |  |  |
| SER.F.       | 1.00                       | DES    | B | SL HZ        | 1.3                 | WK2        | 2.07 |          |    |  |  |
| FRAME        | 284TSCY                    | RATING |   | 40C AMB-CONT |                     |            |      |          |    |  |  |
| BLANK        | 55C AMB @ 1.0 SF, 60C RISE |        |   |              |                     |            |      |          |    |  |  |
|              | 1.15SF ON SINEWAVE         |        |   |              | NEMA MG-1 PT.5,IP55 |            |      |          |    |  |  |

**AC Induction Motor Performance Data**

Record # 66217

Typical performance - not guaranteed values

| Winding: 10WGZ273-R010 |  |         |  | Type: 1048M                           |  | Enclosure: XPFC           |  |
|------------------------|--|---------|--|---------------------------------------|--|---------------------------|--|
| Nameplate Data         |  |         |  | 460 V, 60 Hz:<br>Single Voltage Motor |  |                           |  |
| Rated Output (HP)      |  | 25      |  | Full Load Torque                      |  | 37.3 LB-FT                |  |
| Volts                  |  | 230/460 |  | Start Configuration                   |  | direct on line            |  |
| Full Load Amps         |  | 56/28   |  | Breakdown Torque                      |  | 103 LB-FT                 |  |
| R.P.M.                 |  | 3520    |  | Pull-up Torque                        |  | 42.1 LB-FT                |  |
| Hz                     |  | 60      |  | Phase                                 |  | 3                         |  |
| NEMA Design Code       |  | B       |  | KVA Code                              |  | F                         |  |
| Service Factor (S.F.)  |  | 1       |  | No-load Current                       |  | 6.99 A                    |  |
| NEMA Nom. Eff.         |  | 91.7    |  | Power Factor                          |  | 90                        |  |
| Rating - Duty          |  | 40C     |  | AMB-CONT                              |  | Temp. Rise @ Rated Load   |  |
|                        |  |         |  |                                       |  | 57°C                      |  |
|                        |  |         |  |                                       |  | Locked-rotor Power Factor |  |
|                        |  |         |  |                                       |  | 23.3                      |  |
|                        |  |         |  |                                       |  | Rotor inertia             |  |
|                        |  |         |  |                                       |  | 2.06 LB-FT2               |  |

**Load Characteristics 460 V, 60 Hz, 25 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125  | 150    |
|-----------------|--------|--------|--------|--------|------|--------|
| Power Factor    | 69     | 83     | 89     | 90     | 90   | 90     |
| Efficiency      | 87.8   | 91.6   | 92.2   | 91.8   | 90.9 | 89.7   |
| Speed           | 3580.1 | 3563.2 | 3542.7 | 3521.3 | 3497 | 3469.9 |
| Line amperes    | 10.1   | 15.4   | 21.7   | 28.3   | 35.7 | 43.5   |

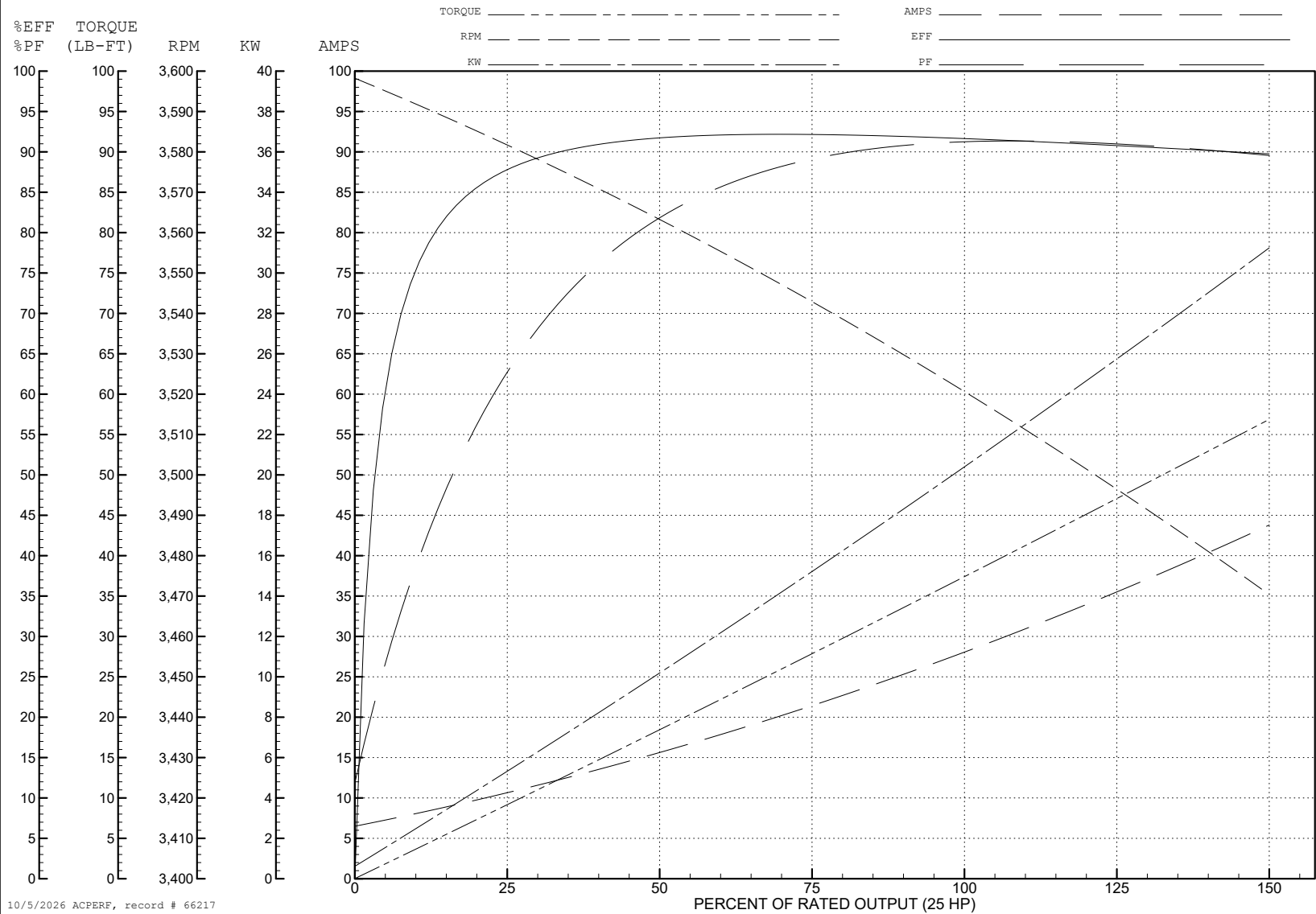
ABB Motors and Mechanical Inc.

WINDING # 10WGZ273

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 3520 RPM 460 V 1048M

TORQUES (LB-FT): PO=103 PU=42.1 LR=54 LRA=171



**AC Induction Motor Performance Data**

Record # 75690

Typical performance - not guaranteed values

| Winding: 10WGZ273-R006 |        |                  |              | Type: 1048M                              |                       | Enclosure: XPFC         |         |
|------------------------|--------|------------------|--------------|------------------------------------------|-----------------------|-------------------------|---------|
| Nameplate Data         |        |                  |              | 380 V, 50 Hz:<br>High Voltage Connection |                       |                         |         |
| Rated Output (HP)      |        | 25//20           |              | Full Load Torque                         |                       | 35.93 LB-FT             |         |
| Volts                  |        | 230/460//190/380 |              | Start Configuration                      |                       | direct on line          |         |
| Full Load Amps         |        | 56/28//54/27     |              | Breakdown Torque                         |                       | 100 LB-FT               |         |
| R.P.M.                 |        | 3520//2955       |              | Pull-up Torque                           |                       | 44.79 LB-FT             |         |
| Hz                     | 60//50 | Phase            | 3            | Locked-rotor Torque                      |                       | 57.45 LB-FT             |         |
| NEMA Design Code       |        | B                | KVA Code     | F                                        | Starting Current      |                         | 168 A   |
| Service Factor (S.F.)  |        | 1                |              | No-load Current                          |                       | 6.91 A                  |         |
| NEMA Nom. Eff.         |        | 91.7             | Power Factor | 90                                       | Line-line Res. @ 25°C |                         | 0.295 Ω |
| Rating - Duty          |        | 40C AMB-CONT     |              | Temp. Rise @ Rated Load                  |                       | 55°C                    |         |
| S.F. Amps              |        |                  |              | Temp. Rise @ S.F. Load                   |                       | 69°C                    |         |
|                        |        |                  |              | Locked-rotor Power Factor                |                       | 26.3                    |         |
|                        |        |                  |              | Rotor inertia                            |                       | 2.06 LB-FT <sup>2</sup> |         |

**Load Characteristics 380 V, 50 Hz, 20 HP**

| % of Rated Load | 25   | 50    | 75    | 100   | 125   | 150   |
|-----------------|------|-------|-------|-------|-------|-------|
| Power Factor    | 67   | 82    | 88    | 90    | 90    | 90    |
| Efficiency      | 88.7 | 92    | 92.2  | 91.5  | 90.4  | 89    |
| Speed           | 2982 | 2966  | 2946  | 2926  | 2904  | 2878  |
| Line amperes    | 9.81 | 14.92 | 21.05 | 27.48 | 34.66 | 42.37 |

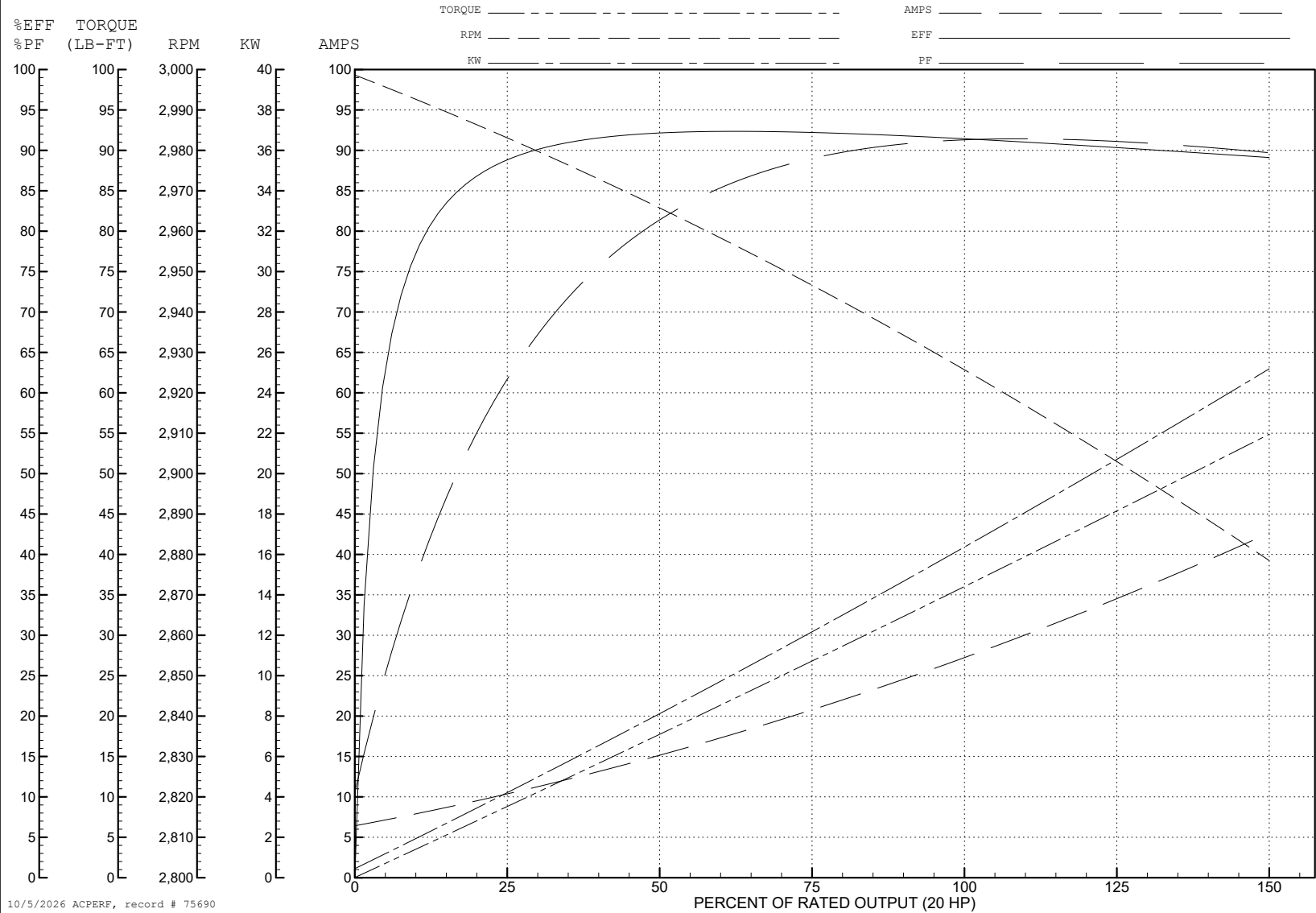
ABB Motors and Mechanical Inc.

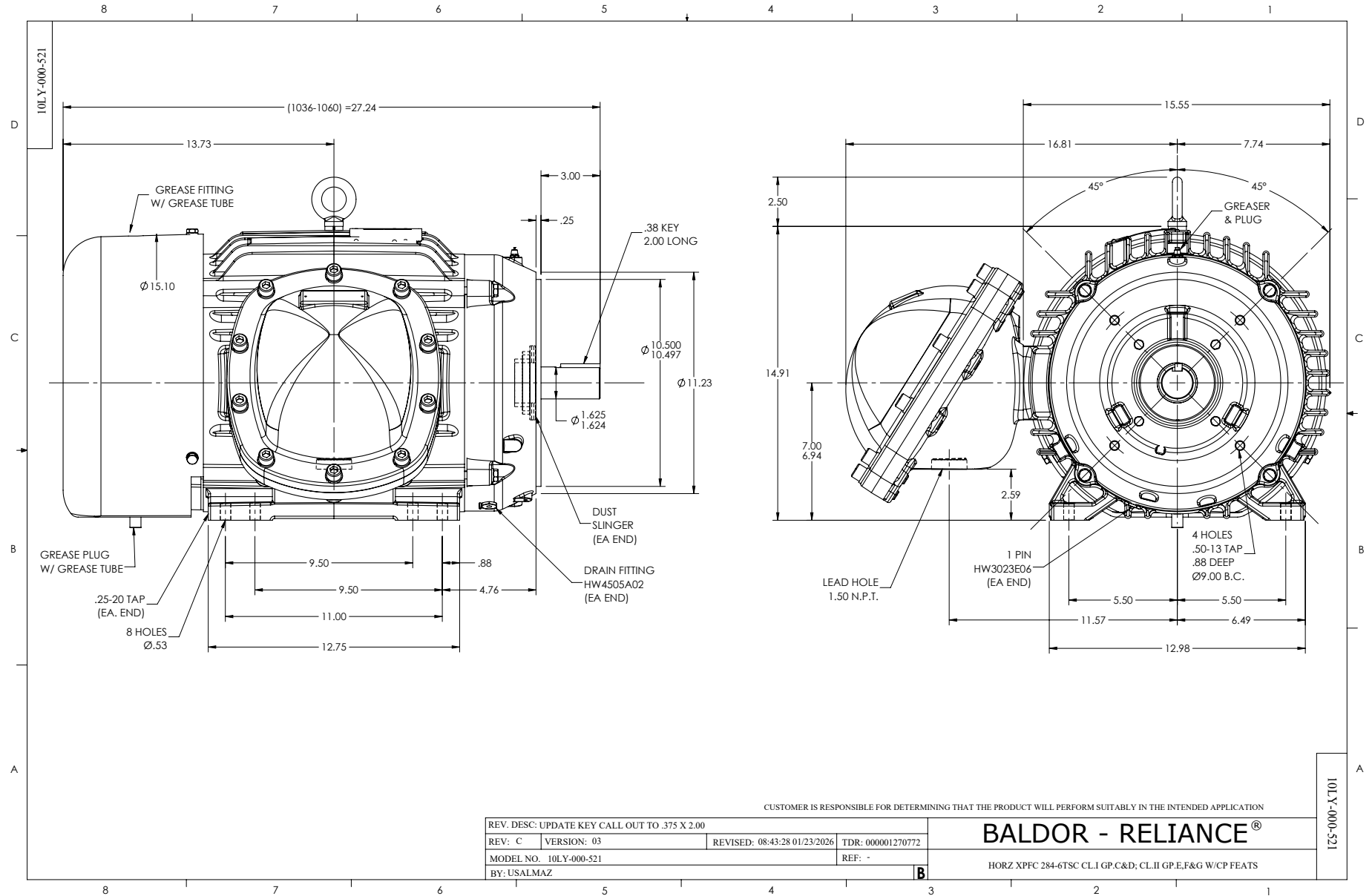
WINDING # 10WGZ273

Typical performance - not guaranteed values.

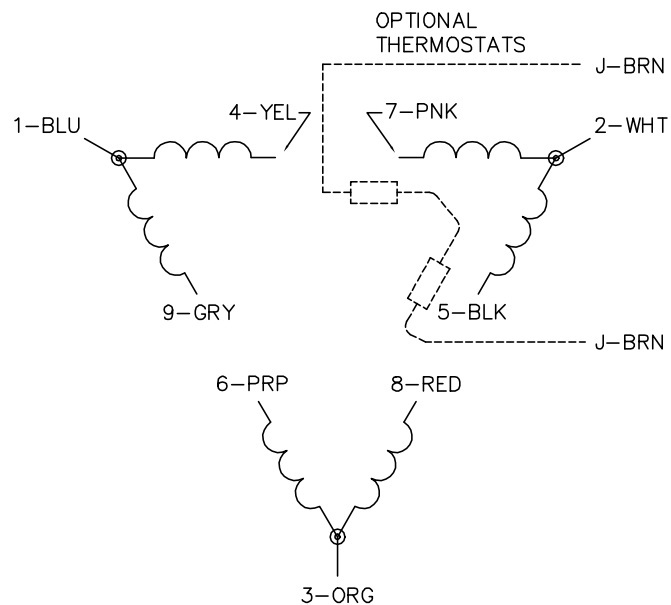
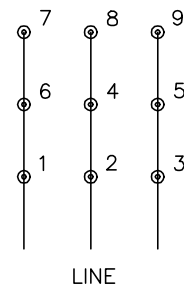
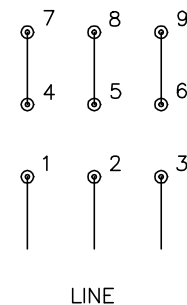
20 HP 3 PH 50 HZ 2926 RPM 380 V 1048M

TORQUES (LB-FT): PO=100 PU=44.79 LR=57.45 LRA=168





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.

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

CD0180