

**NEMA**

**Model DPA0206D-TC**  
MFG PN: TDA 286T20U6B

# Model DPA0206D-TC

## Product Data Package



| MODEL       | HP | RPM  | VOLTAGE | PHASE | Hz | FRAME | MOUNT          | ENCLOSURE |
|-------------|----|------|---------|-------|----|-------|----------------|-----------|
| DPA0206D-TC | 20 | 1180 | 230/460 | 3     | 60 | 286TC | Rigid/C-Flange | ODP       |

### Toronto

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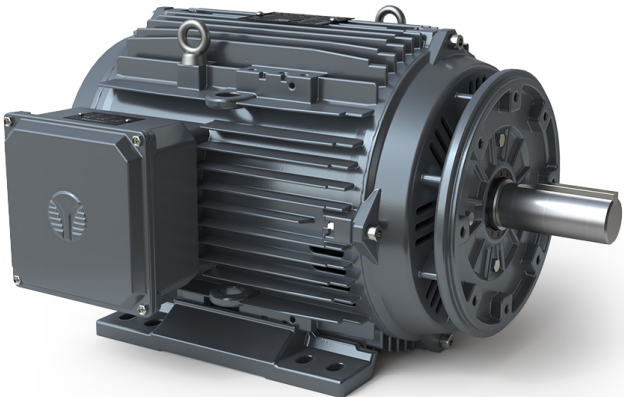
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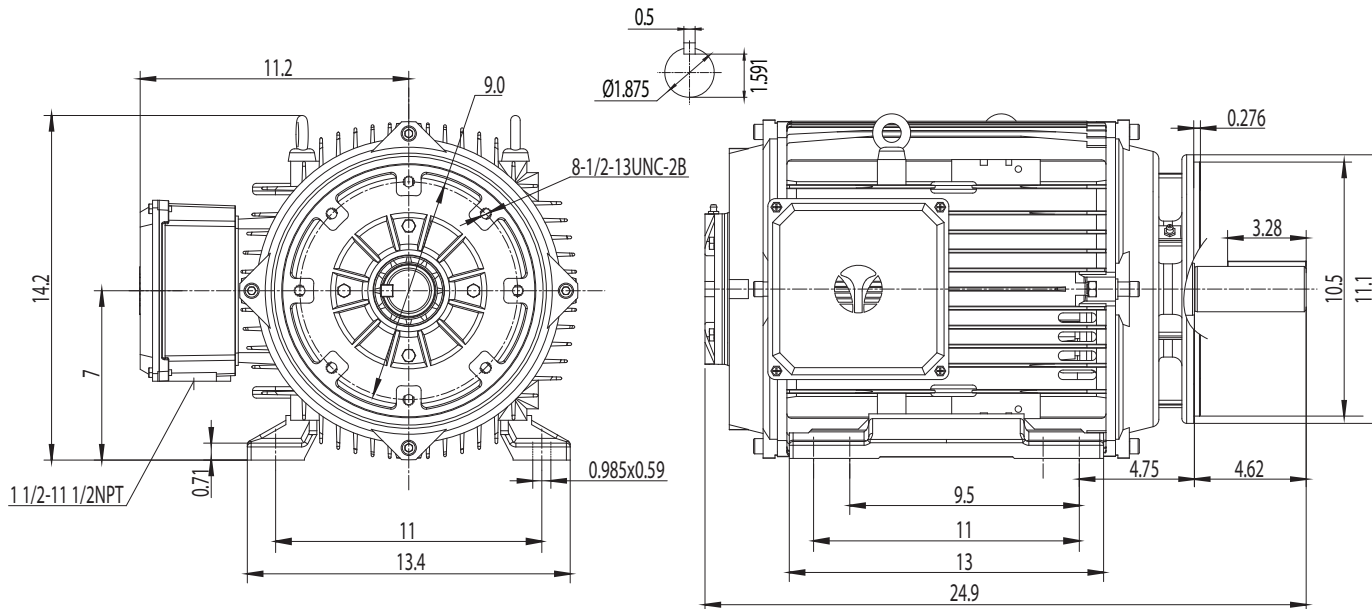
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 MFG PN: TDA 286T20U6B

| ELECTRICAL DATA                     |             |                            |
|-------------------------------------|-------------|----------------------------|
| Rated Motor Output Power            | 20          | HP                         |
|                                     | 15          | kW                         |
| Rated Motor Speed                   | 1180        | r/min 60Hz                 |
|                                     | 970         | r/min 50Hz                 |
| Rated Motor Voltage (+/-10%)        | 230/460     | V/60Hz                     |
|                                     | -           | V/50Hz                     |
| Rated Motor Current                 | 51.97/25.99 | A (I <sub>n</sub> ) @ 60Hz |
|                                     | 59.8/29.9   | A (I <sub>n</sub> ) @ 50Hz |
| Phase                               | 3           | Ø                          |
| Locked Rotor Current @ High Voltage | 230.8       | A (I <sub>n</sub> ) @ 60Hz |
| FI Current @ 208V                   | 57.47       | A (I <sub>n</sub> ) @ 60Hz |
| Service Factor                      | 1.25        | @ 60Hz                     |
|                                     | 1           | @ 50Hz                     |
| KVA Code                            | K           | 60Hz                       |
|                                     | H           | 50Hz                       |
| Nominal Efficiency                  | 92.4        | % @ 60Hz                   |
| Nominal Power Factor                | 0.78        | cosΦ @ 60Hz                |
| Leads (Qty, Size)                   | 12          | 12                         |
| Connection                          | DD/D        | —                          |
| Coil Resistance                     | -           | Ω                          |
| Start Capacitor                     | -           | µF/V                       |
| Run Capacitor                       | -           | µF/V                       |
| VFD DUTY (S.F. 1.0)                 | RATIO       | Hz                         |
| Variable Torque                     | 30:1        | 2 - 60                     |
| Constant Torque                     | 15:1        | 4 - 60                     |
| FULL LOAD TEMPERATURE RISE          |             |                            |
| Full Load Temperature Rise          | 59.7        | °C @ 60Hz                  |
|                                     | -           | °C @ 50Hz                  |

| GENERAL DATA                        |                  |       |
|-------------------------------------|------------------|-------|
| Frame Size                          | 286TC            |       |
| Enclosure                           | ODP              |       |
| Mounting                            | Rigid/C-Flange   |       |
| Approximate Weight (lbs.)           | 322 lbs.         |       |
| Casing Material / Fan Cover         | Cast Aluminum    | Steel |
| Shaft Material                      | 1045             |       |
| NEMA Design                         | B                |       |
| Degree of Protection (IP)           | 23               |       |
| Insulation Class / Temp Rise (60Hz) | F                | B     |
| Tropicalization                     | YES              |       |
| Duty                                | Cont. / S1       |       |
| Conduit Box Location                | F1               |       |
| Feet Removable / Double Drilled     | YES              | YES   |
| Paintwork                           | 7024             |       |
|                                     | Graphite Gray    |       |
| MECHANICAL DATA                     |                  |       |
| Bearing DE Side                     | 6311 C3          |       |
| Bearing ODE Side                    | 6311 C3          |       |
| Grease Type                         | Mobil Polyrex EM |       |
| Compensation Ring (wavy washer)     | NDE              |       |
| Moment of Inertia (lb-ft²)          | -                |       |
| Sound Pressure @ 3 FT dBA           | -                |       |
| SITE CONDITIONS                     |                  |       |
| Ambient Temperature (°C)            | 40               |       |
| Meters Above Sea Level (MASL)       | 1000             |       |
| HAZARDOUS LOCATIONS                 |                  |       |
| CSA Certified                       | -                |       |
| Temperature Code                    | -                | -     |

Questions? Call 1.888.286.1820

MFG PN: TDA 286T20U6B



| NAMEPLATE DATA             | 60Hz        | 50Hz      |
|----------------------------|-------------|-----------|
| Horse Power                | 20          | 20        |
| RPM                        | 1180        | 970       |
| Voltage                    | 230/460     | -         |
| Full Load Amps             | 51.97/25.99 | 59.8/29.9 |
| Service Factor             | 1.25        | 1         |
| KVA Code                   | K           | H         |
| Full Load Amps (208V)      | 57.47       | -         |
| Nominal Efficiency         | 92.4        | 89.2      |
| Nominal Power Factor       | 0.78        | 0.85      |
| Design                     | B           |           |
| Frame                      | 286TC       |           |
| Enclosure Type             | ODP         |           |
| IP Rating                  | 23          |           |
| Duty                       | Cont. / S1  |           |
| Insulation Class           | F           |           |
| Ambient Rating             | 40          |           |
| Drive End Bearing          | 6311 C3     |           |
| Opposite Drive End Bearing | 6311 C3     |           |
| Weight (lbs)               | 322         |           |



# TECHTOP

## INDUSTRIAL THREE PHASE MOTOR

### INVERTER DUTY 15:1 CT 30:1 VT - 1.0 SF

|                 |  |                  |  |
|-----------------|--|------------------|--|
| <b>MODEL</b>    |  | <b>MFG PN</b>    |  |
|                 |  | <b>MFG DATE</b>  |  |
|                 |  | <b>SER #</b>     |  |
| <b>HP</b>       |  | <b>DESIGN</b>    |  |
| <b>RPM</b>      |  | <b>FRAME</b>     |  |
| <b>VOLT</b>     |  | <b>ENCL / IP</b> |  |
| <b>FLA</b>      |  | <b>DUTY</b>      |  |
| <b>SF</b>       |  | <b>INS CL</b>    |  |
| <b>KVA CODE</b> |  | <b>AMB</b>       |  |
| <b>NOM.EFF</b>  |  | <b>DE</b>        |  |
| <b>EFF 75%</b>  |  | <b>ODE</b>       |  |
| <b>PF</b>       |  | <b>WEIGHT</b>    |  |
| <b>USABLE</b>   |  |                  |  |
| <b>AT 208V</b>  |  |                  |  |



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IEC

| VFD DUTY (S.F. 1.0) | RATIO | Hz*    |
|---------------------|-------|--------|
| Variable Torque     | 30:1  | 2 - 60 |
| Constant Torque     | 15:1  | 4 - 60 |

\*For max speed please contact Techtop Canada

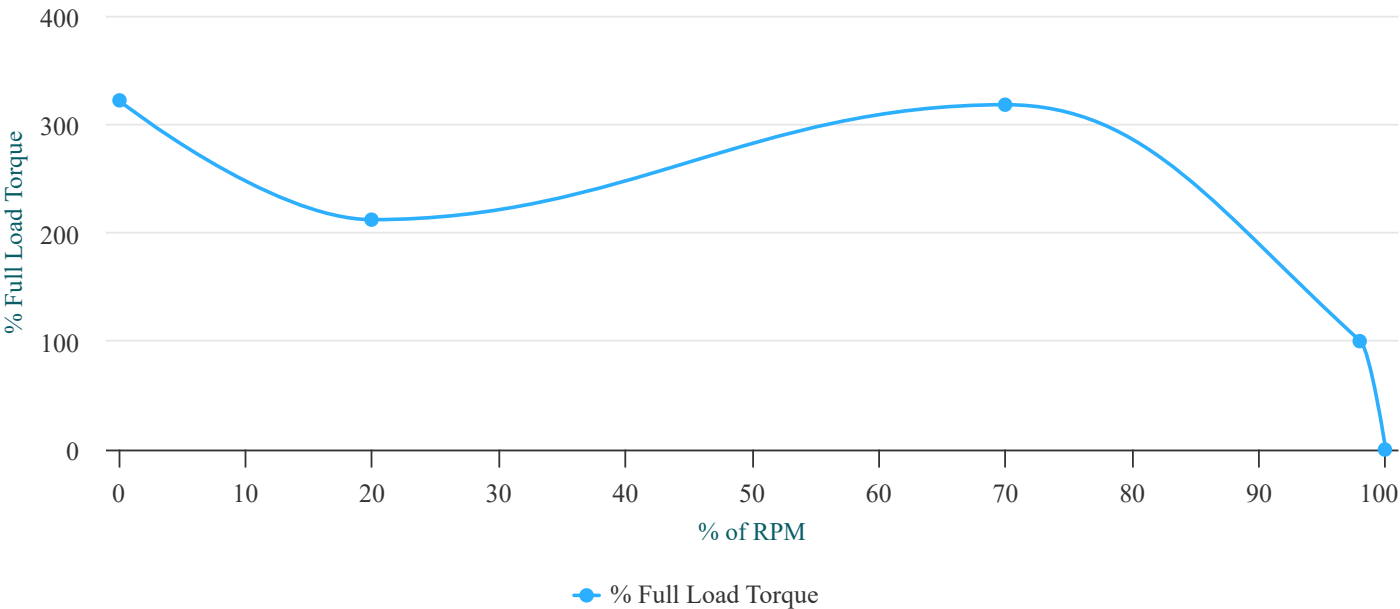
|                     |   |
|---------------------|---|
| HAZARDOUS LOCATIONS | - |
| Class / Division    | - |
| Groups              | - |

**Questions? Call 1.888.286.1820**

**NEMA**

**Model DPA0206D-TC**  
MFG PN: TDA 286T20U6B

**Torque Speed (T-n) Curve**



**PERFORMANCE LOAD VALUES, HIGH VOLTAGE, 60Hz**

| TORQUE VALUES       | TORQUE (lb-ft) | TORQUE (% FULL LOAD) | PERFORMANCE VALUES   |       |
|---------------------|----------------|----------------------|----------------------|-------|
| Locked Rotor Torque | 89.1           | 322                  | Start Configuration  | DOL   |
| Pull-Up Torque      | 188.8          | 212                  | Starting Current (A) | 230.8 |
| Breakdown Torque    | 283.2          | 318                  | No-Load Current (A)  | 14.7  |
| Full Load Torque    | 286.8          | 100                  | No-Load Power Factor | -     |

**TYPICAL PERFORMANCE - NOT GUARANTEED VALUES**

| % OF RATED LOAD     | 25   | 50   | 75    | 100   | 125   | S.F. 1.25 |
|---------------------|------|------|-------|-------|-------|-----------|
| Line Amperes (A)    | 15.7 | 18.4 | 22.3  | 26.9  | 32.3  | 32.3      |
| Efficiency (%)      | 84.5 | 90.1 | 91.4  | 91.4  | 90.8  | 90.8      |
| Speed (r/min)       | 1196 | 1193 | 1189  | 1185  | 1181  | 1181      |
| Power Factor (cosΦ) | 0.35 | 0.57 | 0.69  | 0.76  | 0.8   | 0.8       |
| Input Power (kW)    | 4.44 | 8.33 | 12.31 | 16.42 | 20.64 | 20.64     |

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HIGH VOLTAGE  
(Δ)



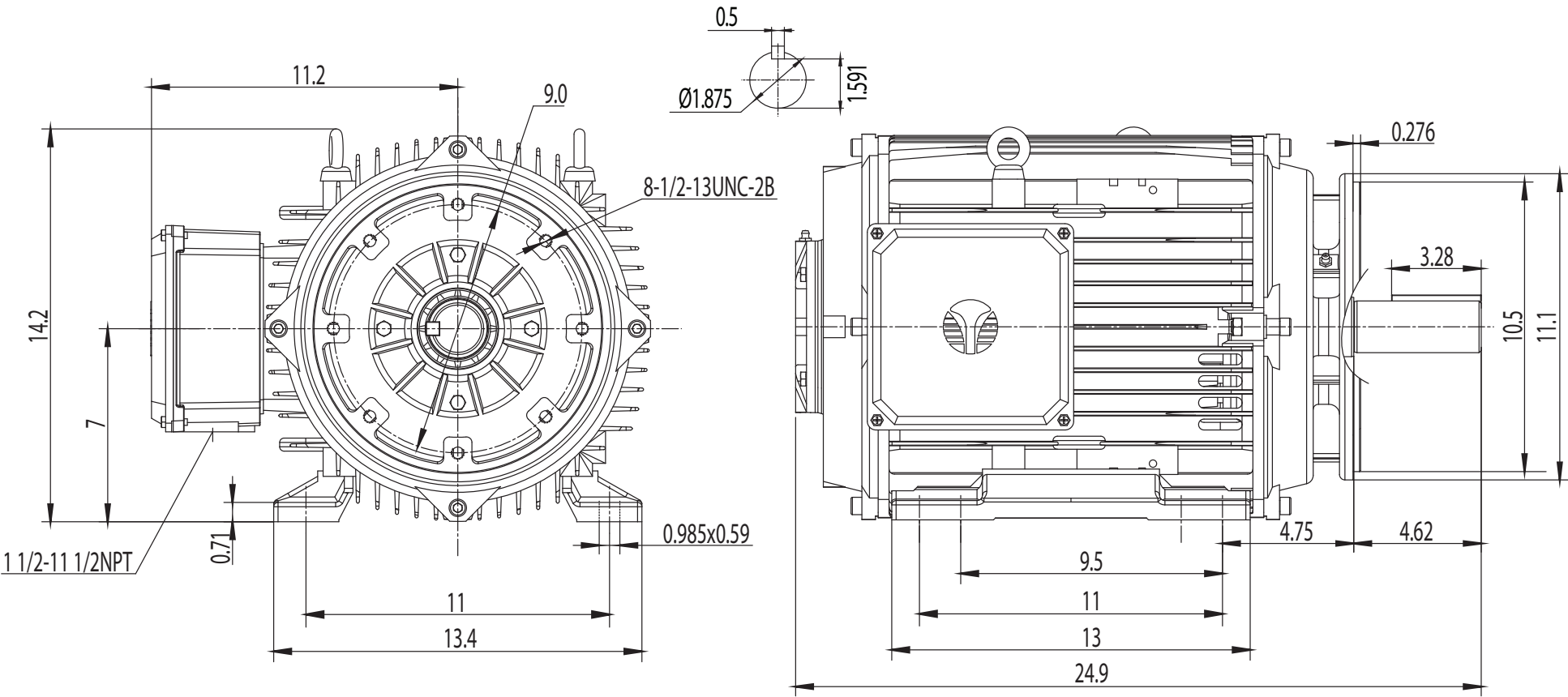
LOW VOLTAGE  
(ΔΔ)

- NOTES:
- 1. CCW ROTATION FACING ODE FOR CONNECTIONS SHOWN
  - 2. TO REVERSE ROTATION, SWAP ANY TWO INPUT LINES
  - 3. WHEN MOTOR IS IN F1 POSITION, LEADS INDICATED WITH “\*” EXIT THE CASING ABOVE THE CENTER LINE OF THE MOTOR, THE REMAINING LEADS EXIT BELOW THE CENTER LINE
  - 4. LEADS MUST BE NUMBERED AND COLORED AS SHOWN
  - 5. DIAGRAMS FOR REFERENCE ONLY



NEMA 3Ø DD/D 12-Lead Dual Voltage

|                     |                |                                                  |          |
|---------------------|----------------|--------------------------------------------------|----------|
| DRAWING NUMBER:     | NEMA-3-12-DD-D | ISSUED DATE                                      | 20/06/25 |
| CONNECTION:         | DD/D           | PREMIUM T-FRAME ALUMINUM & CAST IRON MOTORS, ODP |          |
| NUMBER OF LEADS:    | 12             |                                                  |          |
| THERMAL PROTECTION: | -              |                                                  |          |



NEMA Premium ODP 286TC

|                  |                    |                                                  |          |
|------------------|--------------------|--------------------------------------------------|----------|
| DRAWING NUMBER:  | GR3-AL-DP-284(6)TC | ISSUED DATE                                      | 20/06/25 |
| DIMENSIONS:      | Inches             | PREMIUM T-FRAME ALUMINUM & CAST IRON MOTORS, ODP |          |
| MOUNTING:        | Rigid/C-Flange     |                                                  |          |
| CASING MATERIAL: | Cast Aluminum      |                                                  |          |