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# Customer information packet

## ECP2276T

7.5HP, 1180RPM, 3PH, 60HZ, 254T, 0954M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | TEFC                                                           |
| Frame                          | 254T                                                           |
| Frame Material                 | Iron                                                           |
| Frequency                      | 60.00 Hz                                                       |
| Haz Area Class and Group       | CL I GP A,B,C,D                                                |
| Haz Area Division              | Division II                                                    |
| Motor Letter Type              | Three Phase                                                    |
| Output @ Frequency             | 7.500 HP @ 60 HZ                                               |
| Phase                          | 3                                                              |
| Synchronous Speed @ Frequency  | 1200 RPM @ 60 HZ                                               |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| Agency Approvals               | CCSA US<br>CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR       |
| Ambient Temperature            | 40 °C                                                          |
| Auxiliary Box                  | NO AUXILLARY BOX                                               |
| Auxiliary Box Lead Termination | None                                                           |
| Base Indicator                 | Rigid                                                          |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                        |
| Blower                         | None                                                           |
| Constant Torque Speed Range    | 1.0                                                            |
| Current @ Voltage              | 25.000 A @ 208.0 V<br>21.400 A @ 230.0 V<br>10.700 A @ 460.0 V |
| Design Code                    | A                                                              |
| Drip Cover                     | No Drip Cover                                                  |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 91.0 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |

## Part detail

|              |            |
|--------------|------------|
| Revision     | AZ         |
| Type         | AC         |
| Mech. spec.  | 09J371     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 09WGX827   |
| Layout       | 09LYJ371   |
| Eff. date    | 09-16-2025 |
| CD Diagram   | CD0005     |
| Poles        | 06         |
| Leads        | 9#12       |
| Proprietary  | False      |
| Created date | 08-29-2010 |

| Enclosure Modification        | Severe Duty Features        |
|-------------------------------|-----------------------------|
| Feedback Device               | NO FEEDBACK                 |
| Front Face Code               | Standard                    |
| Front Shaft Indicator         | None                        |
| Haz Area Temp Code            | T3C                         |
| Heater Indicator              | No Heater                   |
| High Voltage Full Load Amps   | 10.7 a                      |
| Insulation Class              | F                           |
| Inverter Code                 | Inverter Duty               |
| KVA Code                      | J                           |
| Lifting Lugs                  | Standard Lifting Lugs       |
| Locked Bearing Indicator      | Locked Bearing              |
| Max Speed                     | 1800 rpm                    |
| Motor Lead Exit               | Ko Box                      |
| Motor Lead Quantity/Wire Size | 9 @ 12 AWG                  |
| Motor Lead Termination        | Flying Leads                |
| Motor Standards               | NEMA                        |
| Motor Type                    | 0954M                       |
| Mounting Arrangement          | F1                          |
| Number of Poles               | 6                           |
| Overall Length                | 24.78 IN                    |
| Power Factor                  | 71                          |
| Product Family                | Super-E Chemical Processing |
| Pulley End Bearing Type       | Ball                        |
| Pulley Face Code              | Standard                    |
| Pulley Shaft Indicator        | Standard                    |
| Rodent Screen                 | None                        |
| Service Factor                | 1.15                        |
| Shaft Diameter                | 1.625 IN                    |
| Shaft Extension Location      | Pulley End                  |
| Shaft Ground Indicator        | No Shaft Grounding          |
| Shaft Rotation                | Reversible                  |
| Shaft Slinger Indicator       | Shaft Slinger               |
| Speed                         | 1180 rpm                    |

|                            |                     |
|----------------------------|---------------------|
| Speed Code                 | Single Speed        |
| Starting Method            | Direct on line      |
| Thermal Device - Bearing   | None                |
| Thermal Device - Winding   | None                |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1          | None                |
| Winding Thermal 2          | None                |

## Nameplate

| NP3995ABAL                |  |                             |  |                  |  |                       |  |               |  |        |  |                           |  |
|---------------------------|--|-----------------------------|--|------------------|--|-----------------------|--|---------------|--|--------|--|---------------------------|--|
| CAT #                     |  | ECP2276T                    |  |                  |  | SER                   |  |               |  | CC     |  | 010A                      |  |
| SPEC                      |  | 09J371X827                  |  |                  |  | RATING                |  | 40C AMB-CONT  |  |        |  |                           |  |
| HZ                        |  | VOLTS                       |  | AMPS             |  | RPM                   |  | HP            |  | CODE   |  | SF DES PF NEMA NOM. EFF   |  |
| 60                        |  | 230/460                     |  | 21.4/10.7        |  | 1180                  |  | 7.5           |  | J      |  | 1.15 A 71 % 91 %          |  |
| PH                        |  | 3 CL F                      |  | MAX RPM          |  | 1800                  |  | MAX CORR KVAR |  | 4.15   |  | USABLE AT 208V N/A        |  |
| IP55                      |  | FR                          |  | 254T             |  | ENCL                  |  | TEFC          |  | DE BRG |  | 6309 ODE BRG 6309         |  |
| GREASE                    |  | POLYREX EM                  |  |                  |  |                       |  | MTR WT        |  | 337    |  | LBS                       |  |
| USABLE AT                 |  | 50HZ 5HP 190/380V 18.6/9.3A |  |                  |  |                       |  | SF1.0         |  |        |  |                           |  |
|                           |  |                             |  |                  |  |                       |  |               |  |        |  |                           |  |
|                           |  |                             |  |                  |  |                       |  |               |  |        |  |                           |  |
|                           |  |                             |  |                  |  |                       |  |               |  |        |  |                           |  |
| CL I DIV 2 GRPS A,B,C,D   |  |                             |  | CL I ZONE 2 GRPS |  |                       |  | IIA,IIB,IIC   |  |        |  | TEMP T 160 C              |  |
| 1.0 SF ON PWM INVERTER    |  |                             |  | POWER            |  | INV TEMP CL           |  | 180           |  | C      |  |                           |  |
| CHP                       |  | 60-90                       |  | HZ               |  | 1.5:1                 |  | CT            |  | 1.0-60 |  | HZ 60:1 VT 0-60 HZ 1000:1 |  |
| SPACE HEATER LEADS H1-H2: |  |                             |  | TIE LIKE NUMBERS |  |                       |  | TOGETHER      |  |        |  |                           |  |
| V                         |  | A                           |  | W                |  | MAX SPACE HEATER TEMP |  |               |  |        |  |                           |  |

## AC Induction Motor Performance Data

Record # 47260

Typical performance - not guaranteed values

| Winding: 09WGX827-R040 |    |              | Type: 0954M                              |                         | Enclosure: TEFC       |             |        |
|------------------------|----|--------------|------------------------------------------|-------------------------|-----------------------|-------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                         |                       |             |        |
| Rated Output (HP)      |    | 7.5          | Full Load Torque                         |                         | 32.4 LB-FT            |             |        |
| Volts                  |    | 230/460      | Start Configuration                      |                         | direct on line        |             |        |
| Full Load Amps         |    | 21.4/10.7    | Breakdown Torque                         |                         | 99.2 LB-FT            |             |        |
| R.P.M.                 |    | 1180         | Pull-up Torque                           |                         | 39.4 LB-FT            |             |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque     |                       | 57.8 LB-FT  |        |
| NEMA Design Code       |    | A            | KVA Code                                 | J                       | Starting Current      |             | 69.7 A |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current         |                       | 5.84 A      |        |
| NEMA Nom. Eff.         |    | 91           | Power Factor                             | 71                      | Line-line Res. @ 25°C |             | 0.89 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load |                       | 31°C        |        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load  |                       | 36°C        |        |
|                        |    |              |                                          | Rotor inertia           |                       | 4.34 LB-FT2 |        |

## Load Characteristics 460 V, 60 Hz, 7.5 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 32   | 52   | 63   | 71   | 73   | 75   | 72   |
| Efficiency      | 83   | 89.7 | 91.5 | 91.5 | 91.8 | 91.2 | 91.9 |
| Speed           | 1196 | 1192 | 1189 | 1184 | 1179 | 1173 | 1181 |
| Line amperes    | 6.34 | 7.49 | 8.87 | 10.7 | 12.9 | 15.7 | 12   |

ABB Motors and Mechanical Inc.

WINDING # 09WGX827

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1180 RPM 460 V 0954M

TORQUES (LB-FT): PO=99.2 PU=39.4 LR=57.8 LRA=69.7





