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# Customer information packet

## CEM2524T

15HP, 1180RPM, 3PH, 60HZ, 284TC, OPSB, F1

## Specifications

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | OPSB                                                           |
| Frame                          | 284TC                                                          |
| Frame Material                 | Steel                                                          |
| Frequency                      | 60.00 Hz                                                       |
| Motor Letter Type              | Three Phase                                                    |
| Output @ Frequency             | 15.000 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               | 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                                                           |
| Current @ Voltage              | 42.000 A @ 208.0 V<br>41.000 A @ 230.0 V<br>20.500 A @ 460.0 V |
| Design Code                    | B                                                              |
| Drip Cover                     | No Drip Cover                                                  |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 91.7 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK                                                    |
| Heater Indicator               | No Heater                                                      |
| High Voltage Full Load Amps    | 20.5 a                                                         |
| Insulation Class               | F                                                              |

## Part detail

|              |            |
|--------------|------------|
| Revision     | D          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 40WGX775   |
| Layout       | 40LYD102   |
| Eff. date    | 01-31-2025 |
| CD Diagram   | CD0005     |
| Poles        | 06         |
| Leads        | 9#10       |
| Proprietary  | False      |
| Created date | 02-20-2020 |

|                            |                       |
|----------------------------|-----------------------|
| Inverter Code              | Inverter Ready        |
| IP Rating                  | NONE                  |
| KVA Code                   | G                     |
| Lifting Lugs               | Standard Lifting Lugs |
| Locked Bearing Indicator   | Locked Bearing        |
| Motor Lead Termination     | Flying Leads          |
| Motor Standards            | NEMA                  |
| Motor Type                 | 4038M                 |
| Mounting Arrangement       | F1                    |
| Number of Poles            | 6                     |
| Overall Length             | 23.81 IN              |
| Power Factor               | 75                    |
| Product Family             | General Purpose       |
| Pulley Face Code           | C-Face                |
| Rodent Screen              | None                  |
| Service Factor             | 1.15                  |
| Shaft Diameter             | 1.875 IN              |
| Shaft Ground Indicator     | No Shaft Grounding    |
| Shaft Rotation             | Reversible            |
| 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

## NP2138L

|              |              |  |          |    |       |        |       |            |          |   |           |  |         |  |      |  |        |  |      |  |
|--------------|--------------|--|----------|----|-------|--------|-------|------------|----------|---|-----------|--|---------|--|------|--|--------|--|------|--|
| CAT.NO.      | CEM2524T     |  |          |    | P/N   |        |       |            |          |   | ENCLOSURE |  | OPSB    |  |      |  |        |  |      |  |
| SPEC.        | 40-0000785   |  |          | CC | 010A  |        | FRAME |            | 284TC    |   | S/N       |  |         |  |      |  |        |  |      |  |
| HP           | 15           |  |          |    | CLASS |        | F     |            | HZ       |   | 60        |  |         |  |      |  |        |  |      |  |
| RPM          | 1180         |  |          |    | PH    | 3      |       | DES        |          | B |           |  |         |  |      |  |        |  |      |  |
| VOLT         | 230/460      |  |          |    |       |        |       |            | KVA-CODE |   | G         |  | ODE BRG |  | 6309 |  | DE BRG |  | 6311 |  |
| AMP          | 41/20.5      |  |          |    |       |        |       |            |          |   |           |  |         |  |      |  |        |  |      |  |
| RATING       | 40C AMB-CONT |  |          |    |       | GREASE |       | POLYREX EM |          |   |           |  |         |  |      |  |        |  |      |  |
| NEMA-NOM-EFF | 91.7         |  | PF       | 75 |       | SER.F. |       | 1.15       |          |   |           |  |         |  |      |  |        |  |      |  |
|              |              |  |          |    |       |        |       |            |          |   |           |  |         |  |      |  |        |  |      |  |
| HTR-VOLTS    |              |  | HTR-AMPS |    |       |        |       |            |          |   |           |  |         |  |      |  |        |  |      |  |

**AC Induction Motor Performance Data**

Record # 30818

Typical performance - not guaranteed values

| Winding: 40WGX775-R001 |  |         |  | Type: 4038M                              |  | Enclosure: OPSB           |  |
|------------------------|--|---------|--|------------------------------------------|--|---------------------------|--|
| Nameplate Data         |  |         |  | 460 V, 60 Hz:<br>High Voltage Connection |  |                           |  |
| Rated Output (HP)      |  | 15      |  | Full Load Torque                         |  | 66.8 LB-FT                |  |
| Volts                  |  | 230/460 |  | Start Configuration                      |  | direct on line            |  |
| Full Load Amps         |  | 41/20.5 |  | Breakdown Torque                         |  | 185 LB-FT                 |  |
| R.P.M.                 |  | 1180    |  | Pull-up Torque                           |  | 87.7 LB-FT                |  |
| Hz                     |  | 60      |  | Phase                                    |  | 3                         |  |
| NEMA Design Code       |  | B       |  | KVA Code                                 |  | G                         |  |
| Service Factor (S.F.)  |  | 1.15    |  | No-load Current                          |  | 10.1 A                    |  |
| NEMA Nom. Eff.         |  | 91.7    |  | Power Factor                             |  | 75                        |  |
| Rating - Duty          |  | 40C     |  | AMB-CONT                                 |  | Temp. Rise @ Rated Load   |  |
| S.F. Amps              |  |         |  |                                          |  | Temp. Rise @ S.F. Load    |  |
|                        |  |         |  |                                          |  | Locked-rotor Power Factor |  |
|                        |  |         |  |                                          |  | Rotor inertia             |  |

**Load Characteristics 460 V, 60 Hz, 15 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 37     | 58     | 69     | 75     | 78     | 79     | 77   |
| Efficiency      | 85.5   | 90.7   | 91.8   | 91.8   | 91.2   | 89.9   | 91.4 |
| Speed           | 1195.6 | 1191.7 | 1187.6 | 1182.8 | 1177.5 | 1169.8 | 1180 |
| Line amperes    | 11.1   | 13.4   | 16.6   | 20.4   | 24.8   | 30.7   | 23   |

ABB Motors and Mechanical Inc.

WINDING # 40WGX775

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1180 RPM 460 V 4038M

TORQUES (LB-FT): PO=185 PU=87.7 LR=105 LRA=116





