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# Customer information packet

## JMEWDM3616T

7.5HP, 3450RPM, 3PH, 60HZ, 184JM, 3646M, TEFC

Class - None

Division - Not Applicable

## Specifications

|                                |                                                               |
|--------------------------------|---------------------------------------------------------------|
| Enclosure                      | TEFC                                                          |
| Frame                          | 184JM                                                         |
| Frame Material                 | Steel                                                         |
| Frequency                      | 60.00 Hz                                                      |
| Haz Area Class and Group       | None                                                          |
| Haz Area Division              | Not Applicable                                                |
| Motor Letter Type              | Three Phase                                                   |
| Output @ Frequency             | 7.500 HP @ 60 HZ                                              |
| Phase                          | 3                                                             |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                              |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                            |
| Agency Approvals               | CSA<br>CSA EEV<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              | 18.500 A @ 208.0 V<br>8.400 A @ 460.0 V<br>16.800 A @ 230.0 V |
| Design Code                    | A                                                             |
| Drip Cover                     | No Drip Cover                                                 |
| Duty Rating                    | CONT                                                          |
| Efficiency @ 100% Load         | 89.5 %                                                        |
| Electrically Isolated Bearing  | Not Electrically Isolated                                     |
| Feedback Device                | NO FEEDBACK                                                   |
| Front Face Code                | Standard                                                      |
| Front Shaft Indicator          | None                                                          |

## Part detail

|              |            |
|--------------|------------|
| Revision     | K          |
| Type         | AC         |
| Mech. spec.  | 36K605     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 36WGS428   |
| Layout       | 36LYK605   |
| Eff. date    | 05-29-2025 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#16       |
| Proprietary  | False      |
| Created date | 12-04-2014 |

|                               |                     |
|-------------------------------|---------------------|
| Heater Indicator              | No Heater           |
| High Voltage Full Load Amps   | 8.4 a               |
| Insulation Class              | F                   |
| Inverter Code                 | Inverter Ready      |
| KVA Code                      | L                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Exit               | Ko Box              |
| Motor Lead Quantity/Wire Size | 9 @ 16 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3646M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 2                   |
| Overall Length                | 19.55 IN            |
| Power Factor                  | 93                  |
| Product Family                | Wash Down           |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | C-Face              |
| Pulley Shaft Indicator        | Tapped & Key        |
| Rodent Screen                 | None                |
| Service Factor                | 1.15                |
| Shaft Diameter                | 0.875 IN            |
| Shaft Extension Location      | Pulley End          |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | Shaft Slinger       |
| Speed                         | 3450 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

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## Nameplate

| NP1669L      |                        |      |     |      |   |       |    |   |  |
|--------------|------------------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | JMEWDM3616T            |      |     |      |   |       |    |   |  |
| SPEC.        | 36K605S428G2           |      |     |      |   |       |    |   |  |
| HP           | 7.5                    |      |     |      |   |       |    |   |  |
| VOLTS        | 230/460                |      |     |      |   |       |    |   |  |
| AMP          | 16.8/8.4               |      |     |      |   |       |    |   |  |
| RPM          | 3450                   |      |     |      |   |       |    |   |  |
| FRAME        | 184JM                  |      | HZ  | 60   |   |       | PH | 3 |  |
| SER.F.       | 1.15                   | CODE | L   | DES  | A | CLASS | F  |   |  |
| NEMA-NOM-EFF | 89.5                   | PF   | 93  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT           |      |     |      |   |       |    |   |  |
| CC           | 010A                   |      |     |      |   |       |    |   |  |
| DE           | 6207                   |      | ODE | 6205 |   |       |    |   |  |
| ENCL         | TEFC                   | SN   |     |      |   |       |    |   |  |
| BLANK        | 10:1CT, 20:1VT, 1.00SF |      |     |      |   |       |    |   |  |

## AC Induction Motor Performance Data

Record # 52145

Typical performance - not guaranteed values

| Winding: 36WGS428-R020 |    |              | Type: 3646M                              |                           | Enclosure: TEFC       |              |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|--------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |              |        |
| Rated Output (HP)      |    | 7.5          | Full Load Torque                         |                           | 11.4 LB-FT            |              |        |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line        |              |        |
| Full Load Amps         |    | 16.8/8.4     | Breakdown Torque                         |                           | 57.9 LB-FT            |              |        |
| R.P.M.                 |    | 3450         | Pull-up Torque                           |                           | 39.9 LB-FT            |              |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 48.2 LB-FT   |        |
| NEMA Design Code       |    | A            | KVA Code                                 | L                         | Starting Current      |              | 91 A   |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current           |                       | 2.33 A       |        |
| NEMA Nom. Eff.         |    | 89.5         | Power Factor                             | 93                        | Line-line Res. @ 25°C |              | 1.43 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 74°C         |        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load    |                       | 92°C         |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 44.4         |        |
|                        |    |              |                                          | Rotor inertia             |                       | 0.205 LB-FT2 |        |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 64   | 85   | 90   | 93   | 94   | 94   | 94   |
| Efficiency      | 86.9 | 90.6 | 91   | 90.1 | 88.8 | 86.5 | 89.3 |
| Speed           | 3571 | 3539 | 3505 | 3468 | 3429 | 3385 | 3445 |
| Line amperes    | 3.14 | 4.59 | 6.43 | 8.43 | 10.5 | 12.9 | 9.67 |

ABB Motors and Mechanical Inc.

WINDING # 36WGS428

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3450 RPM 460 V 3646M

TORQUES (LB-FT): PO=57.9 PU=39.9 LR=48.2 LRA=91





