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# Customer information packet

## VJPFPM2550T-5

100HP, 3530RPM, 3PH, 60HZ, 365JP, 4260M, OPSB

## Specifications

|                                |                           |
|--------------------------------|---------------------------|
| Enclosure                      | OPSB                      |
| Frame                          | 365JP                     |
| Frame Material                 | Steel                     |
| Frequency                      | 60.00 Hz                  |
| Motor Letter Type              | Three Phase               |
| Output @ Frequency             | 100.000 HP @ 60 HZ        |
| Phase                          | 3                         |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ          |
| Voltage @ Frequency            | 575.0 V @ 60 HZ           |
| Agency Approvals               | CSA EEV<br>UL             |
| Ambient Temperature            | 40 °C                     |
| Auxiliary Box                  | NO AUXILLARY BOX          |
| Auxiliary Box Lead Termination | None                      |
| Base Indicator                 | No Mounting               |
| Bearing Grease Type            | Polyrex EM (-20F +300F)   |
| Blower                         | None                      |
| Current @ Voltage              | 90.000 A @ 575.0 V        |
| Design Code                    | B                         |
| Drip Cover                     | Drip Cover                |
| Duty Rating                    | CONT                      |
| Efficiency @ 100% Load         | 93.0 %                    |
| Electrically Isolated Bearing  | Not Electrically Isolated |
| Feedback Device                | NO FEEDBACK               |
| Front Face Code                | Standard                  |
| Front Shaft Indicator          | None                      |
| Heater Indicator               | No Heater                 |
| High Voltage Full Load Amps    | 90.0 a                    |
| Insulation Class               | F                         |
| Inverter Code                  | Not Inverter              |
| KVA Code                       | F                         |
| Lifting Lugs                   | Vertical Lifting Lugs     |

## Part detail

|              |            |
|--------------|------------|
| Revision     | H          |
| Type         | AC         |
| Mech. spec.  | 42E338     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 42WGX105   |
| Layout       | 42LYE338   |
| Eff. date    | 07-24-2023 |
| CD Diagram   | CD0382     |
| Poles        | 02         |
| Leads        | 6#6        |
| Proprietary  | False      |
| Created date | 07-22-2016 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Motor Lead Exit</b>               | Ko Box                |
| <b>Motor Lead Quantity/Wire Size</b> | 6 @ 6 AWG             |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 4260M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 2                     |
| <b>Overall Length</b>                | 33.50 IN              |
| <b>Power Factor</b>                  | 89                    |
| <b>Product Family</b>                | Fire Pump Motor       |
| <b>Pulley End Bearing Type</b>       | Ball                  |
| <b>Pulley Face Code</b>              | C-Face                |
| <b>Pulley Shaft Indicator</b>        | Tapped & Key          |
| <b>Rodent Screen</b>                 | Included              |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 1.577 IN              |
| <b>Shaft Extension Location</b>      | Pulley End            |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding    |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger         |
| <b>Speed</b>                         | 3530 rpm              |
| <b>Speed Code</b>                    | Single Speed          |
| <b>Starting Method</b>               | Wye Start - Delta Run |
| <b>Thermal Device - Bearing</b>      | None                  |
| <b>Thermal Device - Winding</b>      | None                  |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor   |
| <b>Winding Thermal 1</b>             | None                  |
| <b>Winding Thermal 2</b>             | None                  |

## Nameplate

## NP3454L

|           |               |        |           |      |          |       |      |  |       |          |      |            |       |    |
|-----------|---------------|--------|-----------|------|----------|-------|------|--|-------|----------|------|------------|-------|----|
| CAT.NO.   | VJPFPM2550T-5 |        |           |      | CUST P/N |       |      |  | I.P.  |          |      |            | 23    |    |
| SPEC.     | 42E338X105H2  |        |           |      | SER.NO.  |       |      |  | FRAME |          |      |            | 365JP |    |
| HZ        | 60            | HP     | 100       | RPM  |          | 3530  | HZ   |  | HP    |          | RPM  |            |       |    |
| VOLTS     | 575           |        |           | CODE | F        | VOLTS |      |  |       |          |      | CODE       |       |    |
| AMPS      | 90            |        |           | DES  | B        | AMPS  |      |  |       |          |      | DES        |       |    |
| EFF       | 93            | SER.F. | 1.15      | PF   |          | 89    | EFF  |  |       |          |      | SER.F.     |       | PF |
| RATING    | 40C AMB-CONT  |        |           |      | DE BRG   |       | 6313 |  |       | GREASE   |      | POLYREX EM |       |    |
| BLANK     |               |        |           |      | ODE BRG  |       | 6311 |  |       | MTR. WT. |      | 523        |       |    |
|           |               |        |           |      | CLASS    |       | F    |  | PH    |          | 3    |            |       |    |
|           |               |        |           |      | ENCL     |       | OPSB |  | CC    |          | 010A |            |       |    |
|           |               |        |           |      |          |       |      |  |       |          |      |            |       |    |
| HTR-VOLTS | HTR-AMPS      |        | HTR-WATTS |      |          |       |      |  |       |          |      |            |       |    |

## AC Induction Motor Performance Data

Record # 58315

Typical performance - not guaranteed values

| Winding: 42WGX105-R001 |    |              | Type: 4260M                           |                           | Enclosure: OPSB  |                       |       |          |
|------------------------|----|--------------|---------------------------------------|---------------------------|------------------|-----------------------|-------|----------|
| Nameplate Data         |    |              | 575 V, 60 Hz:<br>Single Voltage Motor |                           |                  |                       |       |          |
| Rated Output (HP)      |    | 100          | Full Load Torque                      |                           | 148 LB-FT        |                       |       |          |
| Volts                  |    | 575          | Start Configuration                   |                           | direct on line   |                       |       |          |
| Full Load Amps         |    | 90           | Breakdown Torque                      |                           | 505 LB-FT        |                       |       |          |
| R.P.M.                 |    | 3530         | Pull-up Torque                        |                           | 201 LB-FT        |                       |       |          |
| Hz                     | 60 | Phase        | 3                                     | Locked-rotor Torque       |                  | 244 LB-FT             |       |          |
| NEMA Design Code       |    | B            | KVA Code                              | F                         | Starting Current |                       | 547 A |          |
| Service Factor (S.F.)  |    | 1.15         | No-load Current                       |                           | 21.1 A           |                       |       |          |
| NEMA Nom. Eff.         |    | 93           | Power Factor                          |                           | 89               | Line-line Res. @ 25°C |       | 0.0974 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                       | Temp. Rise @ Rated Load   |                  | 56°C                  |       |          |
| S.F. Amps              |    |              |                                       | Temp. Rise @ S.F. Load    |                  | 68°C                  |       |          |
|                        |    |              |                                       | Locked-rotor Power Factor |                  | 20.9                  |       |          |
|                        |    |              |                                       | Rotor inertia             |                  | 4.69 LB-FT2           |       |          |

## Load Characteristics 575 V, 60 Hz, 100 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 67   | 83   | 87   | 89   | 88   | 87   | 88   |
| Efficiency      | 91.9 | 94.1 | 93.9 | 93.2 | 92.1 | 90.6 | 92.5 |
| Speed           | 3587 | 3572 | 3555 | 3536 | 3514 | 3490 | 3523 |
| Line amperes    | 30.8 | 48.2 | 68.7 | 90.3 | 114  | 140  | 105  |

ABB Motors and Mechanical Inc.

WINDING # 42WGX105

Typical performance - not guaranteed values.

100 HP 3 PH 60 HZ 3530 RPM 575 V 4260M

TORQUES (LB-FT): PO=505 PU=201 LR=244 LRA=547





