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# Customer information packet

## EM3610

3HP, 3450RPM, 3PH, 60HZ, 184, 3532M, TEFC, F1, N

Class - None

Division - Not Applicable

## Specifications

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Enclosure                      | TEFC                                                        |
| Frame                          | 182                                                         |
| 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             | 3.000 HP @ 60 HZ                                            |
| Phase                          | 3                                                           |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                            |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| Agency Approvals               | NEMA PREMIUM<br>CURUSEEV                                    |
| Ambient Temperature            | 40 °C                                                       |
| Auxillary Box                  | No Auxillary Box                                            |
| Auxillary Box Lead Termination | None                                                        |
| Base Indicator                 | Rigid                                                       |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                     |
| Blower                         | None                                                        |
| Current @ Voltage              | 3.600 A @ 460.0 V<br>7.200 A @ 230.0 V<br>7.900 A @ 208.0 V |
| Design Code                    | B                                                           |
| Drip Cover                     | No Drip Cover                                               |
| Duty Rating                    | CONT                                                        |
| Efficiency @ 100% Load         | 86.5 %                                                      |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK                                                 |
| Front Face Code                | Standard                                                    |
| Front Shaft Indicator          | None                                                        |
| Heater Indicator               | No Heater                                                   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | K          |
| Type         | AC         |
| Mech. spec.  | 35L108     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGQ060   |
| Layout       | 35LYL108   |
| Eff. date    | 10-08-2024 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 02-23-2015 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 3.6 a               |
| Insulation Class              | F                   |
| Inverter Code                 | Inverter Ready      |
| KVA Code                      | L                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | No Locked Bearing   |
| Motor Lead Exit               | Ko Box              |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3532M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 2                   |
| Overall Length                | 14.66 IN            |
| Power Factor                  | 92                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | Standard            |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| RoHS Status                   | ROHS COMPLIANT      |
| 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       | No 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

| NP1259L      |              |      |     |      |   |    |   |    |   |  |  |
|--------------|--------------|------|-----|------|---|----|---|----|---|--|--|
| CAT.NO.      | EM3610       |      |     |      |   |    |   |    |   |  |  |
| SPEC.        | 35L108Q060G1 |      |     |      |   |    |   |    |   |  |  |
| HP           | 3            |      |     |      |   |    |   |    |   |  |  |
| VOLTS        | 230/460      |      |     |      |   |    |   |    |   |  |  |
| AMP          | 7.2/3.6      |      |     |      |   |    |   |    |   |  |  |
| RPM          | 3450         |      |     |      |   |    |   |    |   |  |  |
| FRAME        | 182          |      | HZ  | 60   |   |    |   | PH | 3 |  |  |
| SER.F.       | 1.15         | CODE | L   | DES  | B | CL | F |    |   |  |  |
| NEMA-NOM-EFF | 86.5         | PF   | 92  |      |   |    |   |    |   |  |  |
| RATING       | 40C AMB-CONT |      |     |      |   |    |   |    |   |  |  |
| CC           | 010A         |      |     |      |   |    |   |    |   |  |  |
| DE           | 6206         |      | ODE | 6203 |   |    |   |    |   |  |  |
| ENCL         | TEFC         | SN   |     |      |   |    |   |    |   |  |  |

## AC Induction Motor Performance Data

Record # 50261

Typical performance - not guaranteed values

| Winding: 35WGQ060-R002 |    |         | Type: 3532M                              |                     | Enclosure: TEFC         |                       |
|------------------------|----|---------|------------------------------------------|---------------------|-------------------------|-----------------------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |                       |
| Rated Output (HP)      |    | 3       | Full Load Torque                         |                     | 4.5 LB-FT               |                       |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line          |                       |
| Full Load Amps         |    | 7.2/3.6 | Breakdown Torque                         |                     | 18 LB-FT                |                       |
| R.P.M.                 |    | 3450    | Pull-up Torque                           |                     | 11 LB-FT                |                       |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                         | 16 LB-FT              |
| NEMA Design Code       |    | B       | KVA Code                                 |                     | L                       | Starting Current      |
| Service Factor (S.F.)  |    | 1.15    | No-load Current                          |                     | 1.2 A                   |                       |
| NEMA Nom. Eff.         |    | 86.5    | Power Factor                             |                     | 92                      | Line-line Res. @ 25°C |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |                       |
| S.F. Amps              |    |         |                                          |                     | Temp. Rise @ S.F. Load  |                       |

## Load Characteristics 460 V, 60 Hz, 3 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 62   | 81   | 88   | 92   | 93   | 94   | 93   |
| Efficiency      | 83.7 | 87.9 | 88.2 | 87.2 | 85.6 | 83.5 | 86.2 |
| Speed           | 3562 | 3531 | 3498 | 3462 | 3421 | 3375 | 3437 |
| Line amperes    | 1.5  | 2.1  | 2.8  | 3.6  | 4.5  | 5.4  | 4.1  |

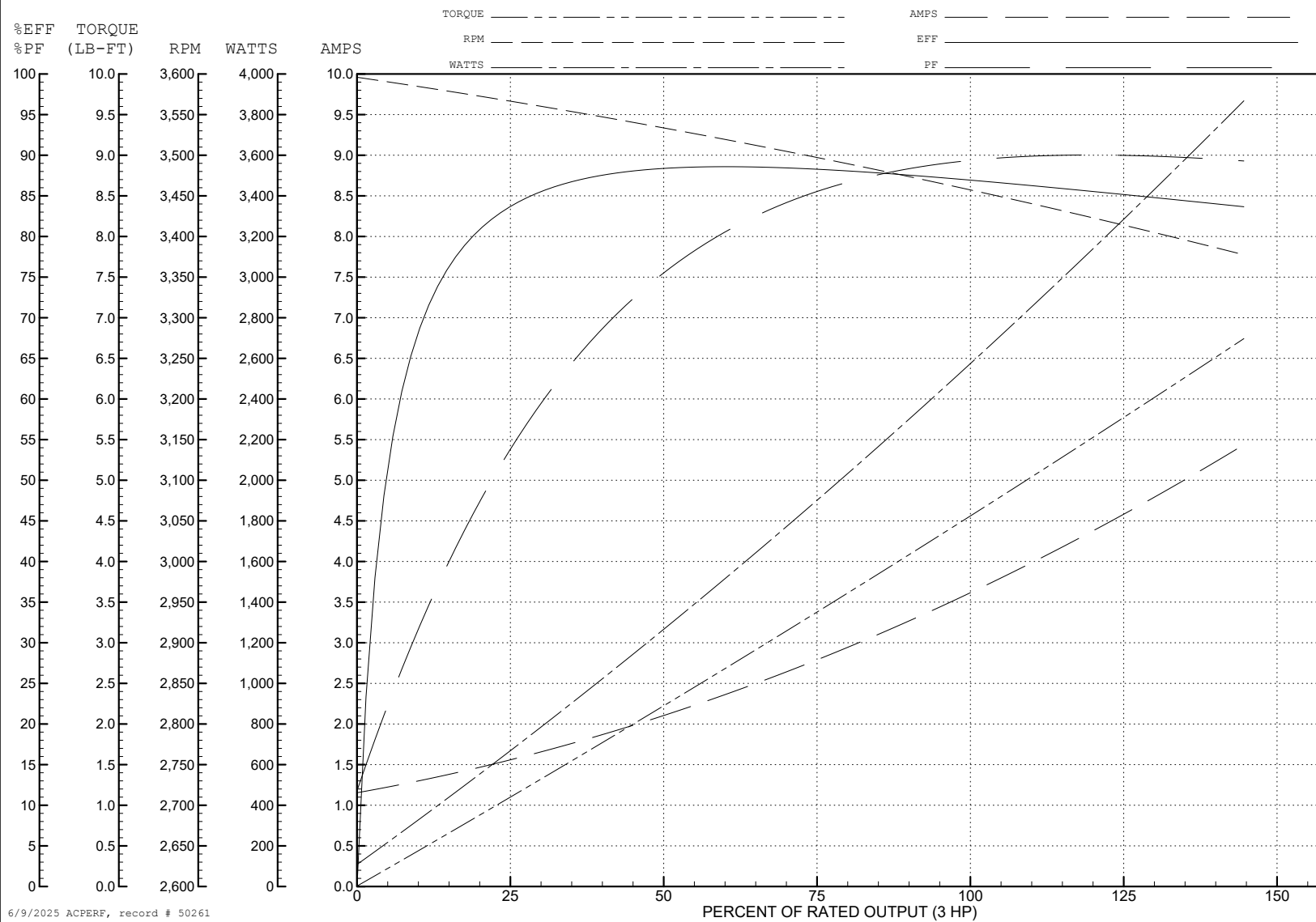
ABB Motors and Mechanical Inc.

WINDING # 35WGQ060

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3532M

TORQUES (LB-FT): PO=18 PU=11 LR=16 LRA=33



**AC Induction Motor Performance Data**

Record # 59171

Typical performance - not guaranteed values

| Winding: 35WGQ060-R002 |    |         | Type: 3532M                             |                     | Enclosure: TEFC           |          |               |
|------------------------|----|---------|-----------------------------------------|---------------------|---------------------------|----------|---------------|
| Nameplate Data         |    |         | 230 V, 60 Hz:<br>Low Voltage Connection |                     |                           |          |               |
| Rated Output (HP)      |    | 3       | Full Load Torque                        |                     | 4.5 LB-FT                 |          |               |
| Volts                  |    | 230/460 | Start Configuration                     |                     | direct on line            |          |               |
| Full Load Amps         |    | 7.2/3.6 | Breakdown Torque                        |                     | 18 LB-FT                  |          |               |
| R.P.M.                 |    | 3450    | Pull-up Torque                          |                     | 11 LB-FT                  |          |               |
| Hz                     | 60 | Phase   | 3                                       | Locked-rotor Torque |                           | 16 LB-FT |               |
| NEMA Design Code       |    | B       | KVA Code                                | L                   | Starting Current          |          | 66 A          |
| Service Factor (S.F.)  |    | 1.15    | No-load Current                         |                     | 2.4 A                     |          |               |
| NEMA Nom. Eff.         |    | 86.5    | Power Factor                            | 92                  | Line-line Res. @ 25°C     |          | 1.17 Ω        |
| Rating - Duty          |    | 40C     | AMB-CONT                                |                     | Temp. Rise @ Rated Load   |          | 61°C          |
| S.F. Amps              |    |         |                                         |                     | Temp. Rise @ S.F. Load    |          | 73°C          |
|                        |    |         |                                         |                     | Locked-rotor Power Factor |          | 47.1          |
|                        |    |         |                                         |                     | Rotor inertia             |          | 0.0885 LB-FT2 |

**Load Characteristics 230 V, 60 Hz, 3 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 57   | 77   | 85   | 88   | 89   | 90   | 89   |
| Efficiency      | 84.1 | 87.9 | 88.4 | 87.2 | 85.7 | 83.5 | 86.3 |
| Speed           | 3562 | 3531 | 3498 | 3462 | 3421 | 3375 | 3437 |
| Line amperes    | 3    | 4.2  | 5.6  | 7.2  | 9    | 10.8 | 8.28 |

ABB Motors and Mechanical Inc.

WINDING # 35WGQ060

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 230 V 3532M

TORQUES (LB-FT): PO=18 PU=11 LR=16 LRA=66

