

# ABB BALDOR RELIANCE III

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## Customer information packet

### IDNM3767T

5HP, 1760RPM, 3PH, 60HZ, 213TC, 0736M, TENV, F1

Class - None

Division - Not Applicable

**Specifications**

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Enclosure                      | TENV                                    |
| Frame                          | 213TC                                   |
| Frame Material                 | Iron                                    |
| Frequency                      | 60.00 Hz                                |
| Haz Area Class and Group       | None                                    |
| Haz Area Division              | Not Applicable                          |
| Motor Letter Type              | Three Phase                             |
| Output @ Frequency             | 5.000 HP @ 60 HZ                        |
| Phase                          | 3                                       |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                        |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ      |
| Agency Approvals               | UR<br>CSA                               |
| 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              | 13.400 A @ 230.0 V<br>6.700 A @ 460.0 V |
| Design Code                    | B                                       |
| 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                | Encoder/Feedback Device                 |
| Front Shaft Indicator          | None                                    |
| Heater Indicator               | No Heater                               |
| High Voltage Full Load Amps    | 6.7 a                                   |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | T          |
| Type         | AC         |
| Mech. spec.  | 07J135     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 07WGW202   |
| Layout       | 07LYJ135   |
| Eff. date    | 10-01-2026 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#14       |
| Proprietary  | False      |
| Created date | 01-01-0001 |

|                               |                            |
|-------------------------------|----------------------------|
| Insulation Class              | H                          |
| Inverter Code                 | Inverter Duty              |
| KVA Code                      | H                          |
| Lifting Lugs                  | Standard Lifting Lugs      |
| Locked Bearing Indicator      | Locked Bearing             |
| Max Speed                     | 6000 rpm                   |
| Motor Lead Exit               | Ko Box                     |
| Motor Lead Quantity/Wire Size | 9 @ 14 AWG                 |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 0736M                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 4                          |
| Overall Length                | 20.40 IN                   |
| Power Factor                  | 78                         |
| Product Family                | General Purpose            |
| Pulley End Bearing Type       | Ball                       |
| Pulley Face Code              | C-Face                     |
| Pulley Shaft Indicator        | Standard                   |
| Rodent Screen                 | None                       |
| RoHS Status                   | ROHS COMPLIANT             |
| Service Factor                | 1.00                       |
| Shaft Diameter                | 1.375 IN                   |
| Shaft Extension Location      | Pulley End                 |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Shaft Slinger Indicator       | No Slinger                 |
| Speed                         | 1760 rpm                   |
| Speed Code                    | Single Speed               |
| Starting Method               | Direct on line             |
| Thermal Device - Bearing      | None                       |
| Thermal Device - Winding      | Normally Closed Thermostat |
| Vibration Sensor Indicator    | No Vibration Sensor        |
| Winding Thermal 1             | None                       |

Winding Thermal 2

None

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**Nameplate**

| NP4009L        |              |      |            |           |      |          |  |      |  |
|----------------|--------------|------|------------|-----------|------|----------|--|------|--|
| CAT.NO.        | IDNM3767T    |      |            |           |      |          |  |      |  |
| SPEC.          | 07J135W202G2 |      |            |           |      |          |  |      |  |
| FRAME          | 213TC        |      | H.P.       | 5 TE      |      |          |  |      |  |
| VOLTS          | 230/460      |      |            |           |      |          |  |      |  |
| MAG. CUR.      | 6.8/3.4      |      |            | F.L. AMPS |      | 13.4/6.7 |  |      |  |
| R.P.M.         | 1760         |      | R.P.M. MAX |           | 6000 |          |  |      |  |
| HZ.            | 60           | PH.  | 3          | CLASS     |      | H        |  |      |  |
| SER.F.         | 1.00         | DES. | B          | SL HZ     |      | 1.16     |  |      |  |
| NEMA NOM. EFF. | 89.5         | WK2  | 0.755      |           |      |          |  |      |  |
| BLOWER         |              | V    |            | PH        |      | HZ       |  | AMPS |  |
| RATING         | 40C AMB-CONT |      |            |           |      |          |  |      |  |
| DE             | 6307         | ODE  | 6206       |           |      |          |  |      |  |
| CC             | 010A         | SN   |            |           |      |          |  |      |  |
|                | 1000:1 CT/VT |      |            |           |      |          |  |      |  |



**AC Induction Motor Performance Data**  
 Record # 20681  
 Typical performance - not guaranteed values

|                          |                    |                        |
|--------------------------|--------------------|------------------------|
| <b>Winding:</b> 07WGW202 | <b>Type:</b> 0735M | <b>Enclosure:</b> TENV |
|--------------------------|--------------------|------------------------|

| Nameplate Data    |              |          |    | General Characteristics at 460 V, 60 Hz:<br>High Volt Connection |            |
|-------------------|--------------|----------|----|------------------------------------------------------------------|------------|
| Rated Output (HP) | 5            |          |    | Full Load Torque                                                 | 14.9 LB-FT |
| Volts             | 230/460      |          |    | Start Configuration                                              | DOL        |
| Full Load Amps    | 13.4/6.7     |          |    | Break Down Torque                                                | 52 LB-FT   |
| R.P.M.            | 1760         |          |    | Pull-Up Torque                                                   | 44 LB-FT   |
| Hz                | 60           | Phase    | 3  | Locked-rotor Torque                                              | 48 LB-FT   |
| NEMA Design Code  | B            | KVA Code | H  | Starting Current                                                 | 48 Amps    |
| Service Factor    | 1            |          |    | No-load Current                                                  | 3.4 Amps   |
| NEMA Nom. Eff.    | 89.5         | P.F.     | 78 | Line-line Res. @ 25°C.                                           | 1.74 Ohms  |
| Rating - Duty     | 40C AMB-CONT |          |    | Temp. Rise @ Rated Load                                          | 92°C       |
| S.F. Amps         |              |          |    | Temp. Rise @ S.F. Load                                           |            |

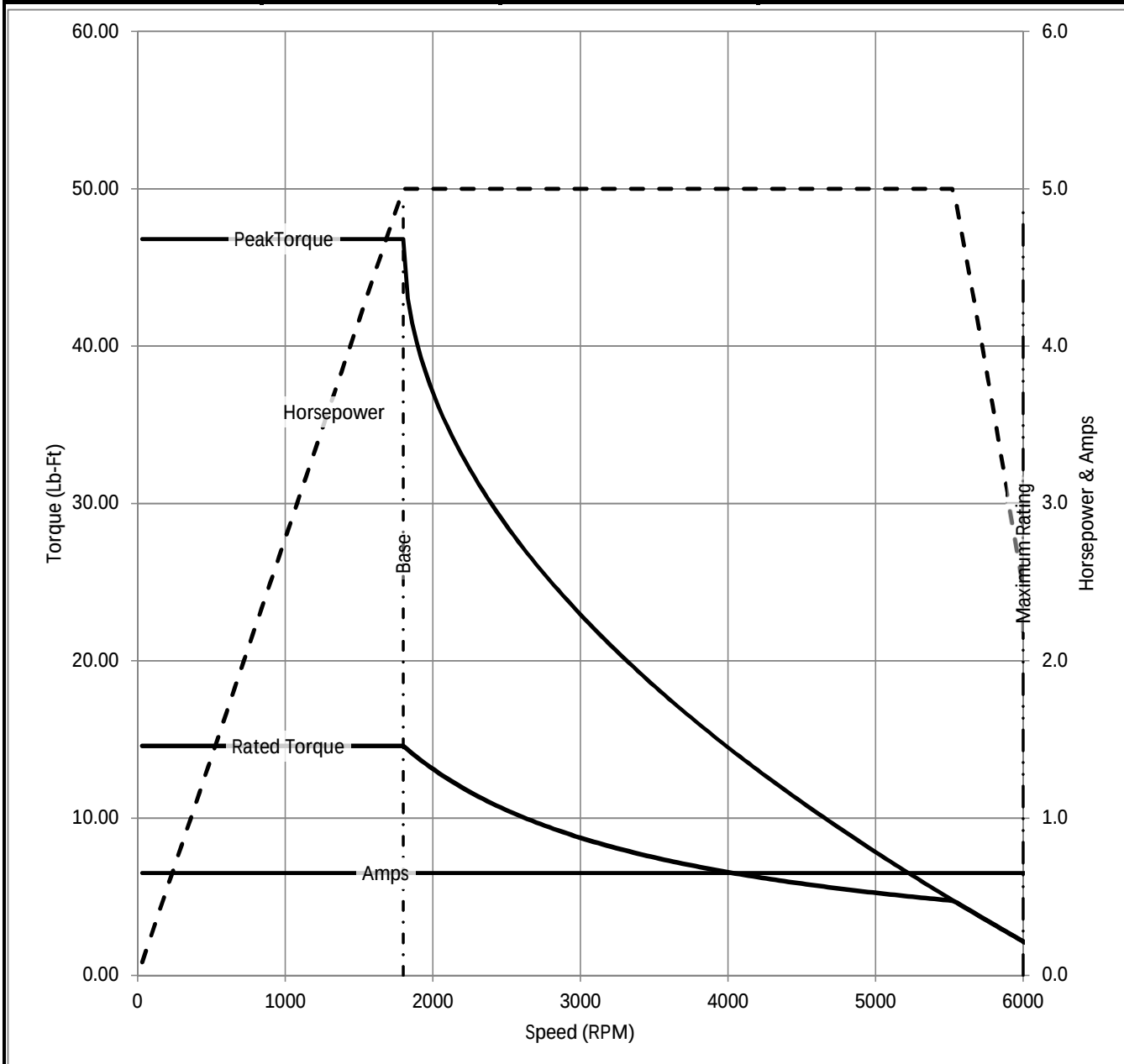
Load Characteristics at 460 Volts, 60 Hz, 5 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 38   | 60   | 73   | 80   | 84   | 86   |      |
| Efficiency      | 82.4 | 88.5 | 90.1 | 90.3 | 90   | 89.3 |      |
| Speed           | 1791 | 1783 | 1775 | 1766 | 1756 | 1746 |      |
| Line Amperes    | 3.7  | 4.4  | 5.4  | 6.5  | 7.8  | 9.2  |      |

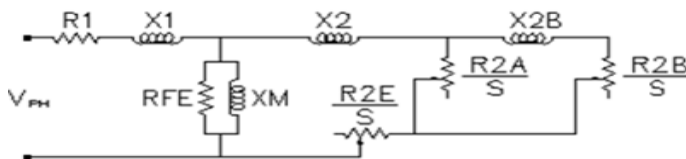
Baldor Electric Company Fort Smith, Arkansas



|            |           |                          |          |                                       |       |                                                   |       |     |        |
|------------|-----------|--------------------------|----------|---------------------------------------|-------|---------------------------------------------------|-------|-----|--------|
| Catalog    | IDNM3767T | NP VOLTS                 | 230/460  | ENCLOSURE                             | TENV  | WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C) |       |     |        |
| FRAME      | 213TC     | NP AMPS                  | 13.4/6.7 | Base Volts                            | 460   | R1                                                | 0.852 | X1  | 2.720  |
| HP         | 5 HP      | DUTY                     | Cont     | Base AMPS                             | 6.5   | R2                                                | 2.280 | X2  | 1.679  |
| BASE SPEED | 1800      | MAX SAFE RPM             | 6000     | Slip Hz                               | 1.13  | R2B                                               | 0.598 | X2B | 2.825  |
| PHASE/HZ   | 3/60      | AMB <sup>0</sup> C/INSUL | 40/H     | WK <sup>2</sup> (lb-ft <sup>2</sup> ) | 0.734 | R2E                                               | 0.175 | XM  | 73.662 |



Remarks: Calculated Data


**BALDOR**  
A MEMBER OF THE ABB GROUP

DR BY ENR  
CK BY  
APP BY ENR  
DATE 2/27/2013

A-C MOTOR  
PERFORMANCE CURVES

07J135W202G2

ISSUE DATE 2/27/2013

