

# ABB BALDOR RELIANCE III

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## Customer information packet

### HBAO3771T

10 AOHP, 3475RPM, 3PH, 60HZ, 215T, 0744M, TEAO

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | TEAO                                                           |
| <b>Frame</b>                          | 215T                                                           |
| <b>Frame Material</b>                 | Iron                                                           |
| <b>Frequency</b>                      | 60.00 Hz                                                       |
| <b>Haz Area Class and Group</b>       | None                                                           |
| <b>Haz Area Division</b>              | Not Applicable                                                 |
| <b>Motor Letter Type</b>              | Three Phase                                                    |
| <b>Output @ Frequency</b>             | 10.000 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                              |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                                               |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| <b>Agency Approvals</b>               | CURUSEEV<br>NEMA_PREMIUM<br>WEEE<br>CSA                        |
| <b>Ambient Temperature</b>            | 40 °C                                                          |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                               |
| <b>Auxiliary Box Lead Termination</b> | None                                                           |
| <b>Base Indicator</b>                 | Rigid                                                          |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                        |
| <b>Blower</b>                         | None                                                           |
| <b>Current @ Voltage</b>              | 22.400 A @ 230.0 V<br>24.400 A @ 208.0 V<br>11.200 A @ 460.0 V |
| <b>Design Code</b>                    | A                                                              |
| <b>Drip Cover</b>                     | No Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                           |
| <b>Efficiency @ 100% Load</b>         | 91.7 %                                                         |
| <b>Electrically Isolated Bearing</b>  | Electrically Isolated Bearings                                 |
| <b>Feedback Device</b>                | NO FEEDBACK                                                    |
| <b>Front Shaft Indicator</b>          | None                                                           |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | L          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 07D097     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 07WGW723   |
| <b>Layout</b>       | 07LYD097   |
| <b>Eff. date</b>    | 07-21-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#14       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-21-2021 |

|                                      |                       |
|--------------------------------------|-----------------------|
| <b>Heater Indicator</b>              | No Heater             |
| <b>High Voltage Full Load Amps</b>   | 11.2 a                |
| <b>Insulation Class</b>              | H                     |
| <b>Inverter Code</b>                 | Inverter Ready        |
| <b>IP Rating</b>                     | NONE                  |
| <b>KVA Code</b>                      | L                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs |
| <b>Locked Bearing Indicator</b>      | Locked Bearing        |
| <b>Max Speed</b>                     | 5400 rpm              |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 14 AWG            |
| <b>Motor Lead Termination</b>        | Flying Leads          |
| <b>Motor Standards</b>               | NEMA                  |
| <b>Motor Type</b>                    | 0744M                 |
| <b>Mounting Arrangement</b>          | F1                    |
| <b>Number of Poles</b>               | 2                     |
| <b>Overall Length</b>                | 16.88 IN              |
| <b>Power Factor</b>                  | 92                    |
| <b>Product Family</b>                | General Purpose       |
| <b>Pulley End Bearing Type</b>       | Ball                  |
| <b>Pulley Face Code</b>              | Standard              |
| <b>Pulley Shaft Indicator</b>        | Standard              |
| <b>Rodent Screen</b>                 | None                  |
| <b>RoHS Status</b>                   | ROHS COMPLIANT        |
| <b>Service Factor</b>                | 1.15                  |
| <b>Shaft Diameter</b>                | 1.375 IN              |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding    |
| <b>Shaft Rotation</b>                | Reversible            |
| <b>Shaft Slinger Indicator</b>       | No Slinger            |
| <b>Speed</b>                         | 3500 rpm              |
| <b>Speed Code</b>                    | Single Speed          |
| <b>Starting Method</b>               | Direct on line        |
| <b>Thermal Device - Bearing</b>      | None                  |
| <b>Thermal Device - Winding</b>      | None                  |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor   |



|                   |      |
|-------------------|------|
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

**Nameplate**
**NP4312A01M05L**

| CAT #         |  |     |  | HBAO3771T    |  |   |  | SER #     |  |    |  | CC           |  |      |  | WGT   |  |      |  | 203  |  | LBS   |  |               |  |  |  |
|---------------|--|-----|--|--------------|--|---|--|-----------|--|----|--|--------------|--|------|--|-------|--|------|--|------|--|-------|--|---------------|--|--|--|
| SPEC          |  |     |  | 07D097W723G2 |  |   |  | RATING    |  |    |  | 40C AMB-CONT |  |      |  |       |  |      |  |      |  |       |  |               |  |  |  |
| HP            |  |     |  | VOLTS        |  |   |  | AMPS      |  |    |  | MAG CUR      |  |      |  | CODE  |  | RPM  |  | DES  |  | PF    |  | NEMA NOM. EFF |  |  |  |
| 10 AO         |  |     |  | 230/460      |  |   |  | 22.4/11.2 |  |    |  | 6.8/3.4      |  |      |  | L     |  | 3500 |  | A    |  | 92    |  | 91.7          |  |  |  |
| 10.5AO        |  |     |  | 230/460      |  |   |  | 23.2/11.6 |  |    |  | 6.8/3.4      |  |      |  | L     |  | 3500 |  | -    |  | 92    |  | 91.7          |  |  |  |
| 11 AO         |  |     |  | 230/460      |  |   |  | 24.2/12.1 |  |    |  | 6.8/3.4      |  |      |  | K     |  | 3500 |  | -    |  | 92    |  | 91.7          |  |  |  |
| 11.5AO        |  |     |  | 230/460      |  |   |  | 25.2/12.6 |  |    |  | 6.8/3.4      |  |      |  | K     |  | 3500 |  | -    |  | 93    |  | 91.7          |  |  |  |
| 12 AO         |  |     |  | 230/460      |  |   |  | 26.2/13.1 |  |    |  | 6.8/3.4      |  |      |  | J     |  | 3475 |  | -    |  | 93    |  | 91.7          |  |  |  |
| PH            |  | 3   |  | CL           |  | H |  | HZ        |  | 60 |  | ENCL         |  | TEAO |  | IP    |  | 54   |  | SF   |  | 1.15  |  | AIR OVER      |  |  |  |
| DE BRG        |  |     |  | 6307         |  |   |  | ODE BRG   |  |    |  | 6206         |  |      |  | FRAME |  |      |  | 215T |  |       |  |               |  |  |  |
| INV TYPE:     |  |     |  | VPWM         |  |   |  | SL HZ     |  |    |  | 1.66         |  | CHP  |  | 60    |  | TO   |  | 90   |  | 1.5:1 |  |               |  |  |  |
| WK2           |  | 0.4 |  | LB FT2       |  |   |  | MAX RPM   |  |    |  | 5400         |  | CT   |  | 6     |  | TO   |  | 60   |  | 10:1  |  |               |  |  |  |
|               |  |     |  |              |  |   |  |           |  |    |  | VT           |  | 3    |  | TO    |  | 60   |  | 20:1 |  |       |  |               |  |  |  |
| SFA 27.8/13.9 |  |     |  |              |  |   |  |           |  |    |  |              |  |      |  |       |  |      |  |      |  |       |  |               |  |  |  |
|               |  |     |  |              |  |   |  |           |  |    |  |              |  |      |  |       |  |      |  |      |  |       |  |               |  |  |  |
| YR:           |  |     |  |              |  |   |  |           |  |    |  |              |  |      |  |       |  |      |  |      |  |       |  |               |  |  |  |

**AC Induction Motor Performance Data**

Record # 95858

Typical performance - not guaranteed values

| Winding: 07WGW723-R061 |    |              | Type: 0744M                              |                           | Enclosure: TEAO       |              |         |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|--------------|---------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |              |         |
| Rated Output (HP)      |    | 10 AIR OVER  | Full Load Torque                         |                           | 15 LB-FT              |              |         |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line        |              |         |
| Full Load Amps         |    | 22.4/11.2    | Breakdown Torque                         |                           | 83 LB-FT              |              |         |
| R.P.M.                 |    | 3500         | Pull-up Torque                           |                           | 46 LB-FT              |              |         |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 55 LB-FT     |         |
| NEMA Design Code       |    | A            | KVA Code                                 | L                         | Starting Current      |              | 120 A   |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current           |                       | 3.4 A        |         |
| NEMA Nom. Eff.         |    | 91.7         | Power Factor                             | 92                        | Line-line Res. @ 25°C |              | 0.723 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 45°C         |         |
| S.F. Amps              |    | 27.8/13.9    |                                          | Temp. Rise @ S.F. Load    |                       | 56°C         |         |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 32           |         |
|                        |    |              |                                          | Rotor inertia             |                       | 0.402 lb-ft² |         |

**Load Characteristics 460 V, 60 Hz, 10 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 64   | 82   | 89   | 92   | 93   | 94   | 93   |
| Efficiency      | 90   | 92.7 | 92.9 | 92.3 | 91.3 | 90.2 | 91.7 |
| Speed           | 3578 | 3556 | 3535 | 3512 | 3488 | 3462 | 3498 |
| Line amperes    | 4.4  | 6.4  | 8.7  | 11.1 | 13.8 | 16.7 | 12.7 |

ABB Motors and Mechanical Inc.

WINDING # 07WGW723

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3500 RPM 460 V 0744M

TORQUES (LB-FT) : PO=83 PU=46 LR=55 LRA=120





