

# ABB BALDOR RELIANCE III

---

## Customer information packet D5007P

7.5HP/1750-2300RPM/DC/NEMA 218AT

**Specifications**

|                          |                       |
|--------------------------|-----------------------|
| Armature Voltage         | 500 V                 |
| Base Speed               | 1750 rpm              |
| Enclosure                | DPFG                  |
| Field Voltage            | 150 V                 |
|                          | 300 V                 |
| Output Power             | 7.500 HP              |
| Agency Approvals         | CSA                   |
| Ambient Temperature      | 40 °C                 |
| Armature Current         | 13.2 a                |
| Drip Cover               | No Drip Cover         |
| Duty Rating              | CONT                  |
| Feedback Device          | NO FEEDBACK           |
| Field Winding Type       | STR. SHUNT            |
| Heater Indicator         | No Heater             |
| Insulation Class         | F                     |
| Lifting Lugs             | Standard Lifting Lugs |
| Motor Standards          | NEMA                  |
| Mounting Arrangement     | F1                    |
| Overall Length           | 25.93 IN              |
| Service Factor           | 1.00                  |
| Shaft Diameter           | 1.375 IN              |
| Shaft Ground Indicator   | No Shaft Grounding    |
| Shaft Slinger Indicator  | No Slinger            |
| Thermal Device - Bearing | None                  |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | -          |
| Type         | DC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | K0015A A   |
| Layout       | 876-1      |
| Eff. date    | 01-06-2020 |
| CD Diagram   | 15209      |
| Poles        | 00         |
| Leads        |            |
| Proprietary  | False      |
| Created date | 12-20-2019 |

**Nameplate**

| NP1734      |         |           |           |                  |          |              |            |     |   |
|-------------|---------|-----------|-----------|------------------|----------|--------------|------------|-----|---|
| CAT.NO.     |         |           |           | MODEL            | T21S8004 |              |            |     |   |
| HP          | 7.5     | RPM       | 1750/2300 |                  | FRAME    |              | 0218AT     |     |   |
| ARM V       | 500     |           | ARM A     | 13.20            | WOUND    |              | STR. SHUNT |     |   |
| FLD V       | 150/300 |           | FLD A     | 1.38-.70/.69-.35 |          |              |            |     |   |
| CONN        |         |           | OHMS      | 307.6            |          | CL           | F          |     |   |
| ENCL        | DPFG    |           | DUTY      | CONT             |          | MX AMB       | 40         |     |   |
| P CODE      | D       |           | CTSR      |                  |          | SER.F.       | 1.0        |     |   |
| S/N         |         |           |           | E/S              | K0015A A |              |            |     |   |
|             | -       |           |           |                  |          |              |            |     |   |
|             |         |           |           |                  |          |              |            |     |   |
| O.D.E. BRG. | 6207    | D.E. BRG. | 6207      | BRUSH            |          | 150986-21-10 |            | QTY | 2 |

**Parts List**

| Part number  | Description                              | Quantity  |
|--------------|------------------------------------------|-----------|
| SA377392     | SA T21S8004                              | 1.000 ea  |
| AA018252     | AA T21S8004                              | 1.000 ea  |
| 036170004DA  | DRSCW METRIC NAMEPLATE                   | 4.000 ea  |
| NP1734       | NPL,BALDOR DC MTR ALUMINUM               | 1.000 ea  |
| 032018004BK  | HHCS 5/16-18X1/2 PLATED                  | 2.000 ea  |
| 15094        | DISHED LOCKWASHER .332 ID, .865 OD       | 2.000 ea  |
| 21702-1      | ROCKER RING ASSY FR 210 1 BRUSH PER BRU  | 1.000 ea  |
| 150986-21-10 | BRUSH,210 FR. R312 NATIONAL              | 2.000 ea  |
| 21075-4      | CE BRKT MACHINE FRAME 210 SERIES,SPL CE  | 1.000 ea  |
| 21073-8      | FE BRKT MACH FR210 STANDARD FOR L        | 1.000 ea  |
| 004824015A   | GREASE POLYREX EM                        | 0.100 lb  |
| 032018048BK  | 5/16-18 X 6.00 HHCS                      | 4.000 ea  |
| 032018032BK  | HHCS 5/16-18X4"PLTD-250                  | 4.000 ea  |
| HW4500A17    | 317400 ALEMITE GREASE RELIEF             | 1.000 ea  |
| HW4500A17    | 317400 ALEMITE GREASE RELIEF             | 1.000 ea  |
| HW5100A07    | W2816-030 WVY WASHER (WB)                | 1.000 ea  |
| 035000001A   | ALFTG 1/8" 1610-BL                       | 1.000 ea  |
| 035000001A   | ALFTG 1/8" 1610-BL                       | 1.000 ea  |
| 032130016AA  | HSHCS                                    | 2.000 ea  |
| 150449-25    | T BOX GRD STUD ARG 1/4 20 DIA. STUD      | 1.000 ea  |
| 21091        | GASKET TERM BOX FRAME 210                | 1.000 ea  |
| 21091        | GASKET TERM BOX FRAME 210                | 1.000 ea  |
| 032018006DK  | HHCS 1/2-13X3/4 PLATED                   | 4.000 ea  |
| 21090        | TERM BOX HOLE COVER 1018 STEEL PLATE     | 1.000 ea  |
| 032018004AK  | HHCS 1/4-20X1/2 PLATED                   | 4.000 ea  |
| 21079-2      | GASKET COVER CE FRAME 210                | 3.000 ea  |
| 21079-1      | GASKET,CVR,FAN END,FR.2103/32 THK DC205( | 3.000 ea  |
| 032018004AK  | HHCS 1/4-20X1/2 PLATED                   | 28.000 ea |
| 21080-1      | VENT COVER FR 21 SERIES                  | 3.000 ea  |
| 21081-2      | ACCESS COVER FRAME 21 SERIES             | 1.000 ea  |
| 21080-2      | VENT COVER, FR 21 SERIES W-5.00          | 2.000 ea  |

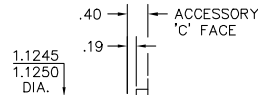
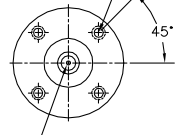
|              |                                          |          |
|--------------|------------------------------------------|----------|
| 15029-1      | TERM.BOX BASE FR-210 DUREX P/N:1DR       | 1.000 ea |
| 15029-2      | TERM.BOX COVER FR-210 DUREX P/N:D616     | 1.000 ea |
| 15029-3      | GASKET T BOX CVR,1/8 THK ARMSTRONG DC 20 | 1.000 ea |
| 032018004AK  | HHCS 1/4-20X1/2 PLATED                   | 2.000 ea |
| 032018004AK  | HHCS 1/4-20X1/2 PLATED                   | 4.000 ea |
| 15209        | LABEL CONNECTIONS & TERMINAL MARKIN      | 1.000 ea |
| 15021-1      | ACCESSORY FACE COVER FRAME 180-500 SERIE | 1.000 ea |
| 034180014EA  | KEY 5/16X5/16X1-3/4L                     | 1.000 ea |
| 004824007BTW | SPECIAL PAINT4824-3BVZ                   | 0.100 ea |

**Accessories**

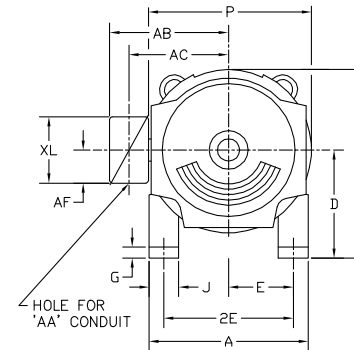
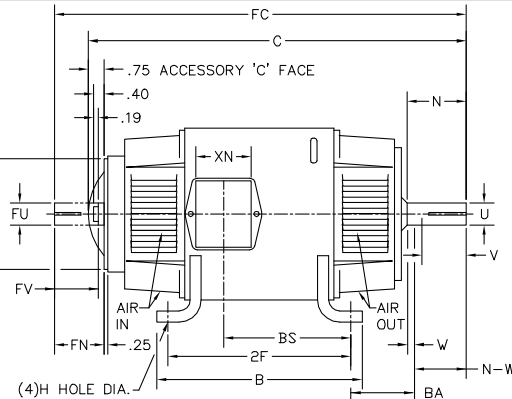
| Part number | Description                              | Multiplier |
|-------------|------------------------------------------|------------|
| 91EP5000A01 | C-FACE CONVERSION KIT FOR STOCK MTR,FR 2 | P1         |

876-1

1/2-13UNC-2B THD X 1.00 DEEP  
4-HOLES EQUALLY SPACED  
ON A 7.250 DIA. B.C.



STANDARD COMM END  
FOR SINGLE SHAFT EXTENSION



|        | FOOT MOUNTING |      |       |     |      |      |      | D.E. SHAFT EXTENSION |       |                   |     | DRIVE KEY |          | ACC SHAFT |       |      | ACC KEY |          | FRAME |       |       |       |                   |       |       |
|--------|---------------|------|-------|-----|------|------|------|----------------------|-------|-------------------|-----|-----------|----------|-----------|-------|------|---------|----------|-------|-------|-------|-------|-------------------|-------|-------|
| FRAME  | BA            | E    | 2F    | G   | H    | J    | N    | N-W                  | U     | V                 | W   | KEY-SQ.   | KEY-LONG | FN        | FU    | FV   | KEY-SQ. | KEY-LONG | A     | B     | C     | FC    | D                 | O     | P     |
| 218AT  | 3.50          | 4.25 | 10.00 | .50 | .406 | 2.00 | 3.00 | 2.75                 | 1.375 | 2.50 <sup>3</sup> | .25 | .312      | 1.75     | 2.44      | 1.125 | 2.19 | .250    | 2.25     | 10.38 | 11.00 | 24.25 | 25.93 | 5.25 <sup>2</sup> | 10.47 | 10.44 |
| 219AT  | 3.50          | 4.25 | 11.00 | .50 | .406 | 2.00 | 3.00 | 2.75                 | 1.375 | 2.50 <sup>3</sup> | .25 | .312      | 1.75     | 2.44      | 1.125 | 2.19 | .250    | 2.25     | 10.38 | 12.00 | 25.25 | 26.93 | 5.25 <sup>2</sup> | 10.47 | 10.44 |
| 2110AT | 3.50          | 4.25 | 12.50 | .50 | .406 | 2.00 | 3.00 | 2.75                 | 1.375 | 2.50 <sup>3</sup> | .25 | .312      | 1.75     | 2.44      | 1.125 | 2.19 | .250    | 2.25     | 10.38 | 13.50 | 26.75 | 28.43 | 5.25 <sup>2</sup> | 10.47 | 10.44 |
| 258AT  | 4.25          | 5.00 | 12.50 | .69 | .531 | 2.25 | 3.44 | 3.25                 | 1.625 | 3.00 <sup>3</sup> | .19 | .375      | 2.31     | 3.33      | 1.375 | 3.08 | .312    | 3.00     | 12.38 | 14.00 | 27.25 | 29.84 | 6.25 <sup>2</sup> | 12.47 | 12.44 |
| 259AT  | 4.25          | 5.00 | 14.00 | .69 | .531 | 2.25 | 3.44 | 3.25                 | 1.625 | 3.00 <sup>3</sup> | .19 | .375      | 2.31     | 3.33      | 1.375 | 3.08 | .312    | 3.00     | 12.38 | 15.50 | 28.75 | 31.34 | 6.25 <sup>2</sup> | 12.47 | 12.44 |
| 2510AT | 4.25          | 5.00 | 16.00 | .69 | .531 | 2.25 | 3.44 | 3.25                 | 1.625 | 3.00 <sup>3</sup> | .19 | .375      | 2.31     | 3.33      | 1.375 | 3.08 | .312    | 3.00     | 12.38 | 17.56 | 30.75 | 33.34 | 6.25 <sup>2</sup> | 12.47 | 12.44 |
| 2513AT | 4.25          | 5.00 | 22.00 | .69 | .531 | 2.25 | 3.44 | 3.25                 | 1.625 | 3.00 <sup>3</sup> | .19 | .375      | 2.31     | 3.33      | 1.375 | 3.08 | .312    | 3.00     | 12.38 | 23.50 | 36.75 | 39.34 | 6.25 <sup>2</sup> | 12.47 | 12.44 |

| CONDUIT BOX |       |      |      |      |       |      |      | ARM<br>APPROX.<br>WK <sup>2</sup><br>LBS.FT. <sup>2</sup> | APPROXIMATE<br>WEIGHT |
|-------------|-------|------|------|------|-------|------|------|-----------------------------------------------------------|-----------------------|
| FRAME       | AA    | AB   | AC   | AF   | BS    | XL   | XN   |                                                           |                       |
| 218AT       | 3/4-1 | 7.91 | 6.44 | 2.44 | 8.38  | 3.81 | 3.12 | 1.35                                                      | 242 <sup>5</sup>      |
| 219AT       | 3/4-1 | 7.91 | 6.44 | 2.44 | 9.38  | 3.81 | 3.12 | 1.49                                                      | 260 <sup>5</sup>      |
| 2110AT      | 3/4-1 | 7.91 | 6.44 | 2.44 | 10.88 | 3.81 | 3.12 | 1.71                                                      | 286 <sup>5</sup>      |
| 258AT       | 1 1/4 | 9.35 | 7.72 | 2.94 | 9.75  | 4.94 | 4.00 | 2.91                                                      | 366 <sup>5</sup>      |
| 259AT       | 1 1/4 | 9.35 | 7.72 | 2.94 | 11.25 | 4.94 | 4.00 | 3.31                                                      | 411 <sup>5</sup>      |
| 2510AT      | 1 1/4 | 9.35 | 7.72 | 2.94 | 13.25 | 4.94 | 4.00 | 3.80                                                      | 471 <sup>5</sup>      |
| 2513AT      | 1 1/4 | 9.35 | 7.72 | 2.94 | 19.25 | 4.94 | 4.00 | 5.27                                                      | 532 <sup>5</sup>      |

- 1) SHAFT DIAMETERS TO 1.500 TOLERANCE +.0000 -.0005  
SHAFT DIAMETERS ABOVE 1.500 TOLERANCE +.0000 -.0010  
SHAFT DIAMETERS TO 1.625 RUNOUT .002 T.I.R. MAX.  
SHAFT DIAMETERS ABOVE 1.625 RUNOUT .003 T.I.R. MAX.
- 2) 'D' DIMENSION TOLERANCE +.000 -.060
- 3) 'V' DIMENSION IS MAX. HUB LENGTH ON SHAFT
- 4) CONDUIT BOX CAN BE ROTATED IN 90° STEPS ON ITS OWN AXIS.
- 5) TOTAL WEIGHT OF MOTOR.
- 6) ALL DIMENSIONS NOT NOTED ARE NOMINAL DIMENSIONS CONSULT FACTORY FOR TOLERANCES.

FOR F1 OR F2 CONDUIT BOX  
LOCATION SEE SALES ORDER

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|                                             |                              |                   |
|---------------------------------------------|------------------------------|-------------------|
| REV. DESC: REV. "D" DIM TO +.000 -.060 ONLY |                              |                   |
| REV. LTR: B                                 | VERSION: 01                  | TDR: 000000752566 |
| FILE: \RGG\00019\505                        | REVISED: 09:35:03 06/20/2012 | BY: RGGNAS        |
| MTL: -                                      |                              |                   |

**BALDOR**  
DIM SHEET, 218AT-2513AT, DPFG, STD  
SH 1 of 1

876-1

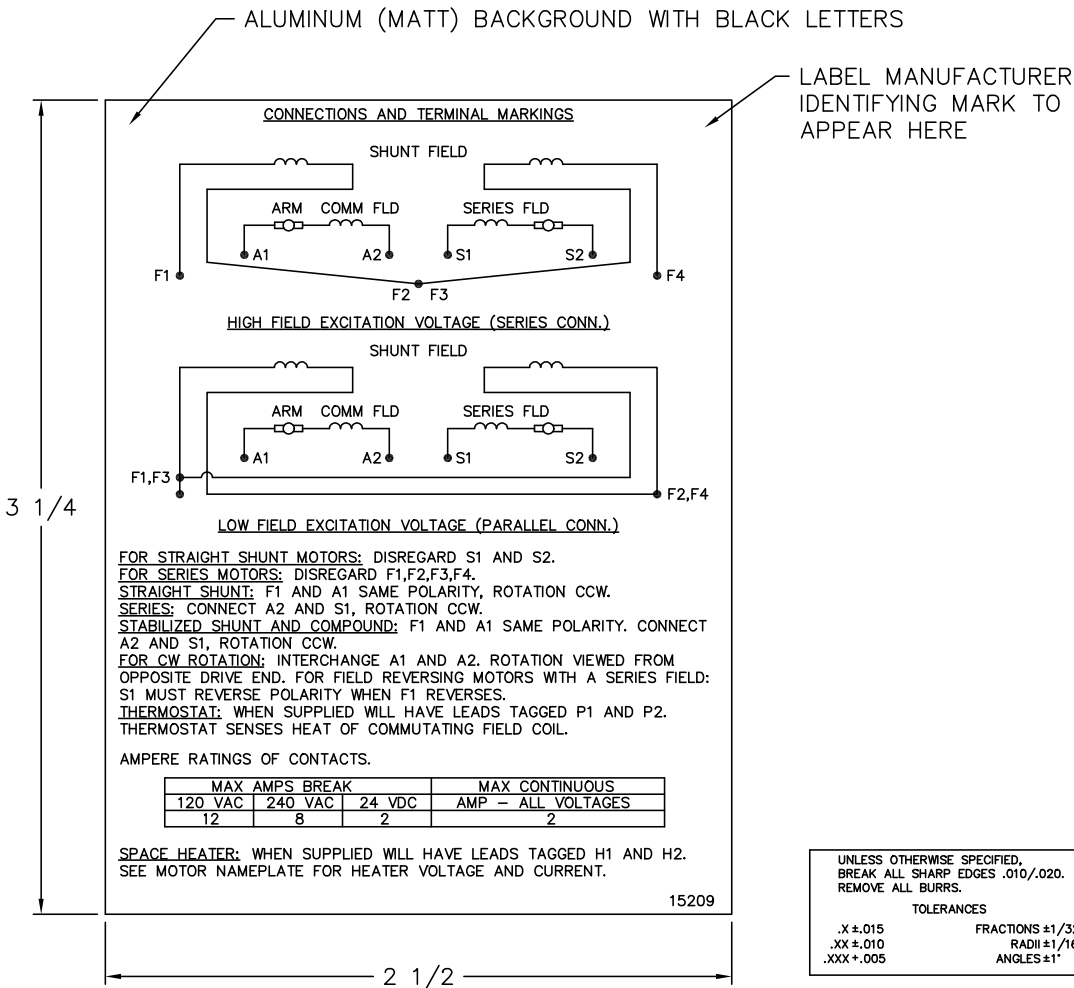
## BALDOR ROUND DC ARMATURE INSULATION B/M

FRAME SIZE: **218**  
VOLTS: **301-600**

CORE LENGTH: **4.62**  
#SLOTS: **24**

| DESCRIPTION                                                                         | #PCS | SIZE (USAGE)<br>OR PART #  | PURCHASE INFO        | REMARKS                                  |
|-------------------------------------------------------------------------------------|------|----------------------------|----------------------|------------------------------------------|
| SLOT LINER                                                                          | 24   | 1.38" X 4.94"<br>(6.82IN2) | 612769207AA          | 4824-10-CX<br>(.015")                    |
| TOP STICK                                                                           | 24   | 5.13"<br>(.43')            | 4175320005AA         | AY482409011<br>(24-21-15)                |
| MIDSTICKS                                                                           | 24   | NA                         | 419910132A           | 4824-10-CX<br>(.010")                    |
| SHAFT INSULATION                                                                    | 2    | NA                         | 418020001B           | 4824-10-CX<br>(.007")                    |
| HEAD INSULATION                                                                     | 4    | NA                         | 609848005F           | 2 PCS EACH HEAD<br>4824-10-FH<br>(.007") |
| COMMUTATOR<br>INSULATION                                                            | NA   | 8.00"                      | MH1094A03            | "GOLD TAPE"                              |
| NOMEX/GLASS<br>CLOTH                                                                | NA   | 12.00"                     | FH482410150          | 4824-10FH                                |
| SLEEVING                                                                            | NA   | NA                         | NA                   | 4824-13AW                                |
|                                                                                     |      |                            |                      |                                          |
|                                                                                     |      |                            |                      |                                          |
|                                                                                     |      |                            |                      |                                          |
|  |      |                            | <b>424503-002JHV</b> |                                          |

15209



**NOTE:**  
MATERIAL .005 MINIMUM FULL HARD ALUMINUM DULL FINISH.  
TEMP. RANGE -20°C TO +125°C MAXIMUM.  
FOR INDOOR AND OUTDOOR MOUNTING BACK.  
METAL, PRESSURE SENSITIVE BACK. MUST MEET CSA STANDARD.  
THE CSA IDENTIFYING MARK OF THE LABEL MANUFACTURER MUST APPEAR IN THE UPPER RIGHT HAND CORNER AS INDICATED.

|             |   |                                        |                   |
|-------------|---|----------------------------------------|-------------------|
| MATL: NOTED |   |                                        |                   |
| REV:        | G | CHANGE ALL "NAMEPLATE" TEXT TO "LABEL" |                   |
| 60Z91       |   | SCALE: —                               | BY: BKW           |
|             |   | FILE: CHB00002485                      | REVISED: 02/19/97 |
|             |   | TDR: 0115147                           |                   |

**BALDOR ELECTRIC Co.**

LABEL, CONNECTIONS AND TERMINAL MARKINGS DC

15209