

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **ZDWNM3546T**

**1HP,1745RPM,3PH,60HZ,143TC,3524M,TENV,F1**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | M     | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 3524M | Elec. Spec: | 35WGP560 | CD Diagram:   | CD0005     |
| Enclosure:  | TENV  | Mfg Plant:     |       | Mech. Spec: | 35RR179  | Layout:       | 35LYRR179  |
| Frame:      | 143TC | Mounting:      | F1    | Poles:      | 04       | Created Date: | 12-21-2009 |
| Base:       | RG    | Rotation:      | R     | Insulation: | H        | Eff. Date:    | 02-10-2016 |
| Leads:      | 9#18  |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP1609L |                      |
|-------------------|----------------------|
| CAT NO            | ZDWNM3546T           |
| SPEC.             | 35RR179P560Z1        |
| FRAME             | 143TC HP 1 TE        |
| VOLTS             | 230/460              |
| MAG CUR           | 1.8/.9 FLA 2.9/1.45  |
| RPM               | 1745 RPM MAX 6000    |
| HZ                | 60 PH 3 CLASS H      |
| SER.F.            | 1.00 DES B SL HZ 1.7 |
| NEMA-NOM-EFF      | 85.5 WK2 0.142       |
| BLWR V            | PH HZ A              |
| RATING            | 40C AMB-CONT         |
| DE BRG            | 6205 ODE BRG 6203    |
| CC                | 010A SER.NO          |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA188993      | SA 35RR179P560Z1                         | 1.000 EA |
| RA176712      | RA 35RR179P560Z1                         | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3010A01W  | 35 CB .75 NPT @ 6:00, WHITE EPOXY        | 1.000 EA |
| 35GS1039      | 05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,  | 1.000 EA |
| 51XB1016A08   | 10-16X 1/2HXWSSLD SERTYB                 | 2.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 35EP3100M70MW | FR TENV 203 BRG WD W/ THRU-SHAFT ENCODER | 1.000 EA |
| HW4032A01     | BLACK DRAIN PLUG FOR WASH DOWN MOTORS    | 3.000 EA |
| HW4600A09     | SEAL 0.656 X 1.124 X 0.250 DOUBLE SHIELD | 1.000 EA |
| HW5100A03SP   | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3300A48MW | SPL FACE MTD EP - 205 BRG - W/SEAL FOR W | 1.000 EA |
| HW4032A01     | BLACK DRAIN PLUG FOR WASH DOWN MOTORS    | 3.000 EA |
| HW4600B49     | SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB | 1.000 EA |
| 12XN1032S20   | 10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL | 2.000 EA |
| 10XN2520S08   | SCREW, 1/4-20 X 1/2 HHCS SS              | 1.000 EA |
| 35FH4801W     | THRU-SHAFT ENCODER COVER INV/VEC F1 & F2 | 1.000 EA |
| 10XN2520S08   | SCREW, 1/4-20 X 1/2 HHCS SS              | 4.000 EA |
| 35CB4522      | 35 LIPPED CB LID PRIMED                  | 1.000 EA |
| 35GS1030A02   | 35 GS FOR CB LID - WHITE NEOPRENE        | 1.000 EA |
| 59XW0832S07   | TAPTITE II,HEX WSHR UNSLTD SER,410 S.S., | 4.000 EA |
| HW4600B46     | V-RING SLINGER 0.875 X 1.420 X .24 VITON | 1.000 EA |
| HW2502D13     | SS KEY, 3/16 SQ X 1.375                  | 1.000 EA |
| HA7000A01     | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| MJ5004A05              | #242-21 LOCTITE GENERAL PURPOSE MED. STR | 0.005 EA |
| MJ5001A27              | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 QT |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| LB1164                 | LABEL,WARNING AND DRAIN                  | 1.000 EA |
| HA5027A01              | HA4066A01 T-DRAIN X2 BAGGED              | 1.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| OE5011A05SP            | HS25 ENCODER ASSY - TENV                 | 1.000 EA |
| MG1025Z02              | ACTIVATOR WILKOFASST 060.02HF            | 0.010 GA |
| MG1025W01              | WILKOFASST, 781.01, SIGNAL WHITE #9003   | 0.017 GA |
| HA3100S07              | THRUBOLT 10-32 X 8.375 SS                | 4.000 EA |
| LC0145B01              | CONNECTION LABEL                         | 1.000 EA |
| NP1609L                | SS WD VEC UL CSA CC REV MTG              | 1.000 EA |
| 36PA1000               | PKG GRP, PRINT PK1016A06                 | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |

AC Induction Motor Performance Data



**AC Induction Motor Performance Data**  
 Record # 36547  
 Typical performance - not guaranteed values

|                          |                    |                        |
|--------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGP560 | <b>Type:</b> 3524M | <b>Enclosure:</b> TENV |
|--------------------------|--------------------|------------------------|

| Nameplate Data    |              |          | General Characteristics at 460 V, 60 Hz:<br>High Volt Connection |            |  |
|-------------------|--------------|----------|--|------------|--|
| Rated Output (HP) | 1            |          | Full Load Torque   | 3.02 LB-FT |  |
| Volts             | 230/460      |          | Start Configuration  | DOL        |  |
| Full Load Amps    | 2.9/1.45     |          | Break Down Torque  | 14.3 LB-FT |  |
| R.P.M.            | 1745         |          | Pull-Up Torque   | 8.76 LB-FT |  |
| Hz                | 60           | Phase    | Locked-rotor Torque  | 10.3 LB-FT |  |
| NEMA Design Code  | B            | KVA Code | Starting Current   | 13.5 Amps  |  |
| Service Factor    | 1            |          | No-load Current  | 0.89 Amps  |  |
| NEMA Nom. Eff.    | 85.5         | P.F.     | Line-line Res. @ 25°C.   | 15.8 Ohms  |  |
| Rating - Duty     | 40C AMB-CONT |          | Temp. Rise @ Rated Load  | 85°C       |  |
| S.F. Amps         |              |          | Temp. Rise @ S.F. Load   | 100°C      |  |

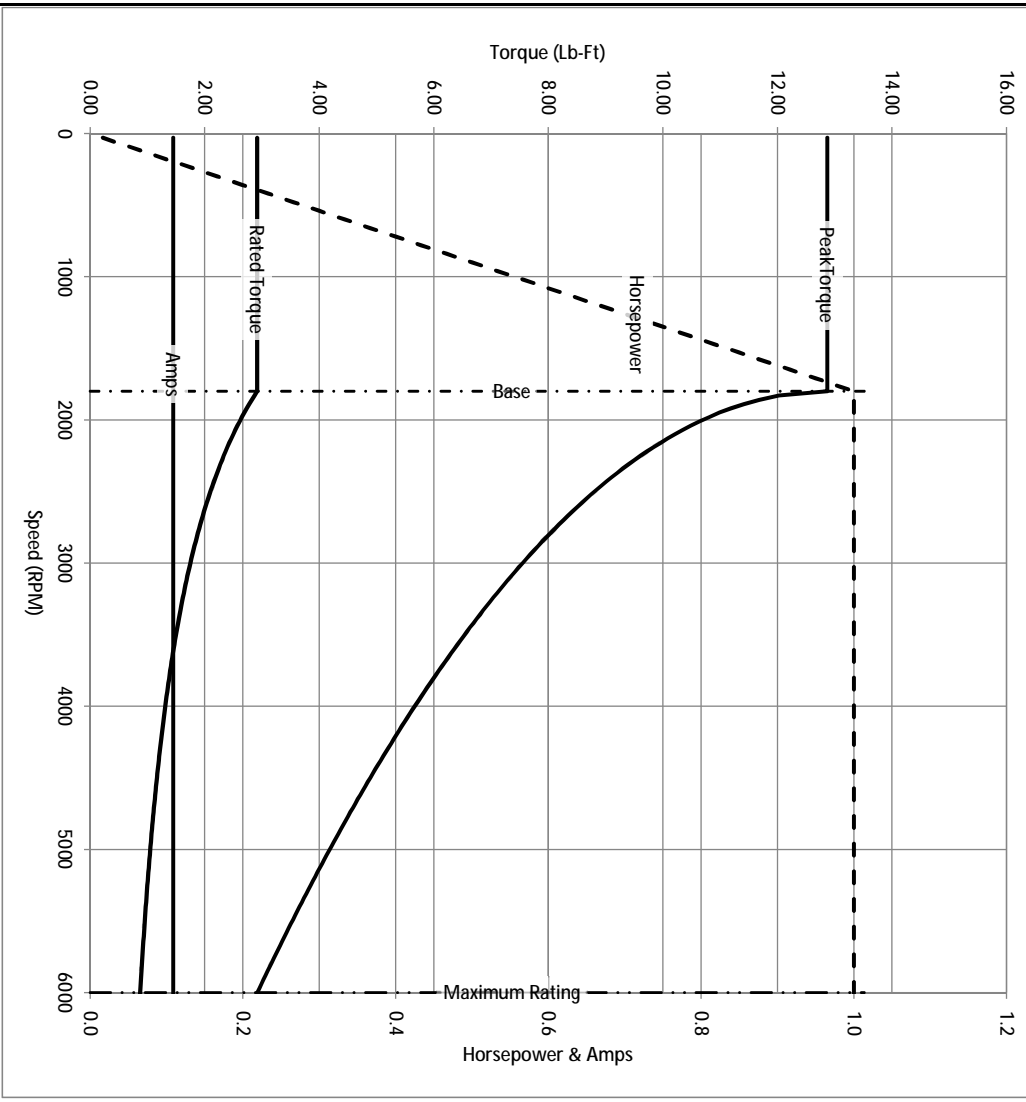
Load Characteristics at 460 Volts, 60 Hz, 1 HP

| % of Rated Load | 25    | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|-------|------|------|------|------|------|------|
| Power Factor    | 33    | 53   | 67   | 76   | 81   | 85   |      |
| Efficiency      | 74.5  | 82.9 | 85.2 | 85.2 | 84.7 | 82.6 |      |
| Speed           | 1784  | 1774 | 1760 | 1744 | 1731 | 1698 |      |
| Line Amperes    | 0.935 | 1.05 | 1.22 | 1.45 | 1.7  | 1.99 |      |

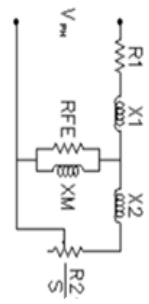
Baldor Electric Company Fort Smith, Arkansas



|            |            |                         |          |                                       |       |   |
|------------|------------|-------------------------|----------|---------------------------------------|-------|---|
| Catalog    | ZDWNM3546T | NP VOLTS                | 230/460  | ENCLOSURE                             | TENV  | WVE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C) |
| FRAME      | 143TC      | NP AMPS                 | 2.9/1.45 | Base Volts                            | 460   | R1 7.710 X1 10.232                                |
| HP         | 1 HP       | DUTY                    | Cont     | Base AMPS                             | 1.45  | R2 4.940 X2 7.257                                 |
| BASE SPEED | 1800       | MAX SAFE RPM            | 6000     | Slip Hz                               | 1.87  | XM1 282.199                                       |
| PHASE/HZ   | 3/60       | AMB <sup>0</sup> /INSUL | 40/H     | WK <sup>2</sup> (lb-ft <sup>2</sup> ) | 0.142 |   |



Remarks: Calculated Data



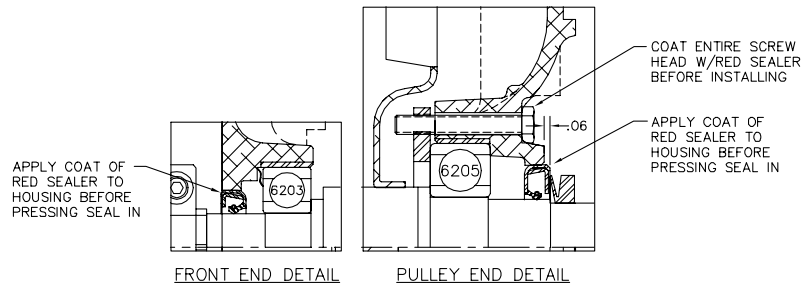
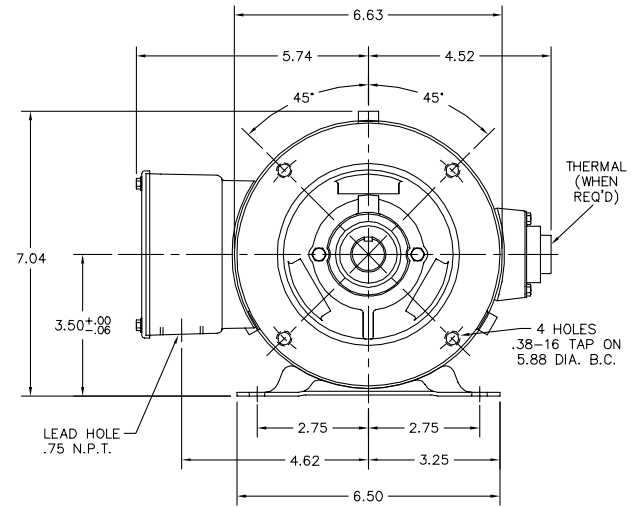
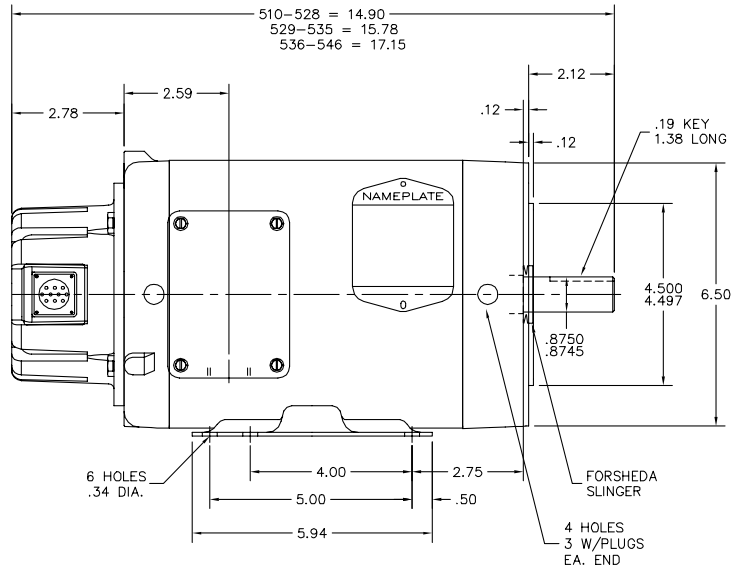
**BALDOR** DR BY ENR  
 CK BY  
 APP BY ENR  
 DATE 3/6/2013

**35RR179P560Z1**

A-C MOTOR  
 PERFORMANCE CURVES  
 ISSUE DATE 3/6/2013

A MEMBER OF THE ABB GROUP

35LYRR179



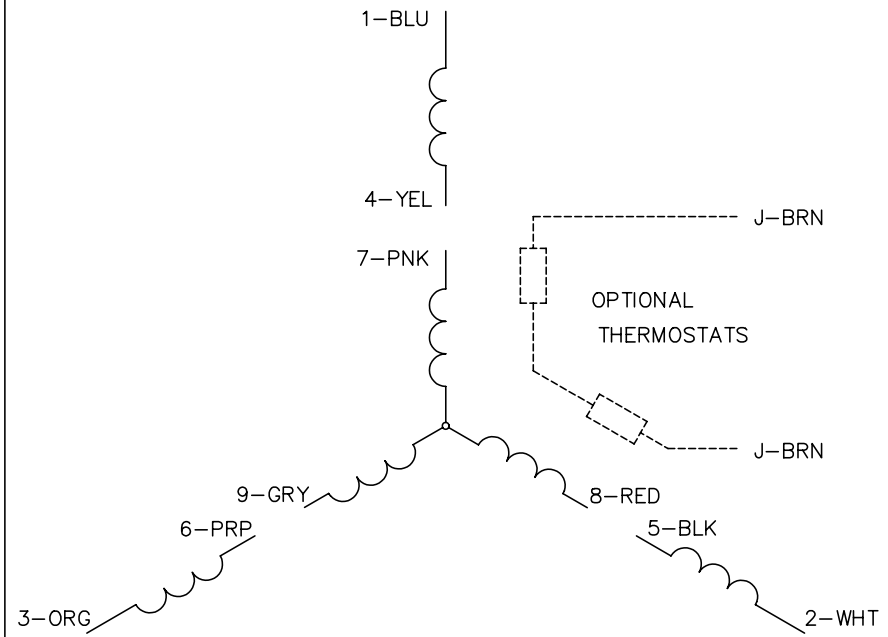
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|                      |                              |                   |
|----------------------|------------------------------|-------------------|
| REV. DESC: NEW       | VERSION: 00                  | TDR: 000000521179 |
| REV. LTR: -          | REVISED: 11:38:25 12/21/2009 | BY: ENALEMO       |
| FILE: \AAA\00168\399 |                              |                   |
| MTL: -               |                              |                   |

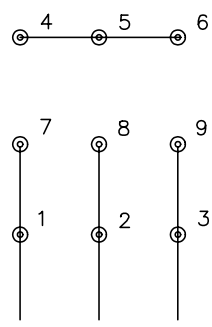
|   |
|---|
| <b>BALDOR • DODGE • RELIANCE</b>                    |
| HOR 143-5TC TENV 35M WD VECTOR (THRU-SHAFT ENCODER) |
| SH 1 of 1   |

35LYRR179

CD0005

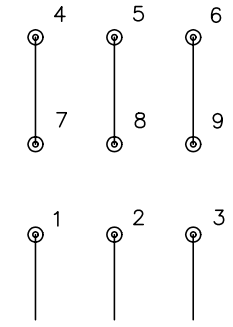


LOW VOLTAGE (2Y)



LINE

HIGH VOLTAGE (1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 90000                                     |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005