

BALDOR® • RELIANCE 

Product Information Packet

IDWNM3707T

5HP,1760RPM,3PH,60HZ,213TC,3732M,TENV,F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|----|
| Revision: | AA | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 37WGT811 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 37H312 | Layout: | 37LYH312 | Poles: | 04 | Created Date: | |
| Base: | RG | Eff. Date: | 04-20-2020 | Leads: | 9#14 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | IDWNM3707T | Insulation Class: | H |
| Enclosure: | TENV | Inverter Code: | Inverter Duty |
| Frame: | 213TC | KVA Code: | H |
| Frame Material: | Steel | Lifting Lugs: | Standard Lifting Lugs |
| Output @ Frequency: | 5.000 HP @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 14 AWG |
| Voltage @ Frequency: | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| | 460.0 V @ 60 HZ | Motor Lead Termination: | Flying Leads |
| XP Class and Group: | None | Motor Type: | 3732M |
| XP Division: | Not Applicable | Mounting Arrangement: | F1 |
| Agency Approvals: | UR | Power Factor: | 78 |
| | CSA | Product Family: | Wash Down |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Sealed Bearing |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |
| Current @ Voltage: | 13.400 A @ 230.0 V | Shaft Ground Indicator: | No Shaft Grounding |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|----------------------------|
| | 6.700 A @ 460.0 V | Shaft Rotation: | Reversible |
| Design Code: | B | Shaft Slinger Indicator: | Shaft Slinger |
| Drip Cover: | No Drip Cover | Speed Code: | Single Speed |
| Duty Rating: | CONT | Motor Standards: | NEMA |
| Electrically Isolated Bearing: | Not Electrically Isolated | Starting Method: | Direct on line |
| Feedback Device: | NO FEEDBACK | Thermal Device - Bearing: | None |
| Front Face Code: | Encoder/Feedback Device | Thermal Device - Winding: | Normally Closed Thermostat |
| Front Shaft Indicator: | None | Vibration Sensor Indicator: | No Vibration Sensor |
| Heater Indicator: | No Heater | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| Nameplate NP1608L | |
|-------------------|----------------------|
| CAT NO | IDWNM3707T |
| SPEC. | 37H312T811G1 |
| FRAME | 213TC HP 5 TE |
| VOLTS | 230/460 |
| MAG CUR | 7/3.5 FLA 13.4/6.7 |
| RPM | 1760 RPM MAX 4000 |
| HZ | 60 PH 3 CLASS H |
| SER.F. | 1.00 DES B SL HZ 1.1 |
| NEMA-NOM-EFF | 89.5 WK2 0.79 |
| BLWR V | PH HZ A |
| RATING | 40C AMB-CONT |
| DE BRG | 6307 ODE BRG 6206 |
| CC | 010A SN |

| Parts List | | |
|---------------|--|----------|
| Part Number | Description | Quantity |
| SA088504 | SA 37H312T811G1 | 1.000 EA |
| RA081414 | RA 37H312T811G1 | 1.000 EA |
| HW3200A01 | 3/8-16X3/4 I-BLT WELDED F/S | 1.000 EA |
| 37CB3005A04W | CASTING W/.75 NPT@6(MACH WHITE) | 1.000 EA |
| 37GS1015 | GASKET, FOR 37 WD KOBX'S (SANTOPRENE) | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| HA5027A01 | HA4066A01 T-DRAIN X2 BAGGED | 1.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 37EP3101B18MW | FRONT TENV L&M 206 BRG WD W/ SEAL & THRU | 1.000 EA |
| HW4032A01 | BLACK DRAIN PLUG FOR WASH DOWN MOTORS | 3.000 EA |
| HW4600B50 | SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB | 1.000 EA |
| HW5100A06 | W2420-025 WVY WSHR (WB) | 1.000 EA |
| 37EP3300A23MW | WHITE EPOXY EP MACH COMPL | 1.000 EA |
| HW4032A01 | BLACK DRAIN PLUG FOR WASH DOWN MOTORS | 3.000 EA |
| HW4600B51 | SEAL 1.375 X 2.125 X 0.313 SINGLE LIP DB | 1.000 EA |
| 10XN2520S30 | 1/4-20 X 1 7/8 HEX HEAD SS | 4.000 EA |
| XY3118S12 | 5/16-18 HEX NUT, STAINLESS STEEL | 4.000 EA |
| 35FH4801W | THRU-SHAFT ENCODER COVER INV/VEC F1 & F2 | 1.000 EA |
| WD4129 | 1.50 X 1.50 GRAY SNAP IN PLUG PROMOULD # | 2.000 EA |
| 10XN2520S08 | SCREW, 1/4-20 X 1/2 HHCS SS | 4.000 EA |
| 37CB4512 | CONDUIT BOX LID FOR WASHDOWN 37 FRAME | 1.000 EA |
| 37GS1008A02 | 37 GS FOR CB LID - WHITE NEOPRENE | 1.000 EA |
| 10XN2520S08 | SCREW, 1/4-20 X 1/2 HHCS SS | 2.000 EA |
| 59XN0832S07 | 8/32 X 7/16 HX WS HD SER X | 4.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| HW4600B33 | V-RING SLINGER 1.375 X 1.890 X .35 VITON | 1.000 EA |
| HW2502F21 | #303 SS,SQ KEY 5/16 X 2.375 | 1.000 EA |
| HA7000A02 | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA | 1.000 EA |
| MJ5004A05 | #242-21 LOCTITE GENERAL PURPOSE MED. STR | 0.005 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| LB1164 | LABEL,WARNING AND DRAIN | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| MG1025Z02 | ACTIVATOR WILKOFAS 060.02HF | 0.010 GA |
| MG1025W01 | WILKOFAS 781.01, SIGNAL WHITE #9003 | 0.028 GA |
| HA3104S14 | 300UBOLT 12.125LG SS | 4.000 EA |
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.001 QT |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| LC0145B01 | CONNECTION LABEL | 1.000 EA |
| NP1608L | SS WD INV UL CSA CC REV MTG | 1.000 EA |
| 36PA1001 | PKG GRP, PRINT PK1017A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |

AC Induction Motor Performance Data

Page 1 of 1



AC Induction Motor Performance Data

Record # 11782

Typical performance - not guaranteed values

| | | |
|--------------------------|--------------------|------------------------|
| Winding: 37WGT811 | Type: 3732M | Enclosure: TENV |
|--------------------------|--------------------|------------------------|

| Nameplate Data | | | General Characteristics at 460 V, 60 Hz: 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 | 49.2 LB-FT | |
| R.P.M. | 1760 | | Pull-Up Torque | 12.9 LB-FT | |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 28.8 LB-FT |
| NEMA Design Code | B | KVA Code | H | Starting Current | 48.3 Amps |
| Service Factor | 1 | | No-load Current | 3.53 Amps | |
| NEMA Nom. Eff. | 89.5 | P.F. | 78 | Line-line Res. @ 25°C. | 1.73 Ohms |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 83°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | | |

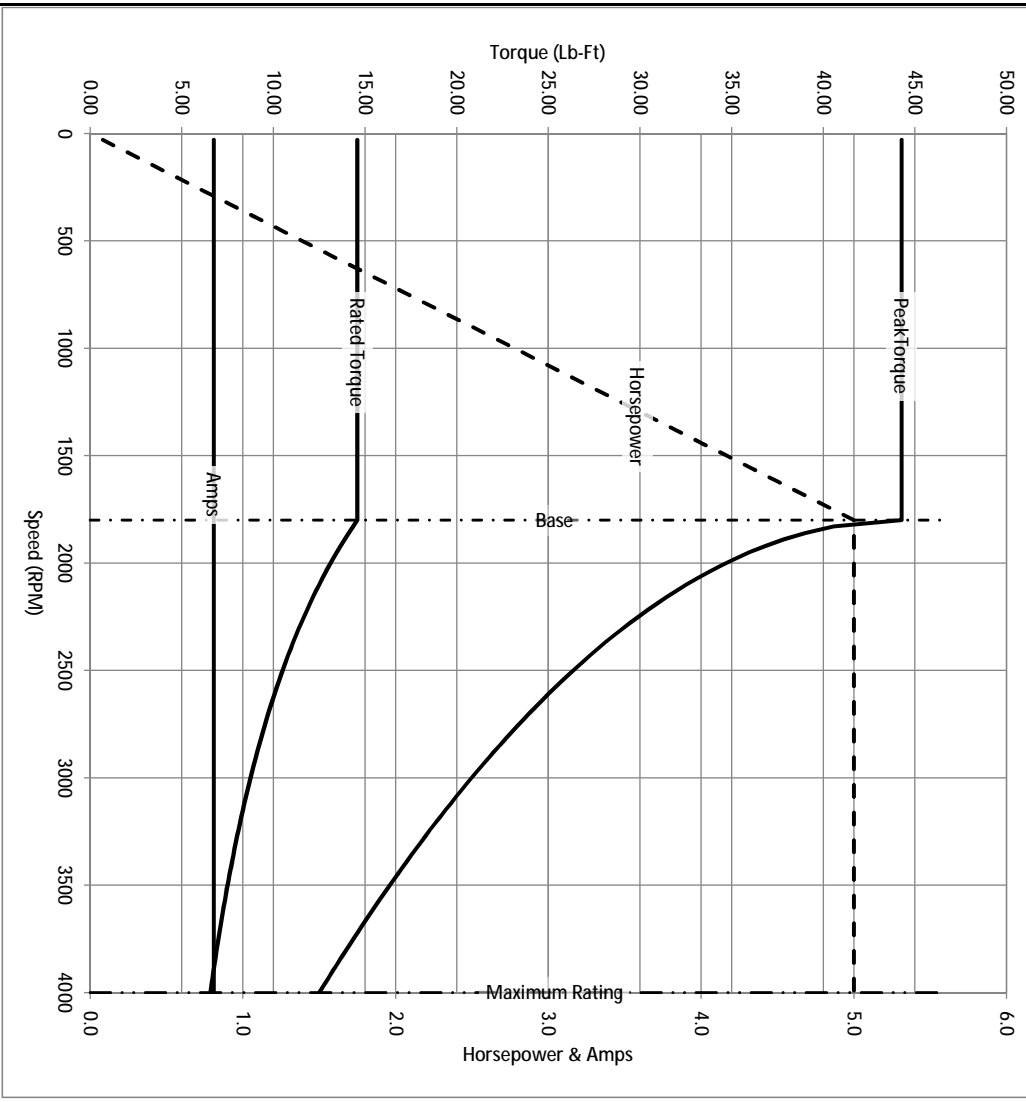
Load Characteristics at 460 Volts, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 38 | 59 | 71 | 77 | 81 | 82 | |
| Efficiency | 83.4 | 89 | 90.3 | 90.3 | 89.7 | 88.6 | |
| Speed | 1789 | 1781 | 1772 | 1764 | 1754 | 1743 | |
| Line Amperes | 3.84 | 4.55 | 5.54 | 6.75 | 8.11 | 9.66 | |

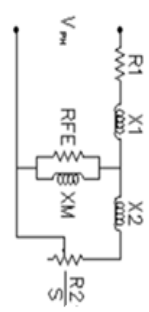
Baldor Electric Company Fort Smith, Arkansas



| | | | | | | |
|------------|------------|-------------------------|----------|---------------------------------------|------|---|
| Catalog | IDWNM3707T | 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 0.818 X1 3.106 |
| HP | 5 HP | DUTY | Cont | Base AMPS | 6.75 | R2 0.511 X2 2.961 |
| BASE SPEED | 1800 | MAX SAFE RPM | 4000 | Slip Hz | 1.20 | XM1 70.827 |
| PHASE/HZ | 3/60 | AMB ⁰ /TNSUL | 40/H | WK ² (lb-ft ²) | 0.79 | |



Remarks: Calculated Data

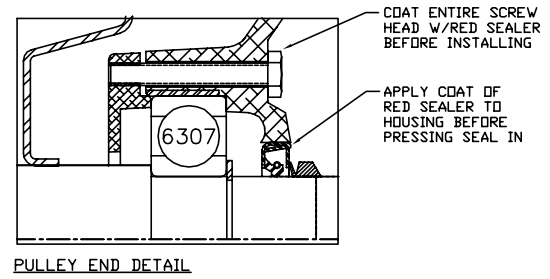
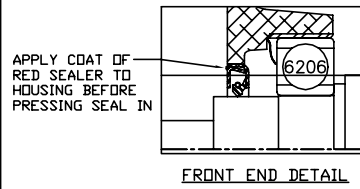
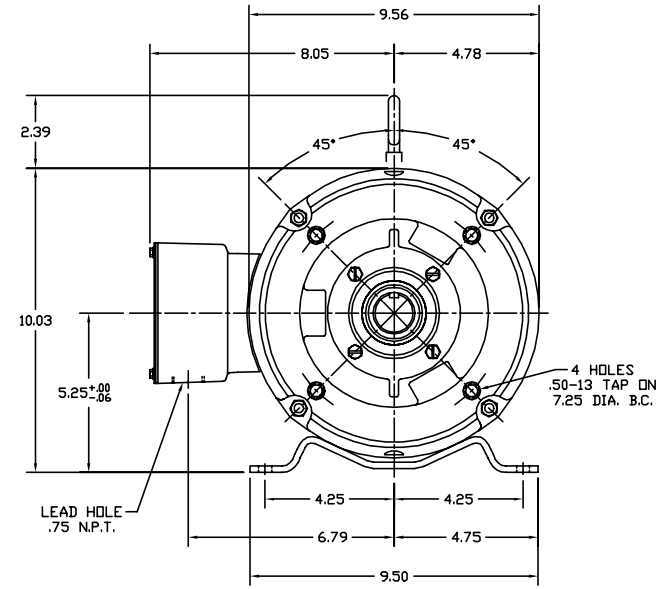
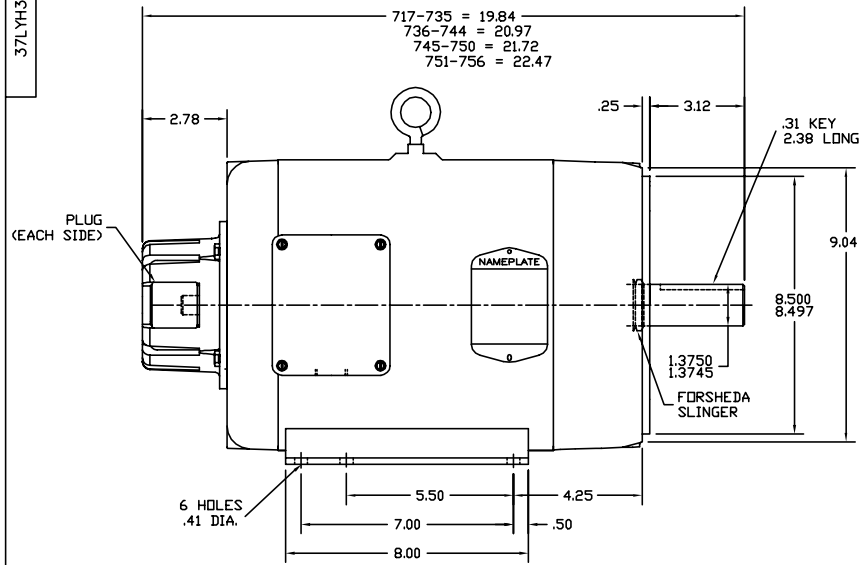


BALDOR DR BY ENR
 CK BY
 APP BY ENR
 DATE 3/6/2013

A MEMBER OF THE ABB GROUP

A-C MOTOR
 PERFORMANCE CURVES
 37H312T81G1
 ISSUE DATE 3/6/2013

37LYH312



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

| | | | |
|--|---------|------------------------------|-------------|
| REV. DESC: ADDED PLUGS FOR INV/VEC COVER | | | |
| REV. LTR: C | BY: BGM | REVISED: 13:06:14 09/28/2002 | TDR: 280837 |
| FILE: AAA00071023 | | REF: 37LYH312 | |
| MTL: - | | | |

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|--|
| BALDOR ELECTRIC Co. |
| DIRZ 213-STC TENV 37M WD S/P#9 INVERTER (THRU-SHAFT ENCODER) |

37LYH312

CD0005

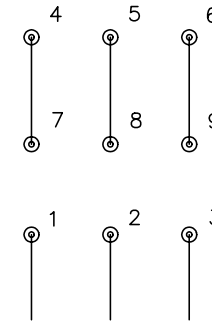


LOW VOLTAGE
(2Y)



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 |
| 900000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005