

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **SUM710004-4**

**100HP,1770RPM,3PH,60HZ,360TY,TENV,FOOTL**

| Part Detail |       |                |       |             |               |               |            |
|-------------|-------|----------------|-------|-------------|---------------|---------------|------------|
| Revision:   | A     | Status:        | PRD/A | Change #:   |               | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    |       | Elec. Spec: | E09838-A-D003 | CD Diagram:   | 416820-036 |
| Enclosure:  | TENV  | Mfg Plant:     |       | Mech. Spec: |               | Layout:       | 066930-060 |
| Frame:      | 360TY | Mounting:      | V1    | Poles:      | 04            | Created Date: | 04-09-2015 |
| Base:       |       | Rotation:      | R     | Insulation: | F             | Eff. Date:    | 09-29-2016 |
| Leads:      |       |                |       |             |               | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |               |               |            |

|                       |       |                          |
|-----------------------|-------|--------------------------|
| Nameplate 000613007AC |       |                          |
| CLASS I GROUP         | C D X | NO. <input type="text"/> |
| CLASS II GROUP        | X X X |                          |
| OPERATING TEMP CODE   | T3C   |                          |
|                       |       |                          |

|                              |                              |             |                                  |              |     |             |               |                              |    |
|------------------------------|------------------------------|-------------|----------------------------------|--------------|-----|-------------|---------------|------------------------------|----|
| <b>Nameplate 000613007MN</b> |                              |             |                                  |              |     |             |               |                              |    |
| <b>CAT NO</b>                | SUM710004-4                  |             | <b>SPEC NO.</b>                  | P36G2701     |     |             |               |                              |    |
| <b>HP</b>                    | 100                          | <b>AMPS</b> | 116.                             | <b>VOLTS</b> | 460 |             | <b>DESIGN</b> | B                            |    |
| <b>FRAME SIZE</b>            | X0360TY                      |             | <b>RPM</b>                       | 1770         |     | <b>HZ</b>   | 60            | <b>AMB</b>                   | 40 |
| <b>D.E. BRG.</b>             | 90BJ33J30X                   |             | <b>PH</b>                        | 3            |     | <b>DUTY</b> | 15MIN         |                              |    |
| <b>O.D.E. BRG.</b>           | 50BC03JG30X                  |             | <b>TYPE</b>                      | P            |     | <b>ENCL</b> | TENV          |                              |    |
|                              |                              |             | <b>POWER FACTOR</b>              |              |     |             |               |                              |    |
|                              |                              |             | <b>MAX CORR KVAR</b>             |              |     |             |               |                              |    |
|                              |                              |             | <b>NEMA NOM/CSA QUOTED EFF @</b> |              |     |             |               |                              |    |
| <b>SER.NO.</b>               |                              |             | <b>MOTOR WEIGHT</b>              | 1500         |     | <b>LBS.</b> |               | <b>NEMA-NOM-EFF</b>          |    |
|                              |                              |             |                                  |              |     |             |               | <b>GUARANTEED EFFICIENCY</b> |    |
|                              |                              |             |                                  |              |     |             |               | <b>100% LOAD</b>             |    |
|                              | *15 MIN IN AIR ;SUB. IN      |             |                                  |              |     |             |               |                              |    |
|                              | SEWAGE / WATER ONLY MAXDEPTH |             |                                  |              |     |             |               |                              |    |
|                              | IN MANUAL; P36G2701F         |             |                                  |              |     |             |               |                              |    |

|                              |                              |             |                      |                                  |             |                              |                  |              |      |
|------------------------------|------------------------------|-------------|----------------------|----------------------------------|-------------|------------------------------|------------------|--------------|------|
| <b>Nameplate 000613007MR</b> |                              |             |                      |                                  |             |                              |                  |              |      |
| <b>CAT NO</b>                | SUM710004-4                  |             | <b>SPEC NO.</b>      | P36G2701                         |             |                              |                  |              |      |
| <b>HP</b>                    | 100                          | <b>AMPS</b> | 116.                 | <b>VOLTS</b>                     | 460         |                              | <b>DESIGN</b>    | B            |      |
| <b>FRAME SIZE</b>            | X0360TY                      | <b>RPM</b>  | 1770                 | <b>HZ</b>                        | 60          | <b>AMB</b>                   | 40               | <b>SF</b>    | 1.15 |
| <b>D.E. BRG.</b>             | 90BJ33J30X                   |             | <b>PH</b>            | 3                                | <b>DUTY</b> | 15MIN                        |                  | <b>INSUL</b> | F    |
| <b>O.D.E. BRG.</b>           | 50BC03JG30X                  |             | <b>TYPE</b>          | P                                | <b>ENCL</b> | TENV                         |                  | <b>CODE</b>  | G    |
|                              |                              |             | <b>POWER FACTOR</b>  |                                  |             | <b>NEMA-NOM-EFF</b>          |                  |              |      |
|                              |                              |             | <b>MAX CORR KVAR</b> |                                  |             | <b>GUARANTEED EFFICIENCY</b> |                  |              |      |
|                              |                              |             |                      | <b>NEMA NOM/CSA QUOTED EFF @</b> |             |                              | <b>100% LOAD</b> |              |      |
| <b>SER.NO.</b>               |                              |             |                      | <b>MOTOR WEIGHT</b>              | 1500        |                              | <b>LBS.</b>      |              |      |
|                              | *15 MIN IN AIR ;SUB. IN      |             |                      |                                  |             |                              |                  |              |      |
|                              | SEWAGE / WATER ONLY MAXDEPTH |             |                      |                                  |             |                              |                  |              |      |
|                              | IN MANUAL; P36G2701F         |             |                      |                                  |             |                              |                  |              |      |

| Parts List  |                                      |          |
|-------------|--------------------------------------|----------|
| Part Number | Description                          | Quantity |
| SA297283    | SA P36G2701                          | 1.000 EA |
| RA283479    | RA P36G2701                          | 1.000 EA |
| 424476003WL | WIRING DIAGRAM MEDIUMA               | 1.000 EA |
| 000613007AC | UL NAMEPLATE FOR HAZARDOUS LOCATIONS | 1.000 EA |
| 000613007MN | NP,MEDIUM AC,NO CERT,STD INDUSTRIAL  | 1.000 EA |
| 000613007MR | NP, MEDIUM AC, CSA, STD INDUSTRIAL   | 1.000 EA |
| 000692000EJ | NAME PLATE                           | 1.000 EA |
| 000901001AA | LABEL WARNING                        | 1.000 EA |
| 034692002AE | HCSPP 1/4" 304 S.S.                  | 2.000 EA |
| 004824015A  | GREASE POLYREX EM                    | 0.600 LB |
| 032018018EG | HHCS 5/8-11X2-1/4 316 SS             | 8.000 EA |
| 032130020EC | HSHCS 5/8-11X2-1/2 304               | 8.000 EA |
| 032620020JD | HSSS 10-24X5/8L 304S.S.              | 1.000 EA |
| 034141300AC | RETAINING RING                       | 1.000 EA |
| 064262008J  | SEAL 360 SUBMERSIBLE                 | 1.000 EA |
| 034141325AC | RETAINING RING                       | 1.000 EA |
| 034692003AE | PPLG 3/8" 304 S.S.                   | 2.000 EA |
| 064262012G  | SEAL                                 | 1.000 EA |
| 413412004B  | SUBM MOISTURE PROBE                  | 2.000 EA |
| 413412005X  | LEAD WIRE ASSY                       | 1.000 EA |
| 413480001R  | RESISTOR ASSEMBLY-BLANKET            | 1.000 EA |
| 421900192FU | ORING                                | 1.000 EA |
| 421900240FU | ORING                                | 1.000 EA |
| 004824018AF | SHELL ROTELLA OIL 10W                | 7.311 LB |

| Parts List (continued) |                              |          |
|------------------------|------------------------------|----------|
| Part Number            | Description                  | Quantity |
| 603762061A             | BRASS,SLINGER,X360TY,EXI,7BY | 1.000 EA |
| 801173002A             | BRKT,DE,360SUB               | 1.000 EA |
| 801174002A             | MTGPLT 360 801174-1WCA       | 1.000 EA |
| 032018006BM            | HHCS 5/16-18X3/4 PLTGRN.     | 1.000 EA |
| 032018006BM            | HHCS 5/16-18X3/4 PLTGRN.     | 1.000 EA |
| 032018016EG            | HHCS 5/8-11X2 316S.S.        | 4.000 EA |
| 032080003LB            | HWHMS 1/4-20X3/8L PLTED      | 3.000 EA |
| 032080003JB            | HWHMS 10-24X3/8L PLTED       | 4.000 EA |
| 034036013AB            | LCKW 5/16 EXT.TOOTH LCKW     | 1.000 EA |
| 047024003AH            | T/LUG AMP 34112              | 4.000 EA |
| 047024003R             | LUG                          | 3.000 EA |
| 415031017A             | NUT W/WASHER 10-24 C.PLT     | 4.000 EA |
| 415031017B             | NUT W/WASHER1/4-20 C.P       | 3.000 EA |
| 421900124FU            | ORING                        | 1.000 EA |
| 609181014D             | HEAT SHRINK TUBING 3/4       | 7.000 EA |
| 004824007K             | SPECIAL PAINT                | 0.100 EA |
| 700385014AB            | CCA #1 25' 320/360           | 1.000 EA |
| 033775004EA            | DRSCR #6-1/4 304 S.S.        | 6.000 EA |
| 034180024GD            | KEY 1/2X1/2X3L 303 S.S.      | 1.000 EA |
| 421900240FU            | ORING                        | 1.000 EA |
| 801171002A             | BRKT, ODE, 360 SUB           | 1.000 EA |
| 032018010CG            | HHCS 3/8-16X1-1/4L 316SS     | 3.000 EA |
| 032018018EG            | HHCS 5/8-11X2-1/4 316 SS     | 8.000 EA |
| B3630-9                | SUBM THERMOSTAT TAG          | 1.000 EA |

|           |                        |          |
|-----------|------------------------|----------|
| B-3664002 | TAG, (NON REGREASABLE) | 1.000 EA |
|-----------|------------------------|----------|

|           |              |                   |           |  |             |       |
|-----------|--------------|-------------------|-----------|--|-------------|-------|
| REL. S.O. | FRAME        | HP                | TYPE      | PHASE/HERTZ                                | RPM         | VOLTS |
|           | 360TY        | 100               | P         | 3/60                                       | 1770        | 460   |
| AMPS      | DUTY         | AMB °C/<br>INSUL. | S.F.      | NEMA DESIGN                                | CODE LETTER | ENCL. |
| 116       | *            | 40/F              | 1.15      | B  | G           | SUB   |
| E/S       | ROTOR        | TEST S.O.         | TEST DATE | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES) |             |       |
| 492294    | 418141-30-WE | ---               | ---       | .0880                                      |             |       |

PERFORMANCE


| LOAD    | HP   | AMPERES | RPM  | INPUT KW | % POWER FACTOR | % EFFICIENCY |
|---------|------|---------|------|----------|----------------|--------------|
| NO LOAD | 0    | 39.9    | 1800 | 3.07     | 9.66           | 0            |
| 1/4     | 25.0 | 49.3    | 1793 | 22.0     | 55.9           | 85.0         |
| 2/4     | 50.0 | 68.2    | 1786 | 41.3     | 76.0           | 90.4         |
| 3/4     | 74.9 | 91.9    | 1779 | 61.0     | 83.4           | 91.6         |
| 4/4     | 99.9 | 119     | 1771 | 81.4     | 86.2           | 91.6         |
| 5/4     | 125  | 148     | 1762 | 103      | 86.8           | 90.9         |

SPEED TORQUE

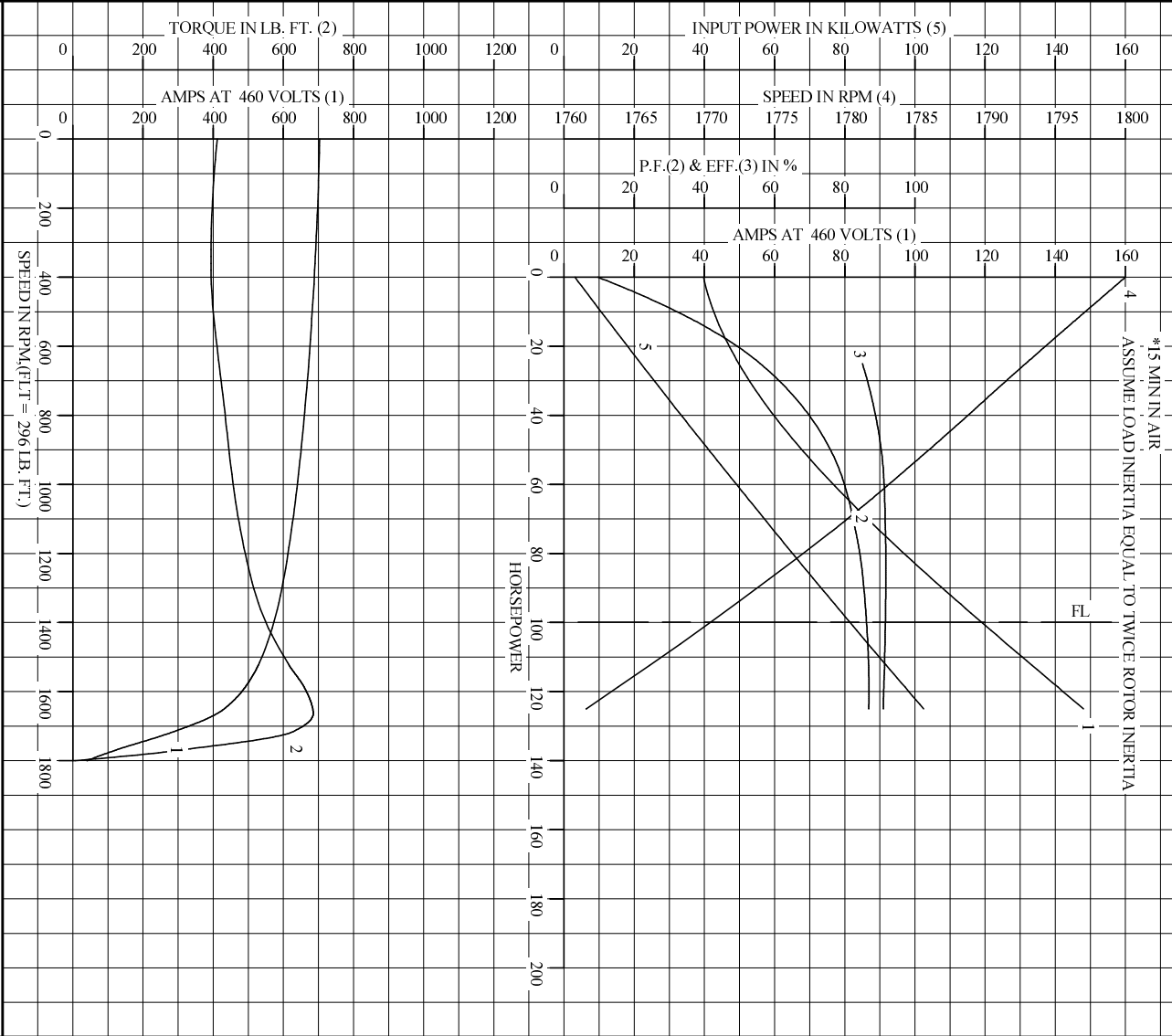
|              | RPM  | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|--------------|------|--------------------|----------------|---------|
| LOCKED ROTOR | 0    | 139                | 412            | 703     |
| PULL UP      | 360  | 133                | 393            | 690     |
| BREAKDOWN    | 1664 | 231                | 685            | 411     |
| FULL LOAD    | 1771 | 100                | 296            | 119     |

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: TYPICAL DATA  
\*15 MIN IN AIR  
ASSUME LOAD INERTIA EQUAL TO TWICE ROTOR INERTIA

|   |               |  |   |
|---|---------------|--|---|
| <br>BALDOR • DOUG • RELIANCE | DR. BY        | D. M. BYRD                               | <b>A-C MOTOR</b><br><b>PERFORMANCE DATA</b><br>E09838-A-D003<br>ISSUE DATE 02/19/09 |
|   | CK. APP. DATE | Z. M. WOLFE<br>BY D. M. BYRD<br>02/19/09 |   |

REL. S.O. RPM 1770 S.F. 1.15 ROTOR 418141-30-WIE  
 FRAME 360TY VOLTS 460 NEMA DESIGN B TEST S.O. TYPICAL DATA  
 HP 100 AMPS 116 CODE LETTER G TEST DATE ---  
 TYPE P DUTY \* ENCLOSURE SUB STATOR RES. @ 25 °C .0380  
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 492294 OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

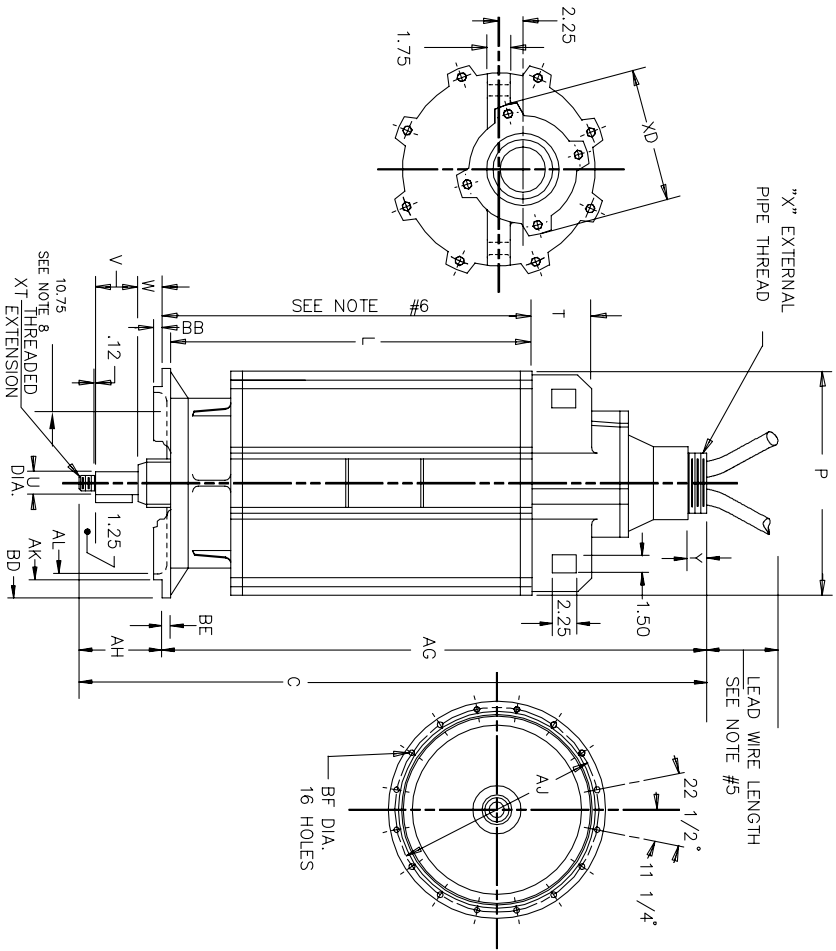
**BALDOR** DR. BY D.M.BYRD  
 CK. BY Z.M.WOHL  
 APP. BY D.M.BYRD  
 DATE 02/19/09

**A-C MOTOR PERFORMANCE CURVES** E09838-A-D003  
 ISSUE DATE 02/19/09

Printed on 2/19/09 11:31 @ r99

066930-060

**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 SQUIRREL-CAGE INDUCTION  
 ENCLOSURE: TOTALLY ENCLOSED SUBMERSIBLE  
 FRAME 360TY THRU L360TY



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

|                                      |                              |                   |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: UPDATE NOTES, LOAD TO BUS | VERSION: 00                  | TDR: 000000921348 |
| REV. LTR: -                          | REVISED: 09:19:59 04/20/2015 | BY: RGGWT         |
| FILE: \RGG\00024\962                 |                              |                   |
| MTL: -                               |                              |                   |

**BALDOR**

DIM SHT 360TY/L360TY SUBMERSIBLE

SH 1 of 1

1.)

| FRAME  | C    | L     | P     | T    | U (3)  | V    | W    | AG    | AH   | AU    | AK (4) | AL    |
|--------|------|-------|-------|------|--------|------|------|-------|------|-------|--------|-------|
| 360TY  | 47.1 | 31.25 | 18.38 | 4.25 | 2.4997 | 3.19 | 2.12 | 43.25 | 6.56 | 18.75 | 17.500 | 15.25 |
| L360TY | 49.1 | 33.25 | 18.38 | 4.25 | 2.4997 | 3.19 | 2.12 | 45.25 | 6.56 | 18.75 | 17.500 | 15.25 |

1.)

| FRAME  | BB  | BD (2) | BE   | BF  | XT           | LEAD CONNECTION |       | B.E. KEY |           |
|--------|-----|--------|------|-----|--------------|-----------------|-------|----------|-----------|
|        |     |        |      |     |              | X               | Y     | XD       | SQ. LGTH. |
| 360TY  | .25 | 20.25  | 1.12 | .69 | 1-1/2-13 - 8 | 1.25            | 10.88 | .50      | 3.00      |
| L360TY | .25 | 20.25  | 1.12 | .69 | 1-1/2-13 - 8 | 1.25            | 10.88 | .50      | 3.00      |

- 1.) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- 2.) "BP" VARIES +.010.
- 3.) "U" VARIES +.0000, -.0005.
- 4.) "AK" VARIES +.000, -.002
- 5.) LEAD WIRE LENGTH AS SPECIFIED ON SALES ORDER.
- 6.) MINIMAL SUBMERGED DEPTH

FACE RUNOUT AND ECCENTRICITY .008 MAX. T.I.R.  
 PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.

090-066990

416820-036

A-C MOTOR  
 CONNECTION DIAGRAM  
 STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

|                                      |                              |                   |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: LOADED TO BUS, C/R 335225 |                              |                   |
| REV. LTR: -                          | VERSION: 00                  | TDR: 000000538207 |
| FILE: \MGA\00000\682                 | REVISED: 11:54:06 04/30/2010 |                   |
| MTL: -                               | BY: RAGRA                    |                   |

**BALDOR**

CONN DIAG - STANDARD 3 LEAD

SH 1 of 1

Marketing maintained PDF of MN414:

<http://www.baldor.com/support/Literature/Load.ashx/MN414?ManNumber=MN414>

